# Assess The Prevalence of Dysmenorrhea And Its Impact on The Activities of Daily Living Among The Nursing Students

**Pratigya<sup>1</sup>, Kajal Banyal<sup>2</sup>** <sup>1, 2</sup> Nursing Tutor <sup>1, 2</sup> M.M College Of Nursing, MMU, Solan Himachal Pradesh.

Abstract- Dysmenorrhea is a painful menstrual cycle in which the majority of women experience abdominal pain and cramping, particularly during menarche or the first year of their reproductive life. The main aim of the study is to assess the prevalence of dysmenorrhea and its impact on daily living activities among nursing students. Material and Methods: A Quantitative and descriptive research design was used to assess the prevalence of dysmenorrhea and its impact on activities of daily living among nursing students of selected nursing colleges of Himachal Pradesh. Total 105 students were taken as a sample of study by Non Probability (Convenient Sampling Techniques). A standardized tool Numeric pain rating scale was used to assess the prevalence of Dysmenorrhea and self structured questionnaire was used to assess the impact of dysmenorrhea on activities of daily living. Results: Result shows that out of 105 students05(3.8%) is having mild level of dysmenorrhea, 56(53.4%) is having moderate level of dysmenorrhea and 45(42.8%) is having severe level of dysmenorrhea. Conclusion: It has been concluded from the findings of the study that prevalence of dysmenorrhea among nursing students of selected nursing colleges of Himachal Pradesh.05(3.8%) is having mild level of dysmenorrhea, 56(53.4%) is having moderate level of dysmenorrhea and 45(42.8%) is having severe level of dysmenorrhea and significant association have been found between the Activity of daily living and dysmenorrhea. Thus, dysmenorrhea has direct influence on the activities of daily living.

*Keywords*- Prevalence, Dysmenorrhea, Impact, Daily living activities, Nursing Students.

# I. INTRODUCTION

Menarche refers to a girl's first menstrual period. Menarche is a specific sign of maturation and becoming a fertile woman. The first period of menarche usually occurs after the growth of breast, pubic, and underarm hair. It can happen as early as age 10 or as late as age 14. The first few menstrual periods are usually irregular and light. During adolescence, periods may become longer and heavier.<sup>1</sup> The menstrual cycle is the process by which the female reproductive system (specifically the uterus and ovaries) allows for pregnancy. The cycle is required for secondary oocyte production and uterine preparation for a healthy pregnancy.<sup>2</sup>Approximately 80% of women report having some symptoms one to two weeks before menstruation.<sup>3</sup>Acne, breast tenderness, abdominal bloating, tiredness, irritability, and mood swings are the most common symptoms. Because these symptoms interfere with daily life, they are classified as premenstrual syndrome in 20 to 30% of women. They are severe in 3 to 8% of cases. The menstrual cycle is primarily governed by hormonal changes, which can be influenced by the use of hormonal birth control pills to avoid pregnancy. Each cycle has three phases based on events in the ovary (ovarian cycle) or the uterus (uterine cycle) (uterine cycle). The ovarian cycle consists of the follicular phase, ovulation, and luteal phase, while the uterine cycle consists of menstruation, the proliferative phase, and the secretory phase.<sup>4</sup> Dysmenorrhea is a major health issue that affects the quality of adolescent girls' daily life activities and is one of the most common gynecologic disorders.<sup>5</sup> The pain may radiate from the lower abdomen to the back or the lower legs. Pain can occur during menstruation or 1 to 3 days before. Pain is at its worst 24 hours after menstruation begins and subsides after 2 to 3 days.<sup>6</sup> Dysmenorrhea is more common in women who have heavy periods, irregular periods, or whose periods began before the age of ten. Dymenorrhea can be classified as either primary or secondary. Primary dysmenorrhea begins during puberty, when a pre-teen or teen begins to have periods.Pain is characterised by severe and frequent menstrual cramping caused by severe and abnormal uterine contractions and is unrelated to underlying pathology. Secondary dysmenorrhea cramps are caused by another medical condition, such as endometriosis, pelvic inflammatory disease, uterine fibroids, and so on. This condition is more common in older women.

# **II. NEED OF THE STUDY**

Dysmenorhea is the most common gynaecological disorder in women, with a prevalence ranging from 60% to 93%. Several studies have found that adolescent girls suffering from dysmenorrhea report that it has an impact on their academic performance, routine physical activities, eating and sleeping patterns. Nag (1982) reported a dysmenorrhea incidence of 33.5% among adolescent girls in India. According to a Swedish study, more than half of all menstruating women experience some discomfort. A senior obstetrician also stated that 5-10% of girls suffer from severe spasmodic dysmenorrhea, which disrupts their educational and social lives.<sup>7</sup>

Another study on dysmenorrhea among adolescent girls in Gwalior, India, was conducted in 2010. An exploratory study technique with a co-relational approach was used, and 970 adolescent girls aged 15-20 years old studying in Gwalior's higher secondary school were recruited for the study. The prevalence of dysmenorrhea in adolescent girls was found to be 79.67%, with the majority of them (37.96%) suffering from dysmenorrhea severity on a regular basis.<sup>8</sup>

# **III. REVIEW OF LITERATURE**

A study was conducted by the researcher on prevalence of dysmenorrhea among the undergraduate medical students and 112 samples was taken by stratified random sampling.Semi structured questionnaire was given to students to collect their responses by personal interviews. Premenstrual syndrome (67%) and dysmenorrhea (33%) were perceived by the study samples as the most distressing problems associated with menstruation.

The researcher was conducted cross sectional study. The data was collected among 310 girls (18 to 25yrs ) on age at menarche ,presence and absence of dysmenorrhea, its duration ,Pre-menstrual symptoms, family history, menses irregularity ,menstrual history, severity grading using Visual Analogue Scale(VAS) and using a semi-structured questionnaire. The result was reported 84.2% (261) girls and 15.8% (49) reported no dysmenorrhea. Using VAS, 34.2% of girls experienced severe pain, 36.6% moderate and 29.2% had mild.

#### **IV. OBJECTIVES**

1. To study the prevalence of dysmenorrhea among nursing students of selected nursing colleges of Himachal Pradesh..

- 2. To find out the association of dysmenorrhea with various activities of daily living such as academic performance, dietary pattern, sleeping pattern, laundry, clinical duties and extra curriculum activities among nursing students of selected nursing colleges of Himachal Pradesh.
- **3.** To prepare an information booklet for nursing students regarding dysmenorrhea and its treatment.

#### V. MATERIAL AND METHODS

To achieve the desired objectives quantitative research approach and exploratory research design was used. The present study was conducted in selected colleges of Himachal Pradesh.The target population was students of B.Sc. Nursing 1<sup>st</sup> and 2<sup>nd</sup> year of selected nursing colleges of Himachal Pradesh.Total 105 students were taken as a sample of study and convenient sampling technique was adopted to collect the data. The tool (Numeric pain rating scale and Self Structured Activities Of Daily Living Scale) was constructed to assess the prevalence of dysmenorrhea and impact of dysmenorrhea on activity of daily living among the students. The data was analysed in accordance with the study's objectives, using descriptive and inferential statistics such as mean, standard deviation and chi-square test.

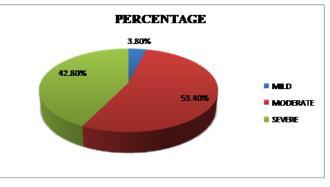


Figure 1.Shows distribution of level of dysmenorrhea among nursing students.

Figure 1 depicts the level of dysmenorrhea among nursing students, according to the Numeric pain rating scale score 05(3.8%) is having mild level of dysmenorrhea, 56(53.4%) is having moderate level of dysmenorrhea and 45 (42.8\%) is having severe level of dysmenorrhea.

Sr. No.	ACTIVITIES	SCORE	FREQUENCY	PERCENTAGE	<i>X</i> <sup>2</sup>	Df	LEVEL OF SIGNIFICA NCE
1	ACADEMICS						SIGNIFICAN
(a)	Attend class with full concentration	2	30	28.5%	1.050 2	2	T
(b)	Attend class with poor concentration	1	71	67.7%			
(c)	Absenteeism	0	4	3.8%			
2	CLINICAL PRACTICAL						NON- SIGNIFICAN
(a)	Perform clinical duties without any difficulty	2	35	33.2%	2.559	559 2	T
(b)	Difficulty in assessing patients need	1	65	62%			
(c)	Skipping clinical duties	0	5	4.8%			
3	DIETRY PATTERN						SIGNIFICAN
(a)	Takes meal on time	2	65	62%	17.67	2	Τ
(b)	Does not take complete food	1	20	19%			
(c)	Skipping meals	0	20	19%			
4	SLEEPING PATTERN						NON-
(a)	Sound sleep	2	40	38%	6.757 2	2	SIGNIFICAN T
(b)	Disturbed sleep	1	60	57.2%			
(c)	Does not sleep	0	5	4.8%			
5	LAUNDRY		·	·			SIGNIFICAN
(a)	Does personal laundry completely	2	76	72.3%	83.16 2	2	T
(b)	Launders small items, rinses socks, stockings etc.	1	24	22.9%			
(c)	All laundry must be done by others	0	5	4.8%			
6	EXTRACIRRCULM ACTIVITIES						SIGNIFICAN T
(a)	Active participation	2	40	38%	39.505	2	
(b)	Difficulty in performing activities	1	55	52.4%			
(c)	Does not participate	0	10	9.6%	7		

\*\*Significant at p<0.01

NS-Non significant

# VI. DISCUSSION

Table 1 shows that there was significant association of dysmenorrhea and daily living activities such as academic performance, dietary pattern, laundryand extra curriculum activities among nursing students. There was no significant association of dysmenorrhea and daily living activities such as sleeping pattern, clinical practical among nursing students.

According to the present study Numeric pain rating scale score 05(3.8%) is having mild level of dysmenorrhea, 56(53.4%) is having moderate level of dysmenorrhea and 45 (42.8%) is having severe level of dysmenorrhea.

# VII. CONCLUSION

It has been concluded from the findings of the study that prevalence of dysmenorrhea among nursing students of selected colleges of Himachal Pradesh.05(3.8%) is having mild level of dysmenorrhea, 56(53.4%) is having moderate level of dysmenorrhea and 45 (42.8%) is having severe level of dysmenorrhea and association also have been found between the Activity of daily living and dysmenorrhea. Thus, dysmenorrhea has direct influence on the activities of daily living.

#### VIII. RECOMMENDATION

Students can plan health education program in the clinical postings. Topic related to dysmenorrhea and its treatment can be included in detail in the curriculum. Inservice and continuing education program can be conducted for nurses to make them aware about dysmenorrhea and its management. Community nursing student should be educated in the community areas.

#### REFERENCES

- Silverthorn, Dee Unglaub (2013). Human Physiology: An Integrated Approach (6th ed.). Glenview, IL: Pearson Education. pp. 850–890.
- [2] Sherwood, Laurelee (2013). Human Physiology: From Cells to Systems (8th ed.). Belmont, California: Cengage. pp. 735–794.
- [3] Biggs, WS; Demuth, RH (15 October 2011).
  "Premenstrual syndrome and premenstrual dysphoric disorder". American Family Physician. 84 (8): 918–24.
- [4] "Premenstrual syndrome (PMS) fact sheet". Office on Women's Health, USA. 23 December 2014. Archived from the original on 28 June 2015. Retrieved 23 June 2015.
- [5] Osayande, AS; Mehulic, S (1 March 2014). "Diagnosis and initial management of dysmenorrhea". American Family Physician. 89 (5): 341–6.
- [6] American College of Obstetricians and Gynecologists (Jan 2015). "FAQ046 Dysmenorrhea: Painful Periods" (PDF). Archived (PDF) from the original on 27 June 2015. Retrieved 26 June 2015.

- [7] Pitts MK, Ferris JA, SmithAM, Shelley JM, Richters J. Prevalence and correlates of three types of pelvic pain in a nationally representative sample of Australian women. Med J Aust.2008;189:138–43.
- [8] Nur N, Sümer H. Prevalence of dysmenorrhea and related risk factors in adolescents.Surekli Tip EgitimiDergisi. 2008;7:27–30.