



“DYSMENORRHOEA AMONG TEEN AGE GROUP GIRLS-A BURNING ISSUE”

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ABSTRACT

Dysmenorrhoea is the most common gynecologic complaint among adolescent and young adult females. Aim of the study was to find the prevalence of dysmenorrhoea among teen age girls (13 to 19 year's) patients presenting with menorrhagia or without menorrhagia. The prevalence of dysmenorrhea was 65.11%. Majority of the girls with dysmenorrhea (58.03%) report a menstrual cycle of 22-28 days, where as 33.03 % of them have a menstrual cycle of 29-35 days and 8.9% report to have a menstrual cycle of more than 35 days. Maximum number of dysmenorrhic girls (78.6 %) report 4-5 days of bleeding and few of them reported to have <3 days and 5-7 days of bleeding (8.9% and 12.5% respectively). 67.8% of the girls with dysmenorrhea reported presence of blood clots in their menstrual flow. Dysmenorrhoea is a very common problem among adolescent girls, and they experience a number of physical and emotional symptoms associated with dysmenorrhea and it also affects their quality of life.

KEYWORDS : Prevalence, Menstrual characteristics, Dysmenorrhoea and menorrhagia.

INTRODUCTION:

Adolescence is a period of transition from childhood to adulthood and is characterized by a spurt in physical, endocrinal, emotional, and mental growth, with a change from complete dependence to relative independence.¹ Dysmenorrhoea is the most common gynecologic complaint among adolescent and young adult females. Dysmenorrhoea may be categorized into two Distinct types: primary and secondary. Primary dysmenorrhoea is defined as painful menses in women with normal pelvic anatomy, usually beginning during adolescence.² Secondary dysmenorrhoea is menstrual pain associated with underlying pathology, and its onset may be years after menarche. Various studies in India revealed that prevalence of dysmenorrhoea varies from 33% to 79.67%.³⁻⁷ However, the true incidence and prevalence of dysmenorrhoea are not clearly established in India.

According to studies dysmenorrhoea is interrupting their educational and social life.³ Due to dysmenorrhoea sickness absenteeism (28-48%) and perceived quality of life losses are prevalent among adolescent girls.⁴⁻⁷ In the United States dysmenorrhoea has been estimated to be the greatest cause of time lost from work and school.⁸ Aim of the study was to find the prevalence of dysmenorrhoea among teen girls (13 to 19 years) patients presenting with menorrhagia or without menorrhagia.

Material and methods:

The study protocol was submitted to the Institutional Ethical Committee and clearance was obtained. Informed consent of the principals of schools was taken before the study and consent from the selected adolescents was also obtained, before initiation of the study. This was a cross-sectional study conducted in the schools and colleges present in Rourkela Town. Final year female medical students and female medico-social worker were trained for this study. Three schools and three colleges randomly selected and from this all the girls who were willing to participate and in the age group of 13-19 years were included in the study.

The total sample size was 172. The data were collected from April 2015 to March 2016. The tool developed was a pretested semi structured questionnaire. The items included were age at menarche, presence and absence of dysmenorrhoea, its duration, amount of bloodloss, irregularity and symptoms experienced during menstruation, family history, sickness absenteeism & quality of life related questions. The following criteria were used to define dysmenorrhoea:⁹

- Onset of pain within 6–12 hours of menses
- Lower abdominal or pelvic pain associated with onset of menses and lasting for 8–72 hours.
- Lower back pain during menses.

- Medial or anterior thigh pain menses.

The collected data was analyzed using descriptive and inferential statistics.

Results and discussion:

A total of 172 students participated in the study. The mean age of the respondents was 15.62±2.16 years. The prevalence of dysmenorrhoea was 65.11%. Majority of the girls with dysmenorrhoea (58.03%) report a menstrual cycle of 22-28 days, where as 33.03 % of them have a menstrual cycle of 29-35 days and 8.9% report to have a menstrual cycle of more than 35 days. Maximum number of dysmenorrhic girls (78.6 %) report 4-5 days of bleeding and few of them reported to have <3 days and 5-7 days of bleeding (8.9% and 12.5% respectively). 67.8% of the girls with dysmenorrhoea reported presence of blood clots in their menstrual flow.

Table 1: Frequency and percentage distribution of Menstrual characteristics of girls with Dysmenorrhoea, N= 112

S. No.	Menstrual characteristics	Frequency (%)
1. Length of Menstrual Cycle		
a.	22-28 days	65(58.03)
b.	29-35 days	37(33.03)
c.	>35 days	10(8.9)
2. Number of days of Bleeding		
a.	<3 days	10(8.9)
b.	4 - 5 days	88(78.6)
c.	5-7 days	14(12.5)
3. Presence of Blood Clots		
a.	Yes	76(67.8)
b.	No	36(32.14)

Table 2: Age at menarche and dysmenorrhoea in adolescent girls:

Age at menarche	With aDysmenorrhoea (%)	Without Dysmenorrhoea(%)	Total (%)
<13	28(73.68)	10(26.31)	38(100)
13-14	68(66.01)	35(33.98)	103(100)
>14	16(51.61)	15(48.38)	31(100)

Table 3: Family history of dysmenorrhoea and prevalence of dysmenorrhoea:

Family History	With Dysmenorrhoea (%)	Without Dysmenorrhoea (%)	Total (%)
Present	60(71.42)	24(28.57)	84(100)
Absent	52(59.09)	36(40.9)	88(100)

Table 4: Sickness absenteeism among dysmenorrhic and non-dysmenorrhic girls:

Sickness absenteeism	With Dysmenorrhoea (%) n= 112	Without Dysmenorrhoea (%) n= 60
Present	54(77.14)	16(22.85)
Absent	58(56.86)	44(43.12)

It is estimated that prevalence of dysmenorrhoea varies from 33% to 79.67%.¹⁻⁵

The results of the present study confirms the same, as dysmenorrhoea was seen in majority of the young girls (65.11%). Similar high prevalence (67.2%) was reported by Sharma et al.,¹⁰ and Harlow and Park (71.6%).¹¹ Comparatively lower prevalence had been reported by Sharma A, Taneja DK, Sharma P, et al (33%),¹² Nag(33.84%),¹⁴ Singh MM, Devi R, Gupta SS. (40.7).¹³

Average length of menstrual cycle was reported to be 22-28 days in majority (58.03%) of girls. Normal length of the cycle is considered as 21–35 days.¹⁵ According to the study majority (78.6%) of the dysmenorrhic girls had bleeding for 4-5 days, 8.9% and 12.5% had bleeding for 5-7 days and less than 3 days respectively. The finding correspond to the findings of the study done by Kural Mool Raj, et al, according to which 74% dysmenorrhic girls experience bleeding for 4-5 days and 19.9% for 5-7 days and 5.7% for <3 days.¹⁶ The present study shows that majority of the dysmenorrhic girls agreed for the presence of clots in their menstrual blood. The similar findings were revealed by the study conducted by Kural Mool Raj.¹⁶

Dysmenorrhoea seems to be familial problem similar conclusion made by Avasarala AK and Panchangam S. in their study.¹⁷ Sickness absenteeism is significantly more among dysmenorrhic girls similar finding observed by Avasarala AK and Panchangam S.¹⁷ and Weissmen AM, Hartz AJ, Hansen MD, et al.¹⁸ Sickness absenteeism because of dysmenorrhoea causes wastage of millions of dollars in the U.S.A. as per the Bergsjö's study.¹⁹

Table 5: Quality of life loss among dysmenorrhic and non dysmenorrhic girls

Quality of life characteristics	With Dysmenorrhoea (%)n= 112	WithoutDysmenorrhoea (%)n= 60	χ ²	P
Reduced Levels of confidence at work	58	20	6.04	<0.01
Poor Work satisfaction	18	3	6.56	<0.01
Loss of Concentration level	69	18	15.2	<0.001
Poorpersonalrelationships	64	13	13.62	<0.001
Decreased physical activity	27	1	14.21	<0.001

The quality-of-life during dysmenorrhoea is comparatively poor among dysmenorrhic girls; loss of physical activity and work satisfaction, personal relationships, confidence & concentration at work also suffers. This clearly indicates that dysmenorrhoea is disturbing their life more when compared with the lives of non-dysmenorrhic girls. The restricted activity, regular work and relationship seen in this study is also found by Avasarala AK and Panchangam S.¹⁷ and Adeyemi AS and Adekanle DA.²⁰

Conclusion:

These findings suggest that the dysmenorrhoea is a very common problem among adolescent girls, and they experience a number of

physical and emotional symptoms associated with dysmenorrhoea and it also affects their quality of life. It can be better managed by mental preparation and by appropriate change in lifestyle like regular physical exercise. The magnitude and intensity of problem demands appropriate intervention through education and change in lifestyle.

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