

# Impact of Menstruation on Academic Performance among Female Nursing Students

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## ABSTRACT

A quantitative descriptive research design was used to assess the impact of menstruation on academic performance among female nursing students of GNM 1<sup>st</sup> year at Rohilkhand School of nursing, Bareilly, UP. 50 female nursing students of GNM 1<sup>st</sup> year were selected through convenient sampling technique. The data were collected by assessment checklist of menstrual symptoms and academic performance. The result showed that 28(56%) were heavy abdomen cramp during menstruation, 34(68%) students were getting anger during their periods, 27(54%) were having sleep disturbance, 36(72%) were reported that they had pelvic pain, 32(64%) students were having fatigue/tiredness and 28(56%) students having irritability during menstruation. The academic performance findings shows that 29(58%) were not having interest to go to the college during menstruation, 33(66%) were said that they had a feeling of hesitation to go for practical classes, 27(54%) were not having interest to write their examination during menstruation, 28(66%) were not able to complete their assignment in time and 26(52%) students were having feeling of inferiority during menstruation. There was significant association between menstrual symptoms of abdominal cramps, anger, sleep disturbance, pelvic pain, fatigue, irritability, forgetfulness, headache, generalized body ache, loss of appetite, nausea/vomiting, mood swings, breast tenderness and constipation with their selected baseline data of marital status, duration of menstrual cycle, regularity of menstruation, experience of menstrual symptoms and treatment of menstrual discomfort. The study concluded that the menstrual symptoms having a major impact on academic performance of female students. So the study findings suggested the students need counseling or related facilities to reduce the effect of menstrual symptoms on academic performance.

**KEYWORDS:** Impact, Menstruation, Academic performance, Female Nursing students, GNM 1<sup>st</sup> year

## I. INTRODUCTION

The menstruation involves many psychological changes, such as irritability, mood liability, depression and anxiety. The most common physical symptoms are headaches, breast tenderness, swelling, abdominal bloating, heaviness, low energy, tired and weak, back and muscle pain, sleep more, stay in bed increased / decreased appetite, and crave food), and emotional symptoms are (depressed mood, sad, lonely, anxious, nervous, mood swings, trouble with relationships, irritable, angry, impatient, difficulty concentrating, feel out of control, cannot cope, less productive in job or home and avoid social activity. Many women may feel different kinds of pain, including sharp, throbbing, dull, nauseating, burning, or shooting pain. Dysmenorrhea may precede menstruation by several days or may accompany it, and it usually subsides as menstruation tapers off. These symptoms sufficient to impair daily activities, a woman's experience of premenstruation symptoms has been found to reduce work efficiency, increase absenteeism, and negatively impact on family.

## II. NEED OF STUDY

The menstrual period has a notable role on the academic performance of students. Women with heavy and painful menstrual periods have more problems affecting their academic and social lives. The academic performance of students varies during their menstruation, in a way that the mental status is decreased during and several days before the period. However, some research on the performance of well academically qualified women has shown that they were less likely to be negatively affected by menses. As the menstrual period is known to impact the student's academic performance, the aim of our study is to determine the impact of menstruation on academic performance among nursing students.

### Problem Statement

"A study to assess the impact of menstruation on academic performance among female nursing students of GNM 1<sup>st</sup> year at selected school of nursing, Bareilly, UP."

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**Objectives**

1. To assess the impact of menstruation on academic performance among female nursing students of GNM 1<sup>st</sup> year.
2. To find out the association between level of impact of menstruation on academic performance with their baseline data.

**Hypotheses**

**H<sub>1</sub>:** There would be significant difference in impact of menstruation on academic performance among female nursing students of GNM 1<sup>st</sup> year.

**H<sub>2</sub>:** There would be significant association between Levels of impact of menstruation on academic performance with their baseline data.

**Assumption**

Female Nursing students of GNM 1<sup>st</sup> year might have shown some impact of menstruation on their academic performance.

**III. METHODOLOGY**

The research design used in this study was descriptive design. The study was conducted at Rohilkhand School of nursing, Bareilly, U.P. 50 female nursing students of GNM 1<sup>st</sup> year were selected through convenient sampling technique.

**IV. RESULT**

The analysis and interpretation of the observation are given in the following section.

**4.1. Section A: Description of baseline data of study participants.**

**Table no. 1: Frequency and percentage distribution of baseline data of study participants.**

**N=50**

S. No.	Baseline Data	Frequency	Percentage
1.	<b>Age</b>		
	a) 17-18 years	21	42%
	b) 19-20 years	23	46%
	c) 21 years & above	06	12%
2.	<b>Age of menarche</b>		
	a) <12 years	10	20%
	b) 13-14 years	23	46%
	c) 15-16 years	08	16%
3.	<b>Marital status</b>		
	a) Unmarried	44	88%
	b) Married	06	12%
4.	<b>History of dysmenorrhea</b>		
	a) Yes	19	38%
	b) No	31	62%
5.	<b>Duration of menstrual cycle</b>		
	a) <4 days	39	78%
	b) ≥4 days	11	22%
6.	<b>Regularity of menstruation</b>		
	a) Regular	43	86%
	b) Irregular	07	14%
7.	<b>Experience of menstrual symptoms</b>		
	a) Yes	35	70%
	b) No	15	30%
8.	<b>Treatment of menstrual discomfort</b>		
	a) Yes	16	32%
	b) No	34	68%

**4.2. Section B: Assessment of Menstrual Symptoms and academic performance**

Objectives 1: To assess the impact of menstruation on academic performance among female nursing students of GNM 1<sup>st</sup> year.

After the eligible subjects were identified the purpose of the study was explained and informed written permission was obtained from the female nursing students of GNM 1<sup>st</sup> year students who met the inclusion criteria. The data were collected by assessment checklist of menstrual symptoms and academic performance.

**Section A: Baseline data:** It includes age, age of menarche, history of dysmenorrhea, marital status, duration of menstrual cycle, regularity of menstruation, experience of premenstrual symptoms and treatment for menstrual discomfort.

**Section B: a) Checklist for assessment of menstrual symptoms:** It contains total 15 items of general menstrual symptoms experienced by the girls during menstruation.

**b) Checklist for assessment of academic performance:** It includes 20 items, which was divided under 5 subheadings, such as classroom performance, examination, assignments, extracurricular activities and personality. It's also in a form of check list "yes or No" response.

The content validity of the tool was ensured by giving the tool to experts in the field of nursing. Reliability of tool was established by Karl Pearson test and assessment checklist of menstrual symptoms was  $r = 0.82$  and assessment checklist of academic performance was  $r = 0.84$ .

**Table no. 2. a) Frequency and percentage distribution of assessment of menstrual symptoms.****N= 50**

S. No	Menstrual symptoms	YES		NO	
		Freq.	%	Freq.	%
1	Abdomen cramp	28	56%	22	44%
2	Anger	34	68%	16	32%
3	Sleep disturbance	27	54%	23	46%
4	Pelvic pain	36	72%	14	28%
5	Fatigue/tiredness	32	64%	18	36%
6	Irritability	28	56%	22	44%
7	Forgetfulness	15	30%	35	70%
8	Headache	23	46%	27	54%
9	Generalized body ache	25	50%	25	50%
10	Loss of appetite	14	28%	36	72%
11	Nausea/vomiting	10	20%	40	80%
12	Mood swings	20	40%	30	60%
13	Breast tenderness	02	4%	48	96%
14	Shortness of breath	06	12%	44	88%
15	Constipation/Diarrhea	12	24%	38	76%

The presenting data in table no. 2(a) depict description of analysis for assessment checklist of menstrual symptoms shows that 28(56%) were heavy abdomen cramp during menstruation, 34(68%) students were getting anger during their periods. Most of the study students 27(54%) were having sleep disturbance, and 36(72%) were reported that they had pelvic pain during menstruation. Only 32(64%) students were having fatigue/tiredness, 28(56%) students having irritability during menstruation, 35(70%) students don't have Forgetfulness, 27(54%) students don't have headache, 25(50%) equal number of students having generalized body ache, and 36(72%) don't have loss of appetite. Most of the students 40(80%) don't have nausea/vomiting, 30(60%) were don't have mood swings during menstruation time, 48(96%) students don't have reported about breast tenderness during menstruation, 44(88%) don't have shortness of breath and 38(76%) don't have constipation/diarrhea.

**Table no. 2. b) Frequency and percentage distribution of assessment of academic performance.****N= 50**

S. No	Items	Yes		No	
		Freq.	%	Freq.	%
	<b>Effect on classroom performance</b>				
1	No interest to go to the college	21	42%	29	58%
2	Lack of concentration during study hours	19	38%	31	62%
3	Difficulty in remembering all that is study	24	48%	26	52%
4	Feeling hesitation to go for practical	33	66%	17	34%
	<b>Effect on examination</b>				
5	No interest to write examination during this time	27	54%	23	46%
6	Not able to prepare for examination	25	50%	25	50%
7	Getting slow in writing examination	24	48%	26	52%
8	Lack of concentration	30	60%	20	40%
	<b>Effect on assignments</b>				
9	Unable to complete the assignment in time	33	66%	17	34%
10	Not able to do critical thinking	22	44%	28	56%
11	Feel to get excuse from teachers	23	46%	27	54%
12	Not able to do presentation	27	54%	23	46%
	<b>Effect on extracurricular activities</b>				
13	No interest in stage performance	28	56%	23	46%
14	Difficulty participating extracurricular activity	30	60%	20	40%
15	Difficulty in public speaking	27	54%	23	46%
16	Lack of interest in extra classes	26	52%	24	48%
	<b>Effect on personality</b>				
17	Getting mood swings	25	50%	25	50%
18	Feeling of inferiority	26	52%	24	48%
19	Lack of self confidence	23	46%	27	54%
20	Lack of interest to meet the teachers	25	50%	25	50%

The presenting data of table no 2(b) depicts description of Frequency and percentage distribution of assessment of academic performance shows that 29(58%) were not having interest to go to the college during menstruation, and

31(62%) were reported about they don't have concentration issue during study hours. 26(52%) don't have any difficulty in remembering of study content, 33(66%) were said that they had a feeling of hesitation to go for practical classes.

Even the menstrual symptoms were affecting the student's performance of examination. Here greater part of students 27(54%) were not having interest to write their examination during menstruation, equal no. of students 25(50%) were reported that they were not able to prepare for the examination, 26(52%) students were getting slow in writing examination whereas 30(60%) were having lack of concentration during examination.

The menstrual symptoms were interfering with student's assignments and extracurricular activities. Majority of students 28(66%) were not able to complete their assignment in time, 28(56%) students have not able to do critical thinking, 27(54%) don't have filling to get excuse from teachers, 27(54%) students not able to do the presentation. 28(56%) were not having interest in stage performance during menstruation, 30(60%) having difficulty participant extracurricular activity during menstruation, 27(54%) will having difficulty in public speaking during time period, 26(52%) female students having lack of interest in extra classes.

Individual personality also affected by menstrual symptoms. Nearly equal number of students 25(50%) were having mood swings, 26(52%) students were having feeling of inferiority during menstruation, Most of the study participants 27(54%) students were don't have lack of interest to meet the teachers and equal number of students 25(50%) were having lack of self- confidence.

**4.3. Objective 2:** To find out the association between level of impact of menstruation on academic performance with their baseline data.

There was significant association between menstrual symptoms of abdominal cramps, anger, sleep disturbance, pelvic pain, fatigue, irritability, forgetfulness, headache, generalized body ache, loss of appetite, nausea/vomiting, mood swings, breast tenderness and constipation with their selected baseline data of marital status, duration of menstrual cycle, regularity of menstruation, experience of menstrual symptoms and treatment of menstrual discomfort.

There was significant association between academic performances of effect of classroom performance, effect on examination & effect on assignment with their duration of menstrual cycle & regularity of menstruation and effect on extracurricular activities & effect of personality with their marital status & history of dysmenorrhea.

Hence the null hypothesis was rejected and the research hypothesis was accepted. Thus it can be interpreted that marital status, history of dysmenorrhea, duration of

menstrual cycle, regularity of menstruation, experience of menstrual symptoms and treatment of menstrual discomfort have any influence on menstrual symptoms and academic performance in female nursing students.

## V. DISCUSSION

This finding was supported by **Khamdan et al.** (2014) on the Impact of Menstrual Periods on Physical Conditions, Academic Performance and Habits of Medical Students shows that majority (90.7%) of the students experienced symptoms during their menstrual period, with the commonest five being abdominal cramps (90.7%), backache (82.7%), tiredness (80.4%), pelvic pain (74.0%) and bloating (65.2%). Pain was reported as the most common cause of exercise discontinuation during menstruation (42.86%). The menstrual period affected their amount of sleep (73.3%), sleep quality (60%), diet (73.8%) and exercise (60.7%).

This finding was supported by **Padmavathi, S. Raja Sankar, N. Kokilavani.** (2014) Premenstrual Symptoms and Academic Performance among Adolescent Girls show that 53 % of adolescents' girls had low academic performance 49% of adolescents girls were school absenteeism.

## VI. CONCLUSION

It can be concluded that the menstrual symptoms having a major impact on academic performance of female students. So the study findings suggested the students need counseling or related facilities to reduce the effect of menstrual symptoms on academic performance. Further research also can be conducted to study the effect of menstruation on female adolescence students.

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