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Ladoke Akintola University of Technology, Ogbomosho, Nigeria*

# PREVALENCE, PERCEIVED EFFECTS AND COPING STRATEGIES OF DYSMENORRHEA AMONG FEMALE NURSING STUDENTS IN TRAINING IN ENUGU STATE, NIGERIA

LOVE NNENE EDEH; MATHIAS AGBA; EUNICE OSUALA; TIMOTHY ONORIKPORI, JUSTIN AGORYE INGWU

## Abstract

*Dysmenorrhea is pain associated with menstruation which is a public health problem affecting young females of reproductive age which can be managed pharmacologically and/or non-pharmacologically. The study aimed at assessing the prevalence, perceived effects and coping strategies of dysmenorrhea among female nursing students of University of Nigeria, Enugu campus (UNEC), Enugu State, Nigeria. A cross-sectional descriptive survey design was employed in this study with a sample size of 268 respondents. Data was obtained using a structured questionnaire. The analysis was done using the Statistical Package for the Social Sciences (SPSS) version 25 and Microsoft Excel 2016. Findings indicate that dysmenorrhea is highly prevalent among female nursing students of UNEC (77%). This study further revealed that the symptoms manifested by respondents during dysmenorrhea include experiencing pain mainly during menstruation (60.9%), the type of pain is intermittent (70.5%) and moderate in the lower abdomen (82.6%). Other associated symptoms experienced by the respondents are Dyspareunia (55.8%) and Stomach upset (54.7%). Findings also observed that the coping strategies used in the management of dysmenorrhea were majorly pharmacologic and non-pharmacologic strategies (48.3%). Three major non-pharmacologic strategies used to cope with dysmenorrhea were rest & sleep (59.9%), hot shower/bath (32.9%) and heat application, (28.5%) also, Felden/Felvin (27.1%) and Panadol/Paracetamol (18.4%) were the most commonly used medications in the management of dysmenorrhea. Lastly, medications are being taken based on the severity of the pain (76.5%), 1-2 times per day (53.9%) The result of this study observed that the major perceived academic effects of dysmenorrhea were lack of concentration at lectures (62.8%), social withdrawal (56.5%) and disturbed sleep (55.6%). It is recommended that healthcare professionals should encourage students to seek prompt medical attention to rule out or treat any underlying problem that may be responsible for dysmenorrhea in order that their reproductive health is not significantly affected later in life.*

**Keywords:** Dysmenorrhea; Prevalence; Perceived effects; Coping strategies; Female nursing students.

## INTRODUCTION

Many female teenagers and young women find the early reproductive years physically and psychologically tough, despite the fact that it is an exciting time in their lives and a significant turning point in the transition from a child to a sexually matured woman Babarimisa (2020). Menstruation is a key sign of functional reproductive and endocrine system in women because it deals with hormonal effects and the reproductive organs. Menstruation being a normal physiological process occurs approximately every month in women of childbearing age which could bring about certain level of pain and discomfort, although without this incapacitating their activities of daily living. Fernandez-Martinez et al., (2018). Although it is a natural phenomenon, up to 80% of women report having some symptom during the one to two weeks prior to menstruation. Common symptoms include acne, tender breasts, bloating, feeling tired, irritability and mood changes. Goswami & Mukherjee (2020). Dysmenorrhea, a painful cramp, is a common menstrual complaint of adolescents and mature women with a major impact on their quality of life, work productivity and health-care utilization. It is considered the most common symptom of all menstrual complaints and poses a greater burden of disease than any other gynecological complaint in developing countries. Most authors use dysmenorrhea interchangeably



with menstrual pain, however, Osonuga & Ekor, (2019) have proposed dysmenorrhea to be menstrual pain severe enough to cause functional incapacitation or seeking treatment or suggest it is a clinical diagnosis based on history on examination findings.

Basically, two types of dysmenorrhea have been described namely, primary and secondary dysmenorrhea. Ikpeama et al. (2022) penned that dysmenorrhea is considered primary in the absence of underlying pathology. Onset of primary dysmenorrhea usually occurs 6-12 months following menarche and prevalence peaks in late adolescence or early twenties (Bernardi, et al., 2017). Secondary dysmenorrhea, on the other hand, is a painful menstruation that is due to underlying pelvic pathology (Ozder & Salduz, 2020). Ultrasonography, which is particularly efficient in excluding several secondary causes of dysmenorrhea like endometriosis and adenomyosis, is used to confirm the diagnosis of secondary dysmenorrhea, which is made based on clinical history and physical examination (Osuala et al., 2022). Various studies have shown that dysmenorrhea can significantly reduce quality of life of affected women and sometimes restrict daily activities, especially in women with severe pain (Abreu-Sanchez et al., 2020) and that it negatively influences their relationships with friends, school or work performance in addition to social and recreational activities (Al-Matouq et al., 2019). Dysmenorrhea being women's health issue, affect a large percentage of women of childbearing age (Abreu-Sanchez et al., 2020).

Menstrual cramps, as highlighted by Ozder & Salduz (2020), are a common and distressing aspect of a woman's menstrual cycle. The intensity of the cramping pain can be unbearable for many women, often leading them to cry and confine themselves to bed. Typically, the pain begins a day or two before the onset of menstrual flow and can persist for 2-3 days afterward. However, in cases where there is an underlying pelvic disease, the pain may extend beyond the duration of menstrual

flow. Severe cases may require hospital admission and management by healthcare professionals. Women commonly employ strategies such as taking NSAIDs (nonsteroidal anti-inflammatory drugs), applying warm compresses to the lower abdomen, and engaging in diversional therapy, such as sleep, to alleviate the pain. Self-medication with NSAIDs is often effective in relieving cramping pain, particularly when there are no underlying pelvic diseases. Chen et al. (2018) identified various reasons why women may not seek treatment for dysmenorrhea, including assuming that the symptoms are normal, perceiving healthcare providers as unhelpful, lacking awareness of available treatment options, and feeling embarrassed. However, underutilization of healthcare services for dysmenorrhea can lead to insufficient self-management, potentially allowing underlying medical causes of menstrual discomfort to go undetected (Durand et al., 2021).

Menstrual disorders, such as dysmenorrhea, can persist throughout a woman's reproductive cycle, causing disruption to their daily activities and overall quality of life (Pokhrel & Thapa, 2021). It is commonly believed that childbirth can alleviate these disorders (Schliep, 2018). Early detection of menstrual conditions can play a crucial role in improving one's health, well-being, and overall quality of life (Pokhrel & Thapa, 2021). Pain and depression are closely linked, and while dysmenorrhea is primarily a menstrual disorder, recurrent pain is a common symptom that can have both somatic and emotional impacts (Ozder & Salduz, 2020). This can result in reduced concentration during lectures, social dysfunction, and ultimately affect the well-being and quality of life of female nursing students. Despite numerous studies on dysmenorrhea worldwide, there is a lack of literature regarding its prevalence, perceived effects, and coping strategies among female nursing students at the University of Nigeria, Enugu Campus (UNEC), Enugu State, Nigeria. Therefore, this study aims to investigate these variables in order to fill this knowledge gap.

**Objectives**

The objectives of this study are to:

1. ascertain the prevalence of dysmenorrhea among female nursing students of University of Nigeria, Enugu Campus.
2. determine the perceived effects of dysmenorrhea among female nursing students of University of Nigeria, Enugu Campus.
3. ascertain the coping strategies of dysmenorrhea among female nursing students of University of Nigeria, Enugu Campus.

bordered by the Institute of Management and Technology (IMT) to the East, Kenyatta Market to the West, Maryland street to the North, and College Road to the South. UNEC serves as an annex to the main campus located in Nsukka. The campus comprises seven faculties and seventeen departments, including the faculties of Basic Medical Sciences, Health Sciences and Technology, Medical Sciences, Dentistry, Law, Business Administration, and Environmental Studies. For the purpose of this study, the focus was limited to the Department of Nursing Sciences, which is part of the Faculty of Health Sciences and Technology.

**METHODOLOGY**

**Design:** The researcher employed a cross-sectional descriptive design.

**Setting:** The study was conducted at the University of Nigeria, Enugu Campus (UNEC), located in Enugu state, Southeast Nigeria. UNEC is situated within Enugu town, specifically behind independence layout. It is

**Sample Size Determination:** A simplified formula for proportions, Taro Yamane, was used to calculate the sample size. The sample size, n = 268.

**Sampling technique:** A proportionate stratified sampling technique was obtained using the formula. The sample size for each level (stratum) is represented in the Table 1.

**Table 1: Students’ population and sample size**

Department	Level	Target population	Sample size
Nursing Sciences	200	132	43
	300	264	87
	400	206	68
	500	212	70
<b>Total</b>		814	268

**Sample size:** The sample size for the study was 268 students and a proportionate stratified sampling technique was used to select sample size from each level of study in the department of nursing sciences.

**Data Collection:** The instrument for data collection was a structured questionnaire, titled; “Questionnaire on the prevalence, perceived effects and coping strategies of dysmenorrhea among female nursing students

of the University of Nigeria, Enugu Campus, Enugu State”. The questionnaire was adopted from previous research works of Bello et al. (2017), Gebeyehu et al. (2017), Ameade et al. (2018), Kizilirmal et al. (2019), Oluwole et al. (2020), Durand et al. (2021), Mengesha & Halie (2021) and Omar et al. (2021) and prepared in English. The instrument was pretested on 26 selected females of the Department of Nursing Sciences, Enugu State University of Science and Technology (ESUT)

and all errors observed during the pre-test study were corrected. After thorough explanation on the objectives of the research to the class members in the four different levels of nursing department, the copies of the questionnaire were administered to selected female Nursing students of UNEC by the researcher and four other research assistants from each of the classes in their respective lecture halls during their break period.

**Validity:** The researchers after structuring the instrument presented it to the expert who examined the questionnaire for adequate coverage of objectives of the study. The instrument was also ascertained for appropriateness of language to rule out ambiguities in the structuring. After reviewing the instrument, some items in the questionnaire were deleted while some were amended as suggested by the expert. Based on the suggestions and recommendations, a final copy of the instrument was drafted.

**Reliability:** Before the administration of the questionnaire, a pre-test study was conducted using 10% of the sample size. As a result, 26 copies of the questionnaire were administered to selected females of the Department of Nursing Sciences, Enugu State University of Science and Technology (ESUT). From the collected data, the reliability of the instrument was ascertained using Cohen's Kappa which measures the consistency of the responses of the subjects. The reliability coefficient was .845 which indicated that the instrument was reliable for the study. All errors observed during the pre-test study were corrected.

**Data Analysis:** The collected data was analysed using descriptive statistics; frequency, percentage, mean and standard

deviation, which were used to summarize the items of the questionnaire. The analyses were done with the aid of Statistical Package for Social Sciences (SPSS) version 25 and Microsoft Excel.

**Ethical Consideration:** Prior to data collection, student identification letter was obtained from the Head of Department of Nursing Sciences, University of Nigeria, Enugu Campus (UNEC). Ethical approval was obtained from the research and ethics committee of University of Nigeria Teaching Hospital (UNTH) (Ref number UNTH/HREC/2022/11/503). Informed verbal consent was sought from the respondents before the questionnaire was administered. Voluntary participation was employed, and the principle of confidentiality and anonymity was used to obtain information from the respondents.

## RESULTS

In this study, 268 students were examined, 265 responses were gotten after the administration of the questionnaire providing a return rate of 98.9%.

### Socio-demographic Characteristics of the Students

The dominant age range of the respondents was from 17-30 years with mean and standard deviation of  $22.62 \pm 2.58$  and modal age group of 21-25 years (59.2%). Virtually all were Christians (99.6%), single (92.5%) and nulliparous (95.5%). Their academic levels were 200 level (18.9%), 300 level (32.5%), 400 level (24.5%) and 500 level (24.1%) (Table 1).

**Table 2: Socio-demographic Characteristics of the Students** **n = 265**

	Frequency	Percent	Range	M±SD
Age			17-30	22.62±2.58
- <20	51	19.2		
- 21-25	168	63.4		
- >26	46	17.4		
Religion				
- Christianity	264	99.6		
- Islam	1	0.4		
Marital status				
- Single	245	92.5		
- Married	17	6.4		
- Cohabiting	3	1.1		
Parity				
- Nulliparous	253	95.5		
- Multiparous	11	4.2		
- Uniparous	1	0.3		
Academic level				
- 200 level	50	18.9		
- 300 level	86	32.5		
- 400 level	65	24.5		
- 500 level	64	24.1		

**Menstrual Characteristics of the Students**

For majority, age of menarche was 12 years and above (66.0%), duration of menses was 4-5

days (64.2%) and menstrual cycle length, 22-28 days (55.8%). Most had regular menstrual cycle (83.4%). Majority had family history of dysmenorrhea (69.4%) (Table 3).

**Table 3: Menstrual Characteristics of the Students** **n = 265**

	Frequency	Percent
<b>Age at menarche</b>		
- <12 years	90	34.0
- = 12 years	175	66.0
<b>Duration of menses</b>		
- 2-3 days	75	28.3
- 4-5 days	170	64.2
- 6-7 days	17	6.4
- >7 days	3	1.1
<b>Menstrual cycle length</b>		
- <21 days	32	12.1
- 22-28 days	148	55.8
- 29-35 days	67	25.3
- >35 days	3	1.2
- I do not know	15	5.6
<b>Menstrual cycle regularity</b>		
- Regular	221	83.4
- Irregular	44	16.6
<b>Family history of dysmenorrhea</b>		
- Yes	184	69.4
- No	81	30.6

**Prevalence of Dysmenorrhea**

The result in table 4 revealed that 90 (34%) of respondents strongly agreed that they experienced dysmenorrhea regularly while 85 (32%) agreed, 59 (22%) disagreed and 31 (12%) strongly disagreed. Also, 89 (34%) of respondents strongly agreed that menstruation is a normal physiological process in women, it brings about certain level of pain and discomfort while 68 (26%) agreed, 25 (9%) disagreed and 17 (6%) strongly disagreed; 89 (34%) of respondents strongly agreed that menstrual pain and discomfort, incapacitate activities of daily living while 97 (37%) agreed, 57 (22%)

disagreed and 22 (8%) strongly disagreed; 90 (34%) of respondents strongly agreed that dysmenorrhea significantly reduces quality of life of affected women while 85 (32%) agreed, 59 (22%) disagreed and 31 (12%) strongly disagreed; 138 (52%) of respondents strongly agreed that dysmenorrhea sometimes restricts daily activities, especially in women with severe pain while 83 (31%) agreed, 28 (11%) disagreed and 16 (6%) strongly disagreed; 155 (58%) of respondents strongly agreed that dysmenorrhea can significantly have negative influences on relationships with friends, school or work performance in addition to social and

recreational activities, 68 (26%) agreed, 25 (9%) disagreed and 15 (6%) strongly disagreed; 89 (34%) of respondents strongly agreed that dysmenorrhea being women's health issue, affect a large percentage of women of childbearing age while 97 (37%) agreed, 57 (22%) disagreed and 22 (8%) strongly disagreed; 111 (42%) of respondents strongly agreed that menstrual cramps are one of the most prevalent and annoying aspects of a woman's period strongly disagreed while 105 (40%)

agreed, 33 (12%) disagreed and 16 (6%) strongly disagreed; 105 (40%) of respondents strongly agreed while 90 (34%) agreed, 46 (17%) disagreed and 24 (9%) strongly disagreed; 111 (42%) of respondents strongly agreed that the pain usually begins a day or two prior to menses while 105 (40%) agreed, 33 (12%) disagreed and 16 (6%) strongly disagreed. This study concludes that the prevalence rate of dysmenorrhea is high (77%)

**Table 4: Prevalence of Dysmenorrhea**

	SA	A	D	SD
1 Experienced dysmenorrhea regularly	90 (34%)	85 (32%)	59 (22%)	31 (12%)
2 Although menstruation is a normal physiological process in women, it brings about certain level of pain and discomfort.	155 (58%)	68 (26%)	25 (9%)	17 (6%)
3 Menstrual pain and discomfort, incapacitate activities of daily living	89 (34%)	97 (37%)	57 (22%)	22 (8%)
4 dysmenorrhea significantly reduces quality of life of affected women	90 (34%)	85 (32%)	59 (22%)	31 (12%)
5 Dysmenorrhea sometimes restricts daily activities, especially in women with severe pain	138 (52%)	83 (31%)	28 (11%)	16 (6%)
6 dysmenorrhea can significantly have negative influences on relationships with friends, school or work performance in addition to social and recreational activities	155 (58%)	68 (26%)	25 (9%)	15 (6%)
7 Dysmenorrhea being women's health issue, affect a large percentage of women of childbearing age	89 (34%)	97 (37%)	57 (22%)	22 (8%)
8 Menstrual cramps are one of the most prevalent and annoying aspects of a woman's period.	111 (42%)	105 (40%)	33 (12%)	16 (6%)
9 The cramping pains is unbearable in most women and sometimes make them cry and stay confined to bed.	105 (40%)	90 (34%)	46 (17%)	24 (9%)
10 The pain usually begins a day or two prior to menses	111 (42%)	105 (40%)	33 (12%)	16 (6%)
Overall Mean	113 (43%)	88 (34%)	42(16%)	21 (8%)



**Symptoms of Dysmenorrhea as Manifested by Respondents**

According to Table 5, the participants reported experiencing dysmenorrhea primarily during menstruation (60.9%) and intermittently (70.5%). The majority of respondents described

the degree of pain as moderate (51.7%), and the location of the pain was predominantly in the lower abdomen (82.6%). Additionally, other significant menstrual-associated symptoms reported by the students included stomach upset (55.8%), mood changes (54.7%), and tiredness (46.8%), as shown in Table 5.

**Table 5: Symptoms of Dysmenorrhea as Manifested by Respondents n = 265**

	Frequency	Percent
Time pain is experienced (n = 207)		
Before the menstruation	78	37.7
During the menstruation	126	60.9
After the menstruation	3	1.4
Type of pain experienced (n = 207)		
Intermittent pain	146	70.5
Continues pain	61	29.5
Degree of the menstrual pain (n = 207)		
- Mild pain	51	24.6
- Moderate pain	107	51.7
- Severe pain	49	23.7
Location of the menstrual pain (n = 207)		
✓ Lower abdomen	171	82.6
✓ Lower back	30	14.5
✓ Thigh	12	5.8
✓ Hips	18	8.7
✓ Others (Waist, Breast, Leg, Joint pain)	4	1.9
Other menstruation associated symptoms experienced (n = 207)		
- Depression	45	17.0
- Vomiting	46	17.4
- Nausea	75	28.3
- Headache	80	30.2
- Tiredness	124	46.8
- Dizziness	40	15.1
- Dyspareunia	14	5.3
- Stomach upset	148	55.8
- Mood changes	145	54.7
- Feeling sick	70	26.4
- Fainting attacks	27	10.2
- Loss of appetite	104	39.2
- Increased appetite	70	26.4
- Restlessness	93	35.1
- Others -Diarrhea, Irritation, Cramps, Bloating, Paralysis	20	7.5

### **Coping strategies used in the management of Dysmenorrhea**

The coping strategies employed for managing dysmenorrhea were primarily a combination of pharmacologic and non-pharmacologic approaches (48.3%), followed by the use of only non-pharmacologic strategies (44.4%). Among the non-pharmacologic strategies, the most used was rest and sleep (59.9%), followed by hot shower/bath (32.9%) and heat application (28.5%). Among the pharmacologic strategies, felden/felvin

(27.1%) was the most frequently used, followed by Panadol/paracetamol (18.4%). The main reason for medication usage was to alleviate the severity of pain (76.5%), and the frequency of drug intake was primarily 1-2 times per day (53.9%), as shown in Table 6.

This study indicates that the coping strategies used for dysmenorrhea are rest and sleep (59.9%), fleden/felvin (27.1%) and the reason for using the drug is severity of pain (76.5%) and the frequency for drug usage is 1-2times per day (54%).

**Table 6: Coping strategies used in the management of Dysmenorrhea** **n = 207**

	<b>Frequenc y</b>	<b>Percen t</b>
How do you cope with dysmenorrhea?		
✓ With pharmacologic strategies	15	7.3
✓ With non-pharmacologic strategies	92	44.4
✓ With pharmacologic and non- pharmacologic strategies	100	48.3
What non -pharmacological strategies of menstrual pain relief do you adopt to cope with dysmenorrhea?		
✓ Rest and sleep	124	59.9
✓ Heat application	59	28.5
✓ Exercise	30	14.5
✓ Massage	42	20.3
✓ Ice application	6	2.9
✓ Cold shower/bath	23	11.1
✓ Hot shower/bath	68	32.9
✓ Relaxation techniques	49	23.7
✓ Acupuncture	5	2.4
✓ Diet change	28	13.5
✓ Others: Drinking Lukewarm water, Taking hot fluids, Diversional therapy	6	2.9
Type of drugs use to manage menstrual pain		
✓ Panadol/paracetamol	38	18.4
✓ Hyoscine butyl bromide (Buscopan)	14	6.8
✓ Felden/felvin	56	27.1
✓ Ibuprofen	30	14.5
✓ Antibiotics	2	1.0
✓ Aspirin	1	0.5
✓ Codeine	1	0.5
✓ Herbal drugs	1	0.5
✓ Oral contraceptives	0	0.0
✓ Others: Blended ginger, Diclofenac injection	7	3.4
Reason for drug usage (n=115)		
- Physician consultation	5	4.3
- The severity of the pain	88	76.5
- Awareness	21	18.2
- More than one reason	1	1.0
Frequency of drugs use per day (n=115)		
✓ 1-2 times per day	62	53.9
✓ 3-4 times per day	27	23.5
✓ PRN (When needed)	26	22.6

**Perceived Effects of Dysmenorrhea**

The major perceived academic effects of dysmenorrhea were lack of concentration at lectures (62.8%) followed by absenteeism from classes and lectures (45.9%). Social withdrawal (56.5%) and loss of attention (41.5%) were the major perceived social

effects while disturbed sleep (55.6%) and loss of appetite (43.5%) were the major perceived psychological effects (Table 6).

This study observed that the perceived effect of dysmenorrhea include lack of concentration during lecture (62.8%), social withdrawal (56.5%) and disturbed sleep (55.6%).

**Table 6: Perceived Effects of Dysmenorrhea**

	<b>n= 207</b>	
	Frequency	Percent
<b>Perceived academic effects of dysmenorrhea</b>		
✓ Absenteeism from classes and lectures	95	45.9
✓ Lack of concentration at lectures	130	62.8
✓ Inability to complete assignment	38	18.4
✓ Inability to study for school exams	55	26.6
✓ None	10	4.8
<b>Perceived social effects of dysmenorrhea</b>		
- Social withdrawal	117	56.5
- Loss of attention	86	41.5
- Limit your exercise	53	25.6
- None	21	10.1
<b>Perceived psychological effects of dysmenorrhea</b>		
- Disturbed sleep	115	55.6
- Depression	38	18.4
- Hating being a female	54	26.1
- Loss of appetite	90	43.5
- None	17	8.2

**DISCUSSION**

The study aimed at assessing the prevalence, perceived effects and coping strategies of dysmenorrhea among female nursing students of University of Nigeria. The demographic characteristics showed that majority of respondents' dominant age range of the respondents was from 17-30 years with mean and standard deviation of 22.62±2.58. Virtually all were Christians (99.6%), single (92.5%) and nulliparous (95.5%). Their academic levels were 200 level (18.9%), 300 level (32.5%), 400 level (24.5%) and 500 level (24.1%). This study

revealed that the age of menarche was 12 years and above (66.0%), duration of menses was 4-5 days (64.2%) and menstrual cycle length, 22-28 days (55.8%). Most had regular menstrual cycle (83.4%). Majority had family history of dysmenorrhea (69.4%).

Our study indicates that dysmenorrhea is highly prevalent among female nursing students of UNEC. This finding is similar to the study carried out by Omar et al. (2021) whose finding showed that more than two-third of its respondents' experiences dysmenorrhea, this study is also consistent with Gebeyehu et al.



(2017) whose results revealed dysmenorrhea prevalence rate of more than two-third and the study of Oluwole et al. (2020) which revealed prevalence rate of more than two-third. The writers' observed that the high rate of dysmenorrhea occurrences is a common public health problem faced by young women in their reproductive years. The findings of this study align with previous research, indicating that dysmenorrhea is commonly experienced during menstruation, with intermittent and moderate pain primarily located in the lower abdomen. Similar to the studies conducted by Omar et al. (2021) and Mengesha & Halie (2021), the present study highlights the prevalence of dysmenorrhea and its associated symptoms.

The coping strategies employed by the respondents in managing dysmenorrhea in this study were Felden/Felvin, the reason for using drug is because of the severity of the pain and the frequency of the drug used is 1-2times per day. These findings are consistent with the studies conducted by Mengesha & Haile (2021), Durand et al. (2021), Oluwole et al. (2020), and Ameade et al. (2018), which also reported a combination of strategies involving rest, heat application, and the use of analgesics.

The result of this study observed that the major perceived academic effects of dysmenorrhea were lack of concentration at lectures (62.8%), social withdrawal and disturbed sleep. These results are similar to the finding of Durand et al. (2021) which revealed that dysmenorrhea mostly affected concentration during classes and respondents' enjoyment of life. This result of this study is also in line with another study conducted by Ameade et al. (2018) whose results revealed that attending lectures was the most disrupted daily life activity for the respondents of that study and that even if they make it to the lectures, their concentration was greatly disturbed due to the dysmenorrhea. The writers suggested that sometimes the reason why students are not paying attention during lectures is because of the effects of dysmenorrhea. Due to the severity of the pain,

attention may be lost, some even go as far as being absent from school as revealed by the result of this study. This study is in line with the study of Gebeyehu et al. (2017) whose respondents reported that decreased appetite and altered sleeping pattern were the psychological effects of dysmenorrhea. However, the writers also noted that lesser number of the students hated being a female and some of them battled with depression as a psychological impact of dysmenorrhea. All these impacts further signified that dysmenorrhea can be extremely unbearable for some affected females.

## CONCLUSION

This study contributes to the existing body of knowledge by providing empirical evidence on the prevalence, perceived effects, and coping strategies of dysmenorrhea among female students in a university in the Southeast region of Nigeria. The findings indicate a high prevalence of dysmenorrhea in this study population. The use of a combination of pharmacologic and non-pharmacologic strategies was identified as the primary coping mechanism for managing dysmenorrhea. The impact of dysmenorrhea on the quality of life of the students was found to be significant. Based on these findings, it can be concluded that dysmenorrhea is a common problem among females in their reproductive years. It is important for healthcare professionals to encourage students to seek timely medical attention to diagnose and treat any underlying causes of dysmenorrhea, thereby preventing potential long-term effects on reproductive health. Additionally, it is crucial for parents, relatives, and friends to provide psychological support and encouragement to individuals experiencing dysmenorrhea, considering its potential psychological impact. By addressing these aspects, effective coping strategies can be developed and implemented to mitigate the challenges associated with dysmenorrhea and improve the overall well-being of affected individuals.

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