

Relationship between Academic Performance and Dysmenorrhea among Adolescent Girls: Study from Karad Maharashtra India

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Abstract

Background:- Menstruation is a normal physiological process that occurs once in a month in the women of reproductive age. This is very common problem can be seen all over the world. Worldwide statistics shows that there are 51% of the population consists of female adolescents. Several studies shows that dysmenorrhea affects on academic performance & daily activities, loss of concentration in the classroom (66.8%),no active participation in class(47.4%), not doing homework(21%) fail in exam (29.9%). proportions of dysmenorrhea in young adolescent is higher. A cross-sectional study was conducted, including adolescent girls from Krishna Mahavidhyalay, Rethare Bk. Karad to assess the relationship between dysmenorrhea & its effect on academic performance among female students. The study conducted on a total of 100 girls with age range between 15-19years.convinent sampling technique was used.RESULTS:-542% adolescent girls having the affect of dysmenorrhea on academic performance.57 % of the girls school life is disturbed due to dysmenorrhea.34% of the girls got less marks in examination. 45% of the girls faced difficulty in the examination.CONCLUSION: - Study shows that there is relationship between dysmenorrhea & academic performance. Early detection of this problem is necessary to prevent further complication.

INTRODUCTION

Menstruation is a normal physiological process that occurs once in a month in the women of reproductive age. Dysmenorrhea is defined as painful menstrual periods caused by uterine contractions. It is most common problem in adolescent and young women. In Dysmenorrhea pain in back of the legs & lower back is very common during menstruation the adolescent

girls.¹may have nausea, vomiting, diarrhea, headache & weakness along with this pain is the major problem due to that many young female students remain absent in the school. Due to Absentisam the adolescent girls missing many important academic things leads to poor performance in school.²This is very common problem can be seen all over the world. World wide statistic shows that there are 51% of the

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population consists of female adolescents. Several studies shows that dysmenorrhea affects on academic performance & daily activities loss of concentration in the classroom (66.8%), not actively participated in class(47.4%), not doing homework(21%) fail in exam activity limitation(29.9%)³ proportions of dysmenorrhea in young adolescent is higher . Dysmenorrhea is more prevalent among female school students; it is related to class absenteeism & limitations on social/academic/sports activities. The young female adolescent do not take medical advice and self treating with prostaglandin inhibitors; like Ibuprofen .⁴ Dysmonnereha impaired on multiple level of the students' quality of life it includes role limitations at school & family due to emotional sickness ,impaired physical health & pain.⁵ Dysmonnereha is not a life-threatening situation; it may affect work productivity. During Dysmonnereha psychological problems like anxiety, fear, loss of concentration, shame, excessive angriness, and depression can be experienced. ⁶ There is very little attention given to this problem there is need to compensate on lost classes & try to improve the academic performance

of the female adolescent students who are suffering from dysmenorrhea. Therefore, this study aimed to Relationship between academic performance and dysmenorrhea among adolescent girls.⁷

MATERIALS & METHODS:

A cross-sectional study was conducted, including adolescent girls from Krishna Mahavidhyalay, Rethare||Bk.||Karad to assess the relationship between dysmenorrhea & its effect on academic performance among female students. The ethical approval was taken from ethical committee of Krishna Institute of Medical Sciences deemed to be University Karad.The study conducted on a total of 100 girls with age range between 15-19years. Adolescent girls with endocrine disease, and hypothyroidism were excluded from the present study. The research tool contains the demographic data include age, religion, monthly income, mother's occupation, father's occupation, source of information and other questions including affect of dysmenorrhea on the academic performance of the girls. The confidentiality of the participants was maintained during the study. statistical analysis was done with SPSS software.

RESULTS

Table: 1 Frequency percentage distribution of sample according to theirsociodemographic variables. N=100

Sr.No	Variables	Mild	Moderate	Severe	p value	
1	Age	15 yrs	1	5	2	0.0645 NS
		15-16	4	11	11	
		17-18	3	6	20	
		18-19	9	7	21	
2	Religion	muslim	3	6	7	0.5317 NS
		hindu	16	22	43	
		other	0	1	0	
3	Education	11th	5	16	14	0.0079 NS
		12th	12	11	42	
4	Family	joint	10	15	40	0.117 NS
		nuclear	9	12	14	
5	Diet	veg	1	4	7	0.639 NS
		mixed	17	24	47	
		non veg	0	0	0	

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6	Mother occupation	housewife	15	26	35	0.237 NS
		buisness	0	1	4	
		govt.job	3	0	7	
		private job	0	1	4	
		other	0	2	2	
7	Father occupation	farmer	15	22	30	0.5792 NS
		buisness	1	2	11	
		govt.job	1	1	2	
		private job	2	3	8	
		other	0	1	1	
8	Income	>5,000	1	0	2	0.765 NS
		5-10000	2	7	13	
		20000-30000	10	13	22	
		above 40	5	10	15	
9	Source of Information	health care provider	8	15	24	0.7891 NS
		mass media	1	1	5	
		parents	8	15	20	
		friends	1	0	2	
		neighbours	0	0	0	

Age wise distribution of sample reveals that majority of 37% of groups within the age group 18-19 yrs. Distribution of sample according to religion wise reveals that majority of 81% girls belongs to Hindu religion. Education or class wise distribution of sample reveals that majority of 65% students in 12th class. Distribution of samples according to type of family reveals that majority of 65% in joint family. Diet wise distribution of sample reveals that majority of 88% adolescent girls taken mixed type of diet. Distribution of

samples according to mother's occupation reveals that majority 76% mothers of adolescent girls are housewife. Distribution of samples according to father's occupation reveals that majority 67% fathers of adolescent girls are farmer. Distribution of samples according to monthly income reveals that majority 45% adolescent girls monthly income is 20,000-30,000. Distribution of samples according to source of information reveals that majority 47% adolescent girl's source is health care provider.

Table 2- Frequency and percentage of academic performance and dysmenorrhea. N=100

Sr.No.	Variables	F	%
1	Affect on academic performance	Yes	42 42%
	No	58 58%	
2	Affect on school life	Yes	57 57%
	No	43 43%	
3	Which affect on school life	Sports inability	13 13%
	Sleeping problem	10 10%	
	Less marks	34 34%	
	Other	0 0	
4	Effect on study	Absenteeism	40 40%

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		Difficulty in exam	45	45%
		Less concentration	15	15%
		Other	0	0
5	Action taken for dysmenorrhea in School	Informed to class teacher & seek help	16	16%
		Informed to friends & get help	6	6%
		Ask permission from teacher & going to home	57	57%
		Manage the situation by itself	23	23%
6	Result Of yearly academic Performance	Greater than 50%	18	18%
		Greater than 60%	39	39%
		Less than 70%	41	41%
		More than 70%	2	2%
7	No of days absent in school per month	2 days	25	25%
		3-4 days	23	23%
		5-6 days	35	35%
		More than 6 days	17	17%
8	Reasons for absenteeism	Severe pain	42	42%
		Lack of concentration	30	30%
		Irritation	16	16%
		Other	12	12%
9	Affect on exam	Affected by not able to prepare for exam	31	31%
		Affected by mood swings	22	22%
		Affected by lack of concentration	34	34%
		Not affected	13	13%
10	Causes for poor academic Performance	Mental instability	30	30%
		Lack of concentration	51	51%
		Miss class test & examination	14	14%
		Unable to answer the question in class	5	5%
11	Associated symptoms along with dysmenorrhea affect on study	Yes	70	70%
		No	30	30%
12	If dysmenorrhea not occurs then academic performance will be better	Yes	83	83%
		No	17	17%

Table -3 Shows that the dysmenorrhea affects the academic performance of adolescent girls. 42% adolescent girls having the affect of dysmenorrhea on academic performance. 57% of the girls school life is disturbed due to dysmenorrhea. 34% of the girls got less marks in examination. 45% of the girls faced difficulty in the examination. 57% of the girls Ask permission from teacher & went home during menstruation. 41% of the girls got the marks below 70% in final examination. 35% of the girls remain absent during their menstruation. 51% of the

girls were not able to concentrate on studies due to dysmenorrhea. The most important finding of the study was 83% of the girls accepted that if dysmenorrhea would not be there we would have performed better in the examination.

DISCUSSION

In present study it was found 42% adolescent girls having dysmenorrhea & it affects on their academic performance. According to a study conducted by Patel V. et.al. the quality of life is disturbed due to

dysmenorrhea along with poor academic performance, the prevalence of dysmenorrhea was 82.52%.it was relatively higher than our study.⁸

Dysmenorrhea is very common problem among adolescent girls and had a negative impact on social, academic, sports and daily activities.⁹

Academic performance was impaired, with 20.1%reporting absence from school due to dysmenorrhea (N=19, n=11, 226, 95%CI 14.9-26.7)&40.9% participant reported classroom performance & concentration being disturbed.(N=10,n=5126,95% CI 28.3%)¹⁰

Prevalence of dysmenorrhea and school absenteeism was 73% with the severity of dysmenorrhea was 37.5%, 43.8%, and 18.8% for mild, moderate, and severe dysmenorrhea. other disturbed school activities like concentration during class, participation in class& sports.(17.6%, 12.2%, 10.9%).¹¹

In a study conducted on female adolescent shows that prevalence of dysmenorrhea was 31.6%., out of that 8.6% students were frequently missing school and routine classes respectively. Maximum students do not take any kind of medical help for this problem.¹²

CONCLUSION:

This study shows that there is strong connection between dysmenorrhea & academic performance. Due to dysmenorrhea girls experiencing restricted activity & their routine regular life is distrubed. These girls should be educated about proper dietary intake during menses. Early detection of this problem is necessary to prevent further complication.

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CONFLICTS OF INTEREST:

There are no conflicts of interest.

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