



ASSESSMENT OF PROBLEMS ASSOCIATED WITH MENSTRUATION AMONG STUDENTS OF SELECTED COLLEGE

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ABSTRACT

Menstrual problems are a foremost gynecological problem and a cause of anxiety to students, conditioning both academics and quality of life. This study aimed to assess the magnitude of menstrual irregularity and associated problems among students. The objectives of the study were to determine the problems associated with menstruation among the students and to find out the association between the problems associated with menstruation and the selected socio demographic variables. A quantitative research approach was used for the study. A sample of 150 students was selected by using non probability purposive sampling technique. The study was conducted at MGM Muthoot College of Nursing, Kozhencherry. The menstrual problems are assessed by using a checklist consist of questions includes problems before, during and after menstruation and socio demographic variables. Distribution of menstrual problems revealed that 53.33% of samples were having mild menstrual problems, 44% of samples were having moderate menstrual problems and 2.67% of samples were having severe menstrual problems. Chi square analysis showed that there was a significant association between the problems associated with menstruation among the students with selected socio demographic variables like age ($\chi^2=10.0645$), year of study ($\chi^2=10.0645$), number of days of menstruation ($\chi^2= 13.461$), sanitary products used ($\chi^2=20.632$) and presence of any menstrual disorder ($\chi^2=7.588$) at $p<0.05$ level. This study recommends that early assessment of the menstrual problems helps in controlling and helps in minimizing these problems.

Keywords: Assess; problems; menstruation.

INTRODUCTION

BACKGROUND OF THE STUDY

Menstrual disorders are problems that affect a woman's normal menstrual cycle. They include painful cramps during menstruation, abnormally heavy bleeding, or not having any bleeding. For most women, a normal menstrual cycle ranges from 21 to 35 days. However, 14% to 25% of women have irregular menstrual cycles, meaning the cycles are shorter or longer than normal; are heavier or lighter than normal; or are experienced with other problems, like abdominal cramps. Irregular cycles can be ovulatory, meaning that ovulation occurs, or anovulatory, meaning ovulation does not occur. Common menstrual disorders include:

Dysmenorrhea (painful cramps during menstruation) ; Premenstrual syndrome (physical and psychological symptoms occurring prior to menstruation); Menorrhagia (heavy bleeding, including prolonged menstrual periods or excessive bleeding during a normal-length period); Metrorrhagia (bleeding at irregular intervals, particularly between expected menstrual periods); Amenorrhea (the absence of menstruation); Oligomenorrhoea (infrequent menstrual periods); Hypomenorrhea(light periods). The overall prevalence of menstrual disorders was reported by 76.9%. The most common menstrual disorder was premenstrual syndrome (71.3%), dysmenorrheal (46.3%), amenorrhea (21.3%), oligomenorrhoea (12.8%), polymenorrhagia (22.2%), menorrhagia (15.9%) and hypo menorrhea (15%).^[1] Menstrual cycle is intrinsically linked to our mental health. The hormonal changes during our menstrual cycle may affect our mental health but our mental health may also have an impact on our menstrual cycle. ^[1] Stress causes changes in hormonal levels. Thus, stress can shorten or stop our period. It can also make it more painful. ^[2]For some people, PMS can also cause mood swings in the weeks leading up to their period. Mood swings involve a sudden, unexplained change in mood. Other emotional symptoms of PMS can include: Sadness, Irritability, Anxiety and Anger. Social and cultural restrictions during menstruation are common. Some of the girls and women were restricted from visiting places of worship, and touching religious items or even praying. All of them were restricted from cooking and doing household work, as well as touching community hand pumps. ^[4]

STATEMENT OF THE PROBLEM

A study to assess the problems associated with menstruation among the students of selected college at Pathanamthitta district.

OBJECTIVES

1. Assess the problems associated with menstruation among college students.
2. Find out the association between the problems associated with menstruation and selected socio-demographic variables.

OPERATIONAL DEFINITIONS

1. **Assess:** In this study, assess refers to the identification of the problems related to menstruation.
2. **Problems:** In this study, problem refers to the matter that needs attention and to be solved in relation with menstruation.
3. **Menstruation:** In this study, menstruation refers to the normal vaginal bleeding that occurs from the endometrium of uterus due to the hormones produced by endocrine glands for 4-5 days of every 28 days from menarche to menopause.

ASSUMPTION

The prevalence of menstrual problems will be high among students and may have negative influences on the daily life activities of the students.

RESEARCH APPROACH

Research approach is a frequently used term in research which is an important element of research design, which governs it. The approach used in this study is quantitative research approach.

RESEARCH DESIGN

A research design is the framework or guide used for the planning, implementation and analysis of a study. It is a systematic plan of what is to be done, it will be done and how the data will be analyzed out and methods that will be use.

The research design used in this study was **Descriptive research design**.

POPULATION

Female students between the ages of 17-22 years.

SAMPLE & SAMPLING TECHINQUE

Sample: BSc Nursing Students of first semester, second semester, second year and third year of MGM Muthoot College of Nursing, Kozhencherry.

Sample Size: 150 BSc Nursing Students of first semester, second semester, second year and third year of MGM Muthoot College of Nursing, Kozhencherry.

Sampling technique: non probability purposive sampling technique.

DESCRIPTION OF THE TOOL

The tool consists of two sections.

Section-A: Socio demographic variables

The socio demographic variables include age, year of study, age of menarche, anthropometric measurements, number of days of menstruation, dietary pattern, sanitary products used during menstruation, presence of any menstrual disorders and any other health issues.

Section-B: Checklist for assessing the menstrual problems

The checklist consisted of 30 items. It is a self prepared checklist to assess the problems associated with menstruation.

The score grading includes:-

Mild problems : 1-30

Moderate problems : 31-60

Severe problems : 61-90

CONTENT VALIDITY

Content validity refers to the degree in which items of instrument adequately represent the universe of content for the consent being measured. It is considered with scope of coverage of content area to be

measured. It is ensured through judgement of expert about the content. The prepared instrument along with the statement of problem, objectives, operational definitions, checklist and criteria for validation. The tools were submitted to experts from Medical Surgical Nursing, Child Health Nursing, Obstetrics and Gynaecological Nursing, Mental Health Nursing and Community Health Nursing Department. Suggestions and recommendations given by experts were accepted and necessary modifications were done.

DATA COLLECTION PROCESS

Data collection is gathering the address of a research problem. Data collection was done on 15-12-2022 at the MGM Muthoot College of Nursing. After obtaining ethical clearance and permission from the concerned authorities.

The samples were collected by non-probability purposive sampling. The study was conducted among the students of selected college at Pathanamthitta district. Prior written consent was taken from selected samples. The investigators introduced themselves to samples and explain the purpose of the study. Tool was given to samples and data were collected to assess the problems associated with menstruation. Confidentiality was maintained throughout the study.

PLAN FOR DATA ANALYSIS

Data analysis is the technique used to reduce, organize and give meaning to the data. Descriptive and inferential statistics were used for analysis. Frequency and percentage distributions were used to analyze the selected socio demographic variables. Chi square test were used to find out the association between problems of menstruation with the selected socio demographic variables.

FINDINGS OF THE STUDY

Section 1: Distribution of socio demographic variables of students of selected college.

The socio demographic variables include age, year of study, age of menarche, anthropometric measurements, number of days of menstruation, dietary pattern, sanitary products used during menstruation, presence of any menstrual disorders and any other health issues. The distribution of samples according to age in years revealed that 39 (26%) samples were within the age group of 17-18 years, 97 (64.67%) samples

were within the age group of 19-20 years, 14 (9.33%) samples were within the age group of 21-22 years. Distribution of the samples according to the age of menarche revealed that 17(11.33%) samples were attained menarche at 9- 11years, 123 (82%) samples were attained menarche at 12-14 years, 9(6%) samples were attained menarche at 15-17 years and 1(0.67%) sample was attained menarche at 18-20 years. The distribution of samples according to year of study revealed that 50 (33.34%) of samples were studying in 1st semester, 45 (30%) samples were in 2nd Semester, 47 (31.33%) were in 2nd year & 8 (5.33%) samples were studying in 3rd Year BSc Nursing. The distribution of students according to Body Mass Index revealed that 101 (67.33%) samples were having BMI between 18.5-24.9, 12 (8%) samples were having BMI between 25-29.9 & 1 (0.67%) sample were having BMI above 30. The distribution of samples according to their number of days of menstruation revealed that 144 (96%) of samples were having 4-7 days of menstruation, 3 (2%) of samples were having 8-10 days of menstruation and 3 (2%) samples were having above 10 days of menstruation. The distribution of samples according to type of diet revealed that 147 (98%) samples were non vegetarians, 1 (0.67%) sample was vegetarian and 2 (1.35%) samples were vegetarians. Distribution of samples according to sanitary products used during the menstruation revealed that 139 (93.33%) samples were using sanitary pads, 8 (6%) samples were using menstrual cup, no samples (0%) were using tampons and 1 (0.67%) was using cloth during their menstruation. Distribution of samples according to presence of any menstrual disorders revealed that 17 (11.33%) of samples were having menstrual disorders and 134 (88.67%) samples were not having any menstrual disorders. Distribution of samples according to the health issues present revealed that 1(0.67%) sample were having hyperthyroidism, 3(2%) samples were having hypothyroidism, 8 (5.33%) samples were having anemia, 11 (7.33%) samples were having hypotension and 127 (84.67%) samples were not having any health issues.

Section 2: Distribution of students based on their grading of menstrual problems.

Distribution of samples according to their grading of menstrual problems revealed that 21(14%) of samples were having mild menstrual problems, 123 (82%) samples were having moderate menstrual problems and 6 (4%) samples were having severe menstrual problems

Section 3: Association between menstrual problems with socio demographic variables

The Chi square value for age ($\chi^2=9.82$), year of study ($\chi^2=18.935$), number of days of menstruation ($\chi^2=13.461$), sanitary products used ($\chi^2=20.632$) and presence of any menstrual disorder ($\chi^2=8.365$) at $P < 0.05$ were greater than the table value, so there is a significant association between the problems associated with menstruation among students and the selected socio demographic variables like age, year of study and number of days of menstruation, sanitary products used and presence of any menstrual disorders. The cross-sectional study was conducted by the department of obstetrics and gynecology, at Sri Muthu Kumaran Medical College Hospital and Research Institute, among the first, second- and third-year female students who are doing their MBBS course in the same institute, during the month of December 2019. A total of hundred students were included in the study. Data was collected using a proforma and analysis was done using Statistical Package for Social Sciences (SPSS) version 17. Menstrual cycle periodicity was irregular among 17% of participants. Dysmenorrhea, mid cycle pain, heavy menstrual bleeding was noted among 27%, 19% and 11% respectively. Also 10% of students reported sickness absenteeism due to menstrual disorders.

A cross-sectional study design was carried out among 660 undergraduate female students (21-25yrs) at Debre Berhane University, Ethiopia. To get representative study participants, a stratified sampling technique was used to collect the data self administered questionnaire was used. Physical examination and anthropometric measurement were also done. Data were analyzed by using SPSS version 21. Logistic regression analysis was done. A significant association was declared at a p-value less than 0.05. A total of 620 students participated in the present study with a response rate of 93.9%. Out of the total study participants, 32.6% (95% CI 29–36.5) participants had irregular menstrual cycle. Significant association was found between anemia, alcohol intake, <5 sleep hours, 6–7 sleep hours, Perceived stress, iodine deficiency disorder (IDD) and underweight with menstrual irregularity.

Table 1: Distribution of students according to age.**N=150**

Age in years	Frequency	%
a) 17-18	39	26
b) 19-20	97	64.67
c) 21-22	14	9.33

The data presented in the Table 1 depicts that 26% samples were within the age group of 17-18 years; 64.67% samples were within the age group of 19-20 years and 9.33% samples were within the age group of 21-22 years.

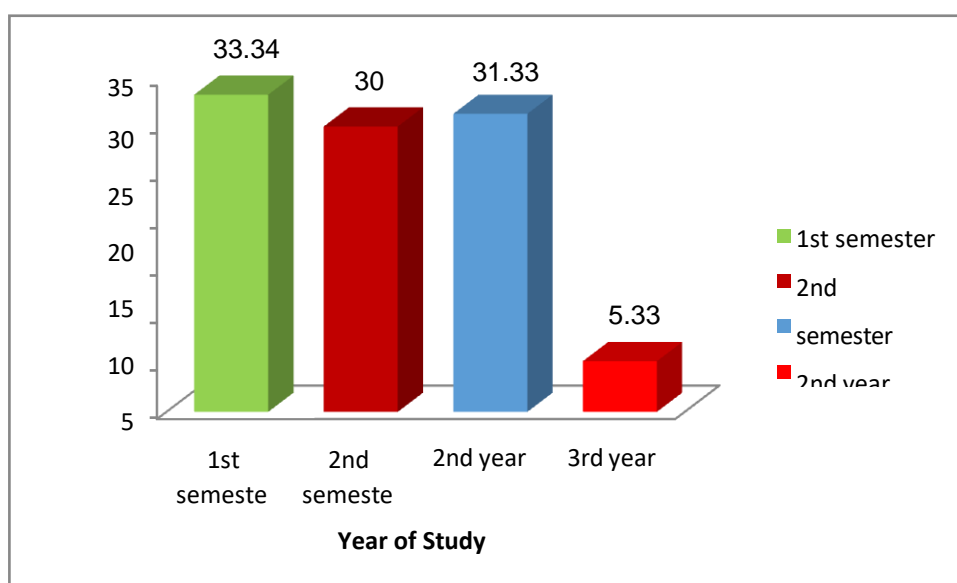
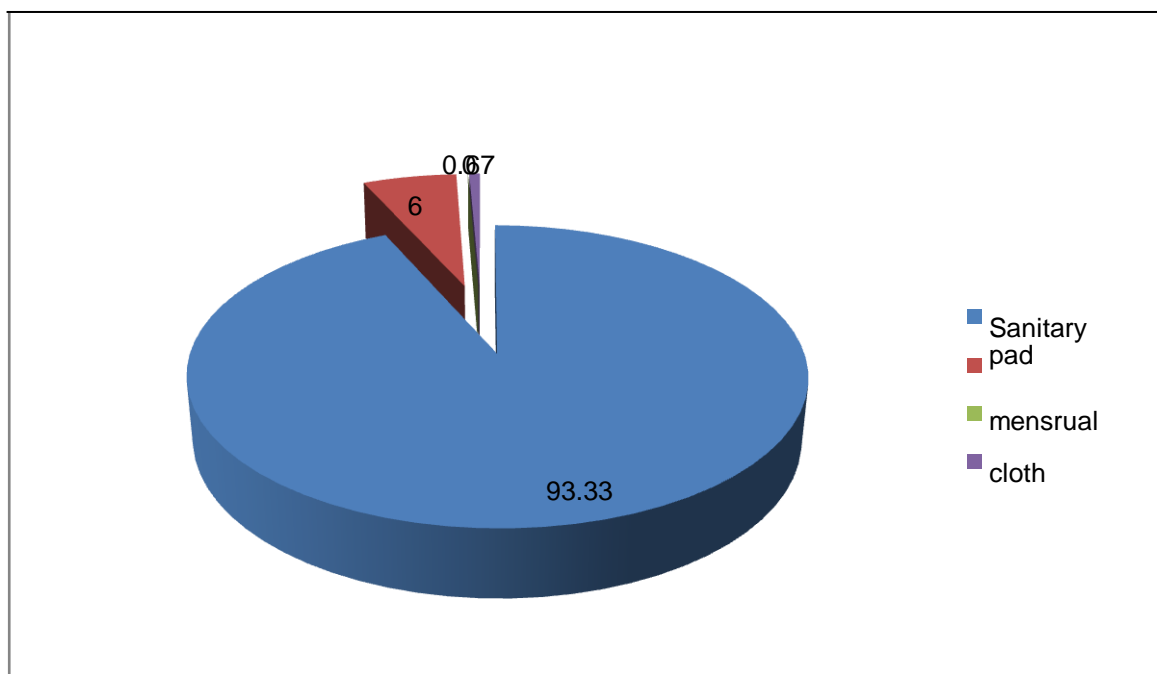
**Figure 1: Distribution of students according to year of study**

Figure 2 depicts that 33.34% samples were studying in 1st semester B.Sc. Nursing, 30% samples were studying in 2nd semester B.Sc. Nursing, 31.33% samples were studying in 2nd year B.Sc. Nursing and 5.33% were in 3rd year B.Sc. Nursing.

Table 2: Distribution of students according to number of days of menstruation.**N=150**

Number of days of menstruation	Frequency	%
a) 4-7 days	144	96
b) 8-10 days	3	2
c) Above 10 days	3	2

The data presented in the Table 4 depicts that 96% samples were having menstrual days of 4-7days, 2% samples were having menstrual days of 8-10 days and 2% samples were having menstrual days above 10 days.

N=150**Figure 2: Pie diagram showing distribution of students according to sanitary products used during the menstruation**

The data presented in the figure 3 depicts that 93.33% of samples were using sanitary pads, 6% were using menstrual cup, 0% were using tampons and 0.67% were using cloth during their menstruation.

Table 6: Distribution of students according to presence of any menstrual disorders**N=150**

Presence of menstrual disorders	Frequency	%
a) Yes	17	11.33
b) No	133	88.67

The data presented in the Table 6 depicts that 11.33% of samples were having menstrual disorders and 88.67% not having menstrual disorders.

NURSING IMPLICATION

The study findings have several implications in the field of nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice

- 1 Nurses can increase knowledge regarding problems associated with menstruation and it helps them to identify it.
- 2 Early identification of menstrual problems help them to control the severity of their problems.
- 3 Nurses can also act as a menstrual health advocate in patient care settings by discussing the benefits of tracking menstrual health variables.

Nursing Education

1. Nurse educators should focus on the needs of the population.
2. A nurse can act as an educator by educating the females regarding the problems of menstruation and the minimize the severity of these problems.

Nursing Administration

- 1 Nurse administer can play many important roles in uplifting the control of menstrual problems.
- 2 They can incorporate the research evidences obtained, while assessing the problems associated with menstruation.

Nursing Research

1. There is a need for a extensive and intensive research in this area so that strategies for educating nurses regarding various aspects of minimizing the severity of menstrual problems can be promoted.
2. The present study may inspire other researchers for conducting the studies in the same area.
3. Researchers can do studies related to various aspects of menstruation, so that intellectual and perceptual diversities will be reflected.

CONCLUSION OF THE STUDY

The study was aimed to assess the problems associated with menstruation among the college students and to find out the association between the menstrual problems and selected socio demographic variables

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