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# Dysmenorrhoea Study among Nursing Students and its Effect

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Abstract: Now a day's common health problem of adolescent girls is dysmenorrhoea, which affects their quality of life. Hence there is an urgent need to evaluate the characteristics of dysmenorrhoea and its effects on daily life among nursing students. To determine the prevalence and effects of dysmenorrhoea the life of nursing students under the study. A prospective descriptive study conducted among nursing students of Government nursing college, Raigarh from 5<sup>th</sup>November to 4<sup>th</sup>January 2019. The data was collected through welldefined questionnaires about dysmenorrhoea, characteristics and associated symptoms and then the data was compiled using MS Excel and the data analysis was done by SPSS. The prevalence dysmenorrhoea in our study is found to be 78.33%. Also education and taking any remedies is found to be highly significant and maximum number of nursing students are facing problem in working due to dysmenorrhoea. Dysmenorrhoea is a very common symptom in every adolescent nursing student as they experience a number physical and psychological symptom. The most significant conclusion of our study was found to be high prevalence of dysmenorrhoea. The finding of this study indicates the magnitude of the problem and the need for appropriate intervention.

Keywords: Dysmenorrhoea, Adolescent, nursing students, menstrual characteristics

#### 1. Introduction

Adolescence is a transition period from childhood to adulthood and is characterized by a spurt in physical, endocrinal, emotional and mental growth. As the direct producers of future generations, the health of adolescent girls influences not only their own health, but also the health of the future population. Almost a quarter of India's population comprises of girls below 20 years <sup>[1]</sup>. Dysmenorrhoea is one of the most common health problems in young adolescent girls as it affects 50-90% of the general population <sup>[2]</sup>.

Dysmenorrhoea is an important public health problem among university students and is associated with school absenteeism and poor quality of life. Approximately 10-15% of females experience monthly menstrual pain severe enough to stop normal daily functions at work, home or school <sup>[3-6]</sup>.

A study of the prevalence of dysmenorrhoea and its associated symptoms would provide evidence of the severity of the problem. The study was carried out to estimate the prevalence of dysmenorrhoea and its common symptoms, and determine the relationship between dysmenorrhoea and the selected physiological parameters such as the body surface area and general health status, and to find the association between the dysmenorrhoea status and the intensity of pain, with selected physiological symptoms.

#### 2. Methodology

The study was carried out in Government nursing college, Raigarh, Chhattisgarh. All the nursing girls who met the sampling criteria were included in the study. The total the sample size was 80. The data was collected from  $5^{\text{th}}$ November to  $4^{\text{th}}$ January 2019. A self-administered questionnaire was distributed to all the participants. Participation by students was strictly voluntary. Informed consent was taken from all the students before their participation.

The socio-demographic and lifestyle characteristics of the students were collected through questionnaire which included socio-demographic profile, menstrual history, associated symptom, characteristics and Effects of Dysmenorrhoea.

Descriptive statistics were reported using mean and standard deviation for the continuous variables, number and percentages for the categorical variables. Chi-square test was used to test the association between demographic and clinical characteristics with the presence of dysmenorrhoea. P-value less than 0.05 were considered as statistically significant. All the data were compiled using MS Excel and analysed by SPSS.

#### 3. Result and Observation

In our study we found that majority of the nursing students under study had experienced dysmenorrhoea, that is 94(78.33%) out of 120, which is clearly described in table 1. Thus we can say that dysmenorrhoea is very common problem among nursing students.

Table 1: Prevalence of Dysmenorrhoea

Dysmenorrhoea	Frequency	Percentage (%)		
Present	94	78.33		
Absent	26	21.67		
Total	120	100%		

Further analysis was conducted on the socio-demographic characteristics of nursing students. The overall description is given below in table 2. And found that age, religion, menarche, menstruation rhythm and exercise are not having any relation with dysmenorrhoea whereas education and taking any remedies is having a very high relation with

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dysmenorrhoea. In other words we can say that age and menstruation rhythm is highly insignificant. Religion, menarche and exercise are insignificant whereas education and taking any remedies highly significant.

 Table 2: Association of Socio-demographic characteristics

 with dysmenorrhoea

with dysmenormoea						
Variables	Dysmenorrhoea		$\chi^2$	p-Value		
, and tes	Yes	No	Value	p value		
Age						
18-21 years	2	1		0.8645		
22-25 years	24	6	0.291			
more than 25 years	68	19				
Education						
B.Sc.(N) I year	31	6		0.0007		
B.Sc.(N)II year	26	2	17.165			
B.Sc.(N) III year	19	11	17.105			
B.Sc.(N)IV year	18	17				
Religion						
Hindu	61	17		0.4487		
Muslim	5	3	1.603			
Christian	28	6				
Menarche						
Less than 11 year	15	8		0.0410		
11-13 year	71	13	6.388			
More than 13 years	8	5				
	Menstrua	tion rhyth	m			
Regular	66	19		0.7762		
Irregular	28	7	0.081			
Exercise						
Yes	80	19	2.041	0.1531		
No	14	7				
	Take an	y remedie	s			
Medication	41	4	10.651	0.0049		
Hot application	31	8				
No	22	14				

Also table 3 completely describes the symptoms of dysmenorrhoea and effects of dysmenorrhoea on the daily life activities of the nursing students. The analysis of this table gives the result that high percentage 97.87% i.e. 92 out of 94 of nursing students are having the back pain which come under gastrointestinal symptoms and very less percentage 27% i.e. 26 out of 94 nursing students faces the problem of loose stool which also comes under gastrointestinal symptoms is the main symptoms of dysmenorrhoea. Whereas if we talk about the effects of dysmenorrhoea on the daily life activity then we found that a maximum number of nursing students 94.68% i.e. 89 out of 94 are facing problem during work.

**Table 3:** Frequency and percentage distribution of symptoms and daily life activities of dysmenorrhoea

	Symptoms / Effects (n=94)		Frequency	Percentage (%)			
	Physical symptoms	Headache	68	72.34			
		Sleeplessness	36	38.30			
		Tiredness	84	89.36			
	Psychological	Depression	54	57.45			
	symptoms	Nervousness	52	55.32			
	Gastrointestinal	Nausea/vomiting	86	91.49			

symptoms	Back pain	92	97.87
	Loose stool	26	27.66
Effects on daily activities	Study	63	67.02
	Sleep	78	82.98
	Work	89	94.68

## 4. Discussion

The prevalence of dysmenorrhoea in our study was found to be 78.33% which is also supported by Anil k Agarwal et al<sup>[1]</sup> and Jayashree R et al<sup>[7]</sup> that is 79.67% and 74% respectively. Whereas less prevalence of dysmenorrhoea has been quoted by Shashikala karanth et al<sup>[8]</sup> and Nag RM et al<sup>[9]</sup>, which is 62.50% and 33.84% respectively. At the same time high prevalence of dysmenorrhoea has been obtained by El-Hameed NA et al.<sup>[10]</sup> that is 94%.

Present study showed that the nursing students who were in higher in class and taking any remedies having less prevalence of dysmenorrhoea. In other words we can say that education and taking any remedies is highly significant. It is worthwhile to comment that, despite the sufferings, only a small proportion of girls had sought pharmacological management (43%) and 57% depended on non-pharmacological methods in present study. According to the study from Mexico, 62% of university students with dysmenorrhoea self-medicated while, 26% consulted physicians<sup>[11]</sup>.

Also in our study when we describes about the symptoms of dysmenorrhoea and effects of dysmenorrhoea on the daily life activities of the nursing students we found that high percentage 97.87% having the back pain and very less percentage 27% nursing students faces the problem of loose stool. Whereas if we talk about the effects of dysmenorrhoea on the daily life activity then we found that a maximum number of nursing students 94.68% are facing problem during work.

We also found in our study that high percentage 97.87% having the back pain and very less percentage 27% nursing student faces the problem of loose stool. Which is supported by Nayana S. George et al <sup>[12]</sup>. Whereas if we talk about the effects of dysmenorrhoea on the daily life activity then we found that a maximum number of nursing students 94.68% are facing problem during work which is supported by Anil K Agarwal<sup>[1]</sup>.

## 5. Conclusion

From the present study it can be concluded that in the present day's dysmenorrhoea is a very common problem among nursing students and they experience a number of physical and gastrointestinal symptoms associated with dysmenorrhea. Also with the increased intensity of pain in occurrence of dysmenorrhea the chances of experiencing these symptoms is also increased. Nursing students, almost always, silently suffer the pain by dysmenorrhea and the discomfort associated with it due to lack of knowledge about reproductive health. It is probable that this also affects their academic performance. The findings of this study thus indicate the enormity of the problem and the need for appropriate intervention through a change in lifestyle.

## 6. Recommendations

Proper attempt should be made to find out the factors, which cause dysmenorrhoea, and it is necessary for us to clarify these factors to improve their quality of life. Appropriate counselling and management should be done among the nursing students to improve their academic performance. On regular basis information, education and support should also be extended to parents, class representatives and hostel administrators in order to address the students about reproductive health. There is an urgent need to prevent unnecessary suffering of the student during menstruation.

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