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Prevalence of using pain killer (analgesic) drug during dysmenorrhea

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ABSTRACT
Purpose of the study: *To assess the practice regarding using of pain killer drug during dysmenorrhea among students.* ***Methodology:*** *Quantitative research approach was adopted for the study. Research survey design was used. Total 200 samples were selected through the convenient sampling technique from Himalayan college of nursing. Data was collected by sociodemographic profile and self -reported practice checklist related to dysmenorrhea and to using painkiller drugs the data was analyzed by descriptive and inferential statistics.* ***Results:*** *The study result reveals that out of 200 samples,99 (49.5%) samples are using painkiller drugs for the management of dysmenorrhea. Out of 99 only 56 (28%) were using prescribed drugs, 23 (11.5%) were habitual to take painkiller drugs.* ***Conclusion:*** *This study reveals that out of 200 samples, 99 (49.5%) samples are using painkiller drugs for the management of dysmenorrhea. From all who are using painkiller drugs 144(72%) of samples are using non prescribed drugs during dysmenorrhea. Out of 99 samples, (94%) of samples are not experiencing any side-effect after using painkiller drugs during dysmenoorhea.*

Key words: *Pain killer, Dysmenorrhea, Mensuration, Remedies.*

INTRODUCTION

Menarche is an important event in life of an adolescent girl during which girls go through physical changes that are important in the psychological perception of sexual identity and that considerably influence mental maturity (Child Dev. 1992) .[1]

Menstruation is a unique phenomenon to the females. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent period. Once every month or so the lining tissue of inside of the womb come away passes out through the vagina with some blood which is known as menstruation.[2]

Painful menstrual periods, also called Dysmenorrhea, may include pain in the pelvis, abdomen, back or legs, abdominal cramps, headache and fatigue. Dysmenorrhea is estimated to occur in 20% to 90% of women of reproductive age. It is the most common menstrual disorder. Typically, it starts within a year of the first menstrual period when there is no underlying cause. Often the pain increases with increase in age of the child. Dysmenorrhea is the medical term used for painful menstruation.[3]

Painful menstruation affects approximately 50% of menstruating women, and 10% are incapacitated for up to 3 days. Painful menstruation is the leading cause of lost time from school and work among women of childbearing age. This pain may precede menstruation by several days or may accompany it, and it usually subsides as menstruation tapers off. Although some pain during menstruation is normal, excessive pain is not. Dysmenorrhea refers to menstrual pain severe enough to limit normal activities or require medication.[4]

MATERIAL AND METHODS

A descriptive survey study was conducted among the girls had dysmenorrhea and using pain killer drug in

Himalayan college of nursing, Dehradun. The study was conducted on 12- 17 June 2017. The sample size was comprised of 200 female student nurses.
Research approach: Quantitative Research was used for the study.
Research Design: Research Survey design was adopted
Population: Student Nurses
Sample: Students age group 18- 30 years
Sample size: 200
Sampling technique: Convenient sampling technique
Setting: Himalayan college of nursing, Dehradun, Uttarakhand, India.
Selection of criteria
Inclusion Criteria

- Student nurses suffering from dysmenorrhea
- Student present at the time of data collection

Exclusion Criteria

- Student suffering from any other gynecological disease condition
- Students who are under treatment for gynecological condition

Procedure methodology

To conduct the study administrative permission was obtained from Principal, Himalayan College of Nursing followed by ethical permission was obtained from ethical committee, SRHU. Data collection is a process of acquiring subjects and collecting information needed for the study. After obtaining necessary administrative permission from the authority, the area was selected. Data was collected from 12 June 2017 to 17 June 2017 in Himalayan College of Nursing, Jollygrant. All subjects who are fulfilling the inclusion criteria were included in the research study. A total 200 Nursing students were selected for the data collection. Written consent was taken from each participant and explained the purpose of the study. We assured to participants that confidentiality would be maintained throughout the study. The Structured knowledge Questionnaire method used to collect data. The final tool prepared after modification and correction with the help of 5 experts and guides. 10-15 minutes were taken by each participant to fill the questionnaire. The tool prepared according to the objective of the present study which consists of 3section section 1- demographic profile, section 2- numerical pain scale, section 3- self-reported practice checklist related to painkiller drug use for dysmenorrhea which were developed to assess the knowledge regarding using painkiller during dysmenorrhea, total number of questions were 36. Each question carried 1 score for correct answer and the 0 score for wrong answer.

Statistical analysis

The data was obtained through structured knowledge questionnaire and demographic data of subject. All data obtained, coded and transformed into master sheet. Data analysis was done by using descriptive and inferential statistics on the basis of objective of the study. Chi-square was used to find association between two or more socio demographical variable. The level $P < 0.05$ was considered as the cutoff value or significance.

RESULT

SECTION 1: - Analysis of demographic characteristics of subjects

TABLE 1. Frequency and percentage distribution of female nursing students according to socio-demographic characteristics

N= 200

NO	O DEMOGRAPHIC VARIABLE	FREQUENY	PERCENTAGE (%)

		(f)	
1)	**AGE IN (YEARS)** 18-24 25-30	 **1** **9** **4** 6	 **97** 3
2)	**COURSE** U. G P. G	 **1** **9** **1** 9	 **95.5** 4.5
3)	**MARITAL STATUS** MARRIED UNMARRIED	 1 2 **1** **8** **8**	 6.4 **93.6**
4)	**PLACE OF LIVING** HOSTLER DAY-SCHOLAR	 **1** **3** **4** 6 6	 **67** 33
5)	**DIETARY-PATTERN** VEGETARIAN NON-VEGETARIAN	 7 8 **1** **2** **2**	 39 **61**
6)	**FAMILY HISTORY OF DYSMENORRHEA** YES NO	 8 1 **1** **1** **9**	 40.5 **59.5**
7)	**AGE AT MENARCHE** 10-14 YEARS 15-18 YEARS	 **1** **3** **7** 6 3	 **68.5** 31.5
8)	**INTERVAL OF CYCLE (IN DAYS)** 25-30 31-35	 **1** **8**	 **90.5** 9.5

		1 1 9	
9)	**DURATION OF MENSTRUATION** 3-4 DAYS 5-7 DAYS	 88 **112**	 44 **66**
10)	**PATTERN OF MENSTRUAL CYCLE** REGULAR IRREGULAR	 **1** **6** **5** 3 5	 **82.5** 17.5
11)	**TYPE OF BLOOD FLOW** SCANTY NORMAL HEAVY	 29 **151** 20	 14.5 **85.5** 10
12)	**PASSAGE OF CLOTS DURING MENSTRUATION** YES NO	 **120** 80	 **60** 40
13)	**LEVEL OF PAIN** MILD MODERATE SEVERE	 2 9 **1** **0** **2** 7 4	 14.5 **51** 37
14)	**USE OF PAIN KILLER** YES No **Name of the drug used** Combilfam Meftal Spas Diclofenac Sodium Paracetamol Ibuprofen Multiple	 9 9 **1** **0** **1** 8 7 4 7 1 4 5	 49.5 **50.5** 8.08 74.75 7.07 1.01 4.04 5.05

Table 1 shows that majority (97%) of subjects were in the age group of 18-24 years (Figure 1). Majority (95.5%) females are in U.G course. Majority (93.6) females are unmarried. Most (67%) of females lives in the hostel. Majority (61%) of females are non-vegetarian. Most (59.9%) females have no family history of dysmenorrhea. Most (68.5%) of subjects were have menarche on 10-14 years. Majority (90.5%) of the subjects menstrual cycle interval was 25-30 days. Most (66%) of the samples duration of menstruation was 5-7 days. Majority (82.5%) of the samples had regular pattern of menstrual cycle. The majority (85.5%) of participants have normal blood flow. Most (60%) participants have history of passage of clots during menstruation. Majority (51%) of samples had moderate pain level. Most of the samples (50.5%) do not opt for any medication during dysmenorrhea. Out of 200 samples only 99 samples (49.5%) use various medications during dysmenorrhea (Figure 2). Out of 49.5% samples majority (74.75%) participants used Meftal Spas, 8.08% used Combiflam, 7.07% used diclofenac sodium, 1.01% used Paracetamol, 4.04% used Ibuprofen and 5.05% samples used multiple drugs for the management of dysmenorrhea (Figure 3).

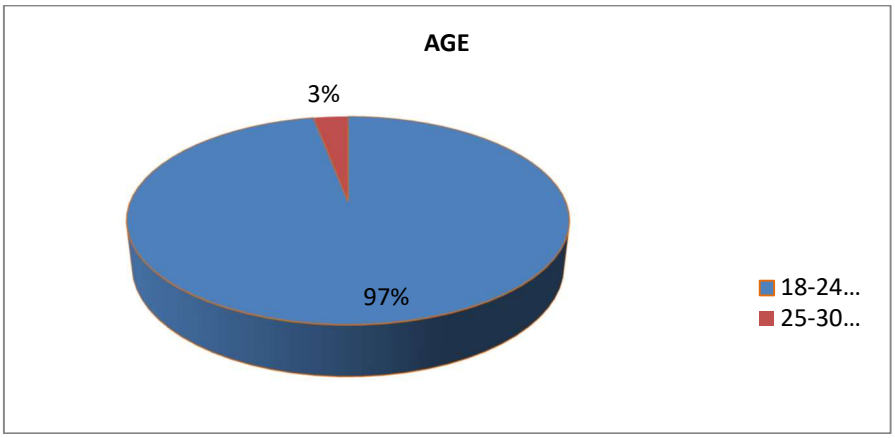

Figure 1. Percentage distribution of female nursing students according to age group

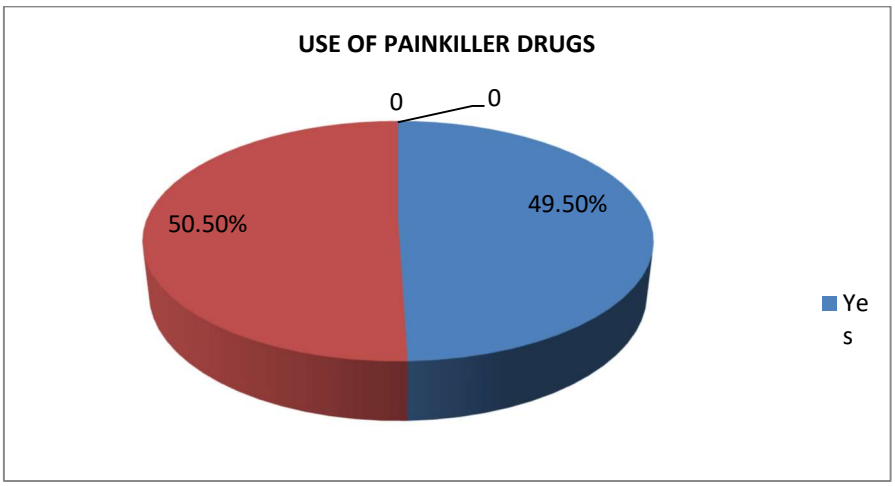

Figure 2. Percentage distribution of female nursing students according to use of painkiller

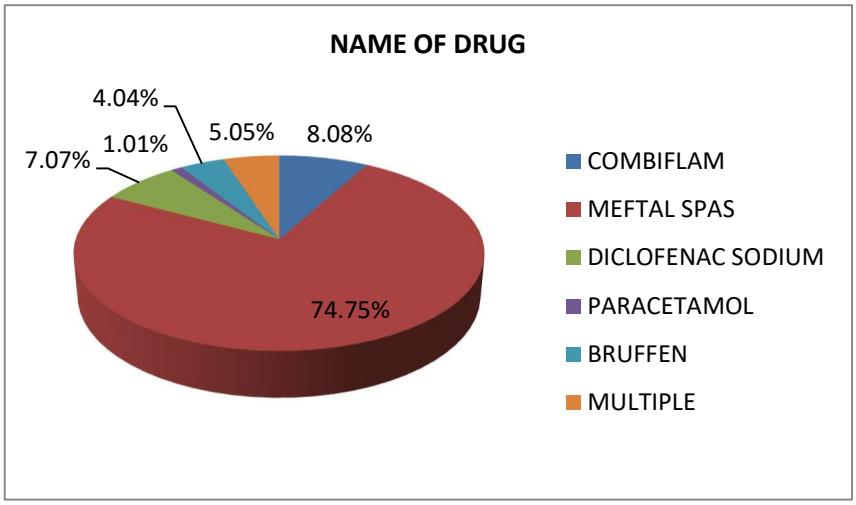

Figure 3. Percentage distribution of female nursing students according to name of painkiller

SECTION 2: - Analysis of severity of dysmenorrhea.

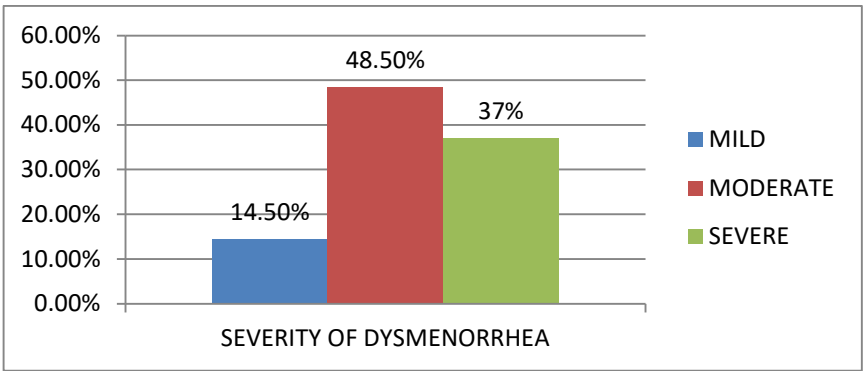

Figure 4. Percentage distribution of female nursing students according to severity of dysmenorrhea

Description of Figure 4: Figure no 4 shows that majority (48.5%) of samples suffers from moderate dysmenorrhea, 37% of samples suffers from severe dysmenorrhea and rest 14.5% of the samples suffers from mild dysmenorrhea.

TABLE 2. Item Analysis of self-reported practice checklist related to painkiller drugs.

N=200

	QUESTIONS	**YES**		**NO**	
		ency		**ency**	
1	s of dysmenorrhea on daily life activities	187	**3.5**	13	6.5
2	lted to doctor	35	7.5	165	**82.5**
3	ience of nausea/vomiting with dysmenorrhea	87	3.5	113	**56.5**

4	ience of mood swings with dysmenorrhea	176	**38**	24	12
5	sed sensitivity to external stimuli (light, sound, smell) with dysmenorrhea	110	**55**	90	45
6	on sleep during dysmenorrhea	166	**33**	34	17
7	ing of meals during dysmenorrhea	115	**7.5**	85	42.5
8	absentism	55	7.5	145	**72.5**
9	al posting absentism	53	6.5	147	**73.5**
10	of concentration during dysmenorrhea	172	**36**	28	14
11	f prescribed painkillers	56	28	144	**72**
12	f same type of painkillers	85	2.5	115	**57.5**
13	f painkiller with home remedies	78	39	122	**61**
14	f home remedies	148	**74**	52	26
15	f painkillers according to severity of dysmenorrhea	84	42	116	**58**
16	ffects of painkiller drugs	12	6	188	**94**
17	ual to take painkiller drugs	23	1.5	177	**88.5**
18	f drug other than analgesic drugs	15	.5	185	**92.5**
19	y members are aware of your intake of painkiller during dysmenorrhea	114	**57**	86	43
20	s relieved after taking painkillers	124	**62**	76	38

OBJECTIVE 2: -To find association between using painkiller drugs with selected demographic variable.

TABLE 3. Association of selected demographic variables with use of pain killer drugs

S.NO	DEMOGRAPHIC VARIABLE	BELOW MEDIAN (<9)	AT OR ABOVE MEDIAN (=>9)	X^2
1	Age (in years 18-24 25-30	 **74** 3	 **119** 4	0.61***
2	Marital Status Married Unmarried	 7 **71**	 5 **117**	**772.9***
3	Place of Living Hostler Day-Scholar	 **60** 17	 **73** 50	**513.4***
4	Family History of Dysmenorrhoea Yes No	 36 **41**	 50 **73**	**265.4***
5	Use of painkiller Yes No	 3 **74**	 **95** 28	**104.8****
6	Dietary Pattern Vegetarian Non-Vegetarian	 32 **45**	 46 **77**	**55.17***

Df1= 3.84 at p<0.05 ***= Chi square** ****= Yates correction** *****= Fissure exact test**

DISCUSSION

The study has adopted quantitative approach with descriptive design. The study sample consisted of 200 female nursing students. A convenient sampling was selected as it was found suitable for the study.

FINDING OF PRACTICE CHECKLIST REGARDING DYSMENORRHEA AND PAINKILLER DRUGS

Result of the present study is supported with a descriptive study conducted by **Kiran B, Tasneem. S (2012)** on the prevalence, severity and treatment of dysmenorrhea in medical and nursing students of SRM University, Chennai, Tamil Nadu. A total of 401 and 97 students from SRM university Chennai and Vydehi Institute of medical sciences and research center Bangalore respectively were enrolled in the study. The prevalence of dysmenorrhea was 76.3% and 100% in medical and nursing students of Chennai and Bangalore respectively. The result shows that 33% and 37.11% students have taken allopathic treatment, 6.20 and 2.06% have taken home remedies, 0.98 and 1.03% have taken Ayurvedic treatment and 2.28% students have taken homeopathic treatment for the management of dysmenorrhea[5].

ASSOCIATION BETWEEN PRACTICE CHECKLIST FOR DYSMENORRHEA AND PAINKILLER DRUGS WITH SELECTED DEMOGRAPHIC VARIABLES

It shows that there is statistically significant difference among marital status (772.9), place of living (513.4), family history of dysmenorrhea (265.4), use of painkiller drugs (104.8), dietary pattern (55.17) but the other group such as age group there is statistically no significant difference related to practice checklist for dysmenorrhea and painkiller.

CONCLUSION

This study reveals that out of 200 samples, 99 (49.5%) samples are using painkiller drugs for the management of dysmenorrhea. From all who are using painkiller drugs 144(72%) of samples are using non prescribed drugs during dysmenorrhea. Out of 99 samples, (94%) of samples are not experiencing any side-effect after using painkiller drugs during dysmenoorhea. Out of 49.5% samples majority of 74.75% participants are using Meftal Spas, 8.08% are using Combiflam, 7.07% are using diclofenac sodium, 1.01% are using Paracetamol, 4.04% are using Ibuprofen and 5.05% samples are using multiple drugs for the management of dysmenorrhea. participants reported that they were experiencing irregular periods because of using painkiller drugs. Some participants reported for increased blood flow whereas some participants reported for decreased blood flow while using painkiller drugs for dysmenorrhea.

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