Original Research Article

Dysmenorrhea prevalence among adolescent girls and its effects on life quality

¹Shivaji Pawar, ²Mahadeo Shinde, ³Pratiksha Deshmukh

¹Assistant Professor, Krishna Institute of Nursing Sciences, Krishna Institute of Medical Sciences deemed to be University, Karad, Maharashtra, India
²Professor, Krishna Institute of Nursing Sciences, Krishna Institute of Medical Sciences deemed to be University, Karad, Maharashtra, India
³4th Year B B.Sc. Nursing Student Krishna Institute of Nursing Sciences, Karad, Maharashtra, India

Corresponding Author:
Shivaji Pawar
¹Assistant Professor, Krishna Institute of Nursing Sciences, Krishna Institute of Medical Sciences deemed to be University, Karad, Maharashtra, India
shivajipawar446@gmail.com

Abstract

Background: Dysmenorrhea is major problem in females of reproductive age. The main symptom of Dysmenorrhea is pelvic pain before or during menses, it lasts for 1-3 days in the females. Dysmenorrhea can be divided in 2 types, primary dysmenorrhea & secondary dysmenorrhea. The symptoms like as pain in lower back, nausea, vomiting, headache, diarrhea and fatigue can be seen in the girls who are suffering from this problem.
Materials and Methods: This cross sectional study was carried out among 100 adolescent school going girls in the age group of 13-17 years. The simple random technique was used. Pretested tool was used to check the quality of life of the dysmenorrhea girls. This study was used in Krishna Mahavidyalaya Rethare Bk. The recorded data was compiled and data analysis was done using SPSS Version 20.0.
Results: In the present study a total of 100 girls participated in the study of age group between 13-17 years. The dysmenorrhea was reported in 70(70%) of the total girls, whereas absent in 30 (30%) adolescent girls. The quality of life of dysmenorrhea girls was poor.
Conclusion: The present study concluded that prevalence of dysmenorrhea was reported to be 73% among college-aged women, dysmenorrhea is a prevalent health issue that can negatively impact.

Keywords: Dysmenorrhea, prevalence, adolescent, life quality

Introduction

Adolescence is a transition period 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]. Indian population consists of one fourth population of girls below the age of 20 years [2]. Dysmenorrhea is major problem in females of reproductive age. The main symptom of Dysmenorrhea is pelvic pain before or during menses, it lasts for 1-3 days in the females [3]. Dysmenorrhea can be divided in 2 types,

primary dysmenorrhea & secondary dysmenorrhea. In primary dysmenorrhea there is no history of involvement of hormonal pathology but in secondary dysmenorrhea pain is due to pathological problems like endometriosis, ovarian cysts, pelvic inflammatory disease [4]. Associated symptoms like as pain in lower back, nausea, vomiting, headache, diarrhea, and fatigue. The exact cause of primary dysmenorrhea is idiopathic. It is related to prostaglandin production [5]. Various studies shows that prevalence of dysmenorrhea is between 33% to 67.71% [6, 7] & because of dysmenorrhea the quality of life is disturbed. The present study was aimed to assess prevalence of dysmenorrhea & to see the quality of life of the girls suffering from dysmenorrhea.

Materials and Methods

This cross sectional study was carried out among 100 adolescent school going girls in the age group of 13-17 years. Out of 100 girls 70 girls who were having dysmenorrhea. Written inform consent was taken from participants. The research tool was prepared & pretested. Complete history was asked regarding presence & absence of dysmenorrhea. The simple random sampling technique was used.

Results

Table 1: Prevalence of dysmenorrhea. N=100

Dysmenorrhea	Frequency	Percentage
Present	73	73
Absent	27	27

Table 01 shows that 70% of the adolescent girls were having dysmenorrhea. It indicates high prevalence of dysmenorrhea.

Table 2: Quality of life loss among dysmenorrhea girls =100

Quality of life Indicator	Frequency	Percentage	X^2	P-value
Reduced Levels of confidence at work	40	40	5.23	<.0.2
Poor Work satisfaction	32	32	7.21	<0.1
Loss of Concentration level	60	60	12.81	<0.1
Poor personal relationships	29	29	11.21	<0.1
Decreased physical activity	33	33	13,23	<0.1

Table 1 show that in the dysmenorrhea girl the Quality of life is poor.40% of dysmenorrhea girls reduced their confidence at work place, 32% of dysmenorrhea girls not satisfied towards their work, 60% of the dysmenorrhea girls were losing concentration, 33% of the dysmenorrhea girls physical activity were decreased.

Discussion

Dysmenorrhea was found to have a significant prevalence among female students (72.7%), which is in line with earlier research indicating rates between 28% and 89.5% [8]. These estimates may be off because different populations were used for the studies, different criteria were used to define dysmenorrhea and pain, and different methodologies were used to gather the data [9].
In keeping with the findings of Burnett *et al.*, over two-thirds of the women in this survey (66.2%) said that their dysmenorrhea was severe or moderate [8]. These findings suggest that severe or moderate dysmenorrhea is an issue for rural female students, and that it may have a detrimental impact on HRQoL, social environment, work and psychological status.

Several studies found that the prevalence of dysmenorrhea decreased with age, suggesting that the peak incidence of primary dysmenorrhea occurs between the ages of 15 and 25, and then declines [8]. There was no statistically significant association between age and the prevalence of dysmenorrhea in this study (p>0.05). This is mainly due to the fact that the age range of the students in the study group is too narrow.

Several environmental risk factors, including current cigarette smoking, have been linked to dysmenorrhea in epidemiological investigations [10]. While previous research has linked smoking to dysmenorrhea, this study found no such link (P>0.05). Similarly to a study conducted in Turkey, we did not inquire about the number of cigarettes smoked each day or the length of time spent smoking [11].

Consistent with the findings of some researchers [12], both univariate and multivariate analyses found that drinking coffee was a significant risk factor for dysmenorrhea, as was having a menstrual cycle that lasted 7 days or longer. Consistent with the conclusion demonstrating that women with heavier menstrual flows have a greater risk of dysmenorrhea, this data suggests that [13].

The mean age of the female students in the study group was rather low compared to that of the general population, therefore it is difficult to draw comparisons with community-based studies. And since the incidence of dysmenorrhea tends to decline with age, limiting the study to participants of a specific age group reduces the likelihood that its findings will be applicable to all women. This study's cross-sectional design also limits our ability to draw conclusions about cause and effect. Finally, self-reporting may have led to underreporting due to its subjective nature.

Conclusion

The present study concluded that prevalence of dysmenorrhea was reported to be 73% among college-aged women, dysmenorrhea is a prevalent health issue that can negatively impact.

References

1. Shah M, Monga A, Patel S, Shah M, Bakshi H. A study of prevalence of primary dysmenorrhea in young students-A cross sectional study. Healthline. 2013;4:30-4.
2. Agarwal AK, Agarwal A. A study of dysmenorrhea during menstruation in adolescent girls. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2010 Jan;35(1):159.
3. Durain D. Primary dysmenorrhea: assessment and management update. J. Midwifery Womens Health. 2004;49:520-8. http://doi:10.1016/j.jmwh.2004.08. 013.
4. Grandi G, Ferrari S, Xholli A, Cannoletta M, Palma F, Romani C, *et al*. Prevalence of menstrual pain in young women: what is dysmenorrhea? J Pain Res. 2012;1:169-74. http://doi:10.2147/JPR.S30602.
5. Hacker NF, Gambone JC, Hobel CJ. Hacker and Moore's Essentials of Obstetrics and Gynecology, 5th edn. Philadelphia, PA: Saunders/Elsevier, 2010, 256-7.
6. Shrotriya C, Ray A, Ray S, Thomas GA. Menstrual characteristics and prevalence and effect of dysmenorrhea on quality of life of medical students. Int. J Collab, Res Intern Med Public Health. 2012;4:275-94.
7. Kural M, Noor NN, Pandit D, Joshi T, Patil A. Menstrual characteristics and prevalence of dysmenorrhea in college going girls. Journal of Family Medicine and Primary Care. 2015;4(3):426-31.
8. Burnett MA, Antao V, Black A, Feldman K, Grenville A, Lea R, *et al*. Prevalence of

primary dysmenorrhea in Canada. Journal of Obstetrics and Gynaecology Canada. 2005 Aug;27(8):765-70.

9. Tangchai K, Titapant V, Boriboonhirunsarn D. Dysmenorrhea in Thai adolescents: Prevalence, impact and knowledge of treatment. J Med Assoc Thai, 2004, 87.
10. Hornsby PP, Wilcox AJ, Weinberg CR. Cigarette smoking and disturbance of menstrual function. Epidemiology. 1998;9:193-8.
11. Aykut M, Gunay O, Gun I, Tuna R, Balci E, Ozdemir M, *et al*. Biyolojik, sosyo-demografik ve nutrisyonel faktorlerin dismenore prevalansina etkisi. Erciyes Tip Dergisi. 2007;29:392-402.
12. Chayachinda C, Rattanachaiyanont M, Phattharayuttawat S, Kooptiwoot S. Premenstrual syndrome in Thai nurses. J Psychosom Obstet Gynaecol. 2008;29:199-205.
13. Di Cintio E, Parazzini F, Tozzi L, Luchini L, Mezzopane R, Marchini M, *et al*. Dietary habits, reproductive and menstrual factors and risk of dysmenorrhoea. Eur J Epidemiol. 1997;13:925-30.