

ORIGINAL ARTICLE

A Study to Identify the Menstrual Problems and Related Practices among Adolescent Girls in Selected Higher Secondary School in Thiruvananthapuram, Kerala, India

¹Linda Varghese, ²Pooja J Prakash, ³Lekha Viswanath

ABSTRACT

Background: Menarche and menstruation are important aspects of female life. Even though the menstruation is a normal physiological process, adolescent girls have difficulty to handle menstruation. The main objective of this study was to identify the menstrual problems and related practices among adolescent girls.

Methodology: A descriptive survey approach was adopted for the study. The sample consisted of 350 adolescent girls selected by proportionate stratified random sampling from the 9th, 10th, 11th and 12th standards of Government Girls Higher Secondary School, Thiruvananthapuram. A semi-structured questionnaire was used to collect data regarding background information, menstrual characteristics, menstrual problems, and related practices. Biophysical measures such as weight, height, and body mass index (BMI) were taken along with the data.

Results: Most of the adolescent girls had irregular menstruation (24%), 12.6% had polymenorrhea, 6.3% had scanty menstruation and only 4% adolescent girls had menorrhagia. The majority (79%) were experiencing dysmenorrhea during menstruation. The menstrual symptoms experienced were abdominal pain (74%), backache (42.9%) and fainting (8.9%).

Conclusion: Menstrual problems form an important domain of adolescent health and because of these problems are unreported, it is necessary that adequate attention and care is provided. The consequences of the neglect of menstrual problems result in impaired reproductive and sexual health in older women.

Keywords: Adolescent girls, Menstrual problems, Practices.

How to cite this article: Varghese L, Prakash PJ, Viswanath L. A Study to Identify the Menstrual Problems and Related Practices among Adolescent Girls in Selected Higher Secondary School in Thiruvananthapuram, Kerala, India. *J South Asian Feder Obst Gynae* 2019;11(1):13-16.

Source of support: Nil

Conflict of interest: None

Date of received: 26-01-2017

Date of acceptance: 12-10-2018

Date of publication: March 2019

INTRODUCTION

Adolescence is the transitional phase of physical and mental development between childhood and adulthood and is characterized by immense hormonal changes. The adolescent has been defined by the World Health Organization (WHO) as the period between 10–19 years of age, in their second decade of life.¹ Adolescent girlhood is a critical time of identity formation and a period of transition from childhood to womanhood,² and of great challenge to the parents, as well as the child and those concerned for the upbringing of the adolescent. It is characterized by physical, psychological, mental and social changes that are critical to wellbeing.³ The most striking change in adolescent girls is the onset of menstruation. Menstruation is due to cyclical hormonal changes in the female, under the control of the hypothalamic–pituitary–ovarian axis.⁴ The onset of menstruation in an adolescent is an important developmental milestone and evidence of fully developed reproductive ability. The age of onset of menstruation or menarche is generally between 11 years and 15 years.

After menarche, common menstrual abnormalities that the female adolescent may encounter include pre-menstrual syndrome, dysmenorrhea, prolonged menstrual bleeding, and emotional disturbances, 75% of girls experience some problems associated with menstruation.⁵ A number of studies from different parts of the world, including India, show that a large proportion of adolescent girls experience menstruation related problems. It leads to an increased prevalence of school and works absenteeism. This provides evidence for giving importance to menstrual problems as a public health problem.⁶

A district-level household and facility survey (2007–2008) conducted in Mumbai by the Ministry of Health and Family Welfare reported that around 20% of the women in India had menstruation related problems. Among those women who have reported menstrual problems in India, 63% reported painful periods, 25% reported irregular periods and 14% reported scanty bleeding. Among these, 20% of women who have reported menstrual problems, 22.3% are the adolescent age women. Adolescent women reported menstruation-related problems such as painful periods (79.5%), irregular periods (18.7%) and scanty bleeding (9.6%) and prolonged bleeding (7.2%). So menstruation

¹Assistant Professor, ²Student, ³Associate Professor

¹⁻³Department of Obstetrics and Gynaecology, Amrita College of Nursing, Amrita Vishwa Vidhyapeetham, Ernakulam, Kerala, India

Corresponding Author: Linda Varghese, Assistant Professor, Department of Obstetrics and Gynaecology, Amrita College of Nursing, Amrita Vishwa Vidhyapeetham, Ernakulam, Kerala, India, e-mail: lindasojan@gmail.com

related problems are more prevalent among adolescent girls.⁷

There are many studies conducted regarding menstrual problems revealed that the prevalence of menstrual problems and related school absenteeism is increasing in India as well as in Kerala. A study conducted by John in Kerala 2010 showed that 70.1% of adolescent girls had a menstrual problem.⁸

Menstrual disorders are common in adolescence and can have significant consequences on future reproductive health. Dysmenorrhea, premenstrual syndrome, and menstrual hygiene are leading contributors to the burden of disease borne by adolescent girls.⁹ This study sought to determine the menstruation-related problems among adolescent school girls.

METHODOLOGY

A quantitative approach with the descriptive design was used to identify the menstrual characteristics, menstrual problems, menstruation-related practices among adolescent girls. The research setting of the study was the Government Girls Higher Secondary School, Thiruvananthapuram. The sample size was 350 students studying in the 9th, 10th, 11th and 12th standards. The adolescent girls were selected by proportionate stratified random sampling.

Data Collection Instruments

The tool used was a semistructured questionnaire to identify the menstrual characteristics, menstrual problems

Table 1: Distribution adolescent girls based on demographic characteristics n = 350

| Variables | Frequency (f) | Percentage (%) |
|-----------------------------|---------------|----------------|
| <i>Age</i> | | |
| 13–14 years | 150 | 42.9 |
| 15–16 years | 177 | 50.5 |
| 17 years | 23 | 6.6 |
| <i>Religion</i> | | |
| Hindu | 307 | 87.7 |
| Christian | 7 | 2 |
| Muslim | 36 | 10.3 |
| <i>Place of residence</i> | | |
| Rural | 266 | 76 |
| Urban | 54 | 24 |
| <i>Socioeconomic status</i> | | |
| Lower | 71 | 20.3 |
| Middle | 275 | 78.6 |
| High | 4 | 1.1 |
| <i>Type of family</i> | | |
| Nuclear | 313 | 89.4 |
| Joint | 37 | 10.6 |

and related practices among adolescent girls developed by the investigator which consists of three sections. Section A—sociodemographic data, Section B—menstrual characteristics and menstrual problems and Section C—menstruation related practices.

RESULTS

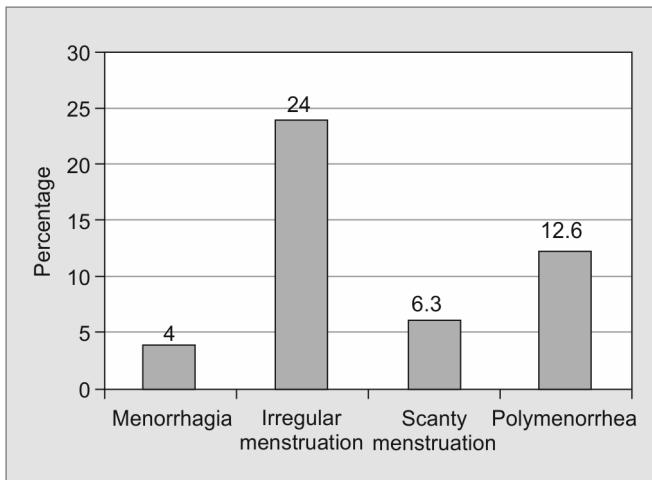
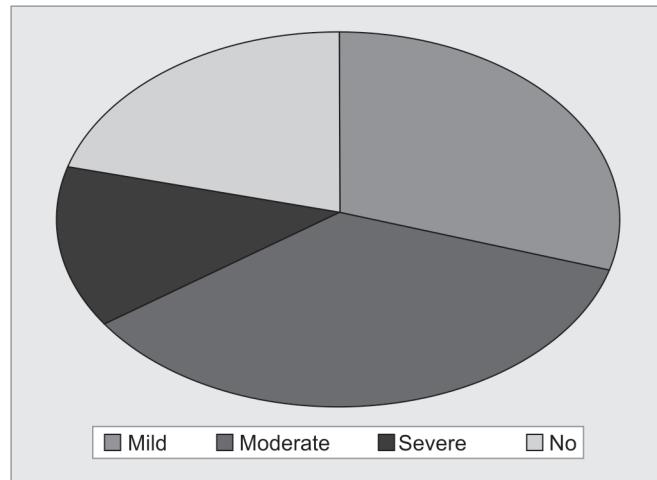
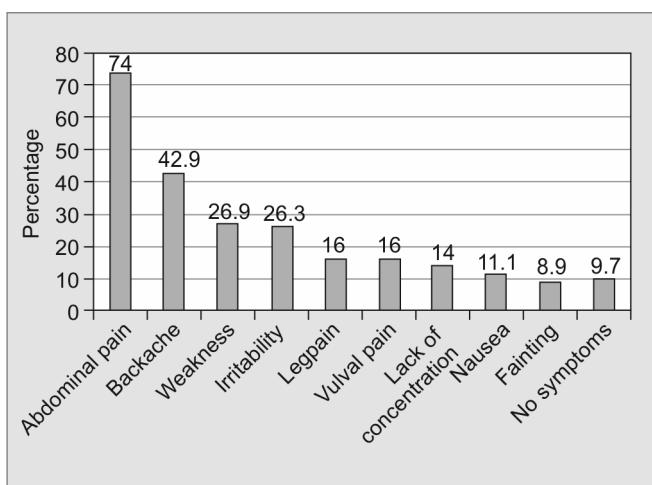
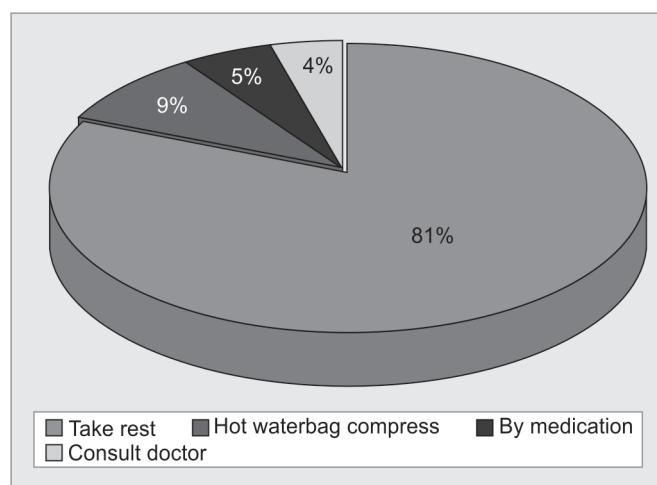
The demographic data were summarized in Table 1. The majority (50.5%) of subjects were in the age group of 15 to 16 years of age. Majority of the participants (76%) were from rural area. Most of the girls (78.6%) were from middle-class family and 89.4% were from nuclear family.

Menstrual Problems and Menstruation-related Practices

Results of identified menstrual problems and menstruation related practices were summarized in Table 2 and Graphs 1 to 4. Most of the adolescent girls had irregular menstruation (24%), 12.6% had polymenorrhea, 6.3% had scanty menstruation and only 4% of adolescent girls had menorrhagia (Graph 2). Among 350 adolescent girls, majority 276 (79%) were experiencing dysmenorrhoea during menstruation, whereas 74 (21%) are not experiencing dysmenorrhea during menstruation. Among the 276 adolescent girls who are experiencing dysmenorrhea, 30% had mild, 34.9% had moderate and 14% have a severe degree of dysmenorrhea. Among the 350 samples 259 (74%) of them experienced abdominal pain, 150 (42.9%) experienced backache and only 31 (8.9) of them experienced

Table 2: Distribution of adolescent girls according to their hygiene practices during menstruation n = 350

| Hygiene practices | Frequency (f) | Percentage (%) |
|--|---------------|----------------|
| <i>Bathing</i> | | |
| Once a day | 106 | 30.3 |
| Twice a day | 243 | 69.5 |
| Do not bathe | 1 | 0.3 |
| <i>Washing genitalia</i> | | |
| With soap and water | 232 | 66.3 |
| With warm water | 114 | 32.6 |
| With disinfectant solution | 4 | 1.1 |
| <i>Types of absorbent</i> | | |
| Clothes | 3 | 0.9 |
| Sanitary pads 217 | 62 | 24 |
| Both | 130 | 37.1 |
| <i>Frequency of changing absorbent</i> | | |
| 2 times a day | 210 | 60 |
| Thrice a day | 113 | 32.3 |
| 4 times a day | 23 | 6.6 |
| More than 4 times | 4 | 1.1 |

**Graph 1:** Distribution of subjects—menstrual disorders**Graph 2:** Distribution of subjects—dysmenorrhea**Graph 3:** Distribution of girls—menstrual symptoms**Graph 4:** Distribution of adolescent girls—management of menstrual symptoms

fainting as the menstrual symptoms. Whereas 34 (9.7%) of them have not experienced any of the menstrual symptoms during menstruation. Majority adolescent girls 284 (81.1%) manage the menstrual problems by taking rest, 32 (9.1%) takes hot water bag compression, 19 (5.4%) takes medicines from the medical store and only 15 (4.3%) were consulting the doctor for managing the menstrual problems. Out of 350 adolescent girls, 240 (68.6%) were taking bath twice a day, 232 (66.3%) wash their genitalia with soap and water. Regarding the type of absorbent used among the 350 samples, 217 (62%) uses sanitary pads and only 3 (0.9%) uses cloths. And majority 210 (60%) change the absorbent two times daily and 4 (1.1%) change more than four times daily.

DISCUSSION

The study findings revealed that most of the girls had one or more menstrual problems. Menstrual problems founded in this study were irregular menstruation (24%), polymenorrhea (12.6%), scanty menstruation (6.3%) and menorrhagia (4%). Dysmenorrhea was experienced by

78.9% of the adolescent girls and 84% of the study subjects had one or more premenstrual symptoms. A cross-sectional study conducted by John at St. Theresa's Girl's Higher Secondary School, Pathanamthitta district on menstrual problems among adolescent girls, showed that 70.1 % of adolescent had problems related to menstruation, of which dysmenorrhea was the major problem (88.8%) and premenstrual syndromes were present in 45.8%. The commonest premenstrual syndromes were headache (42.5%) and irritability (40%). Other menstrual problems were menorrhagia, hypomenorrhea, polymenorrhea, oligomenorrhea and menometrorrhagia (11.2%).⁸ In this study, 23% of adolescent girls were having school absenteeism due to menstrual problems and they had missed school days for one to three days.

Another study conducted by Jin on menstruation of 538 Korean adolescent girls in Seoul, suggests that the prevalence of dysmenorrhea and premenstrual syndromes were 82% and 60.2%, respectively.⁵ Comparing the results of the present study with that of the related literature, the findings are more or less consistent in nature.

Menstruation-related practices as reported by adolescent girls showed that out of 350 samples 62% girls were using sanitary pads, 37.1% were using both pads and cloths and only 3 (0.9%) girls were using cloths during menstruation. Regarding the hygiene practice, 68.9% adolescent girls took bath twice a day and one participant reported not taking bath during menstruation, 60% of the adolescent girls change the absorbent two times daily. In a similar study conducted by El-Gilany on menstrual hygiene among 664 adolescent girls in Egypt, showed that 62% were using sanitary pads during menstruation and only 0.9% was using only cloths during menstruation. Generally, adolescent girls were practicing good menstruation related practices as 60% of the participants changing the absorbents two times a day and 69.5% were taking bath twice a day during menstruation. Mass media was the main source of information about menstrual hygiene, followed by mothers, but a large majority of girls said they needed more information.¹⁰ But in the present study parents, teachers and sisters were the key sources of information regarding menstruation. On comparing the result of the present study in terms of menstrual hygiene practices with the related literature, it was found that the result of the present study is more consistent with the result of the previous study.

CONCLUSION

The study findings throw insight that every adolescent girl in schools have to be screened for menstrual problems and should provide health education regarding the men-

strual problems and its management. It helps prevents various gynecological complaints that occur in their future life.

REFERENCES

1. World Health Organization (WHO). Adolescent pregnancy – Unmet needs and undone deeds. A review of the literature and programs. Issues in Adolescent Health and Development, WHO, Geneva, 2007.
2. Kirk J, Sommer M. Menstruation and body awareness: critical issues for girls' education. EQUALS, Beyond Access: Gender, Education and Development. 2005 Nov;15:4-5.
3. Szilagyi PG. Care of Children with special health care needs. Future Child 13(1), 2003, 137-151.
4. Guyton A, Hall J. Female physiology before pregnancy and female hormones, and the female hormones. In: Guyton A, Hall J, editors. Textbook of Medical Physiology. Philadelphia, Saunders, 1996, pp 1017.
5. Lee LK, Chen PCY, Lee KK, Kaur J. Menstruation among adolescent girls in Malaysia: a cross-sectional school survey. Singapore Med J. 2006 Oct; 47(10):869-874.
6. Stang J, Story M. Adolescent growth and development. Guidelines for Adolescent Nutrition Services. 2005;1(6).
7. Ministry of health and family welfare, Government of India. District level Household and facility survey 2007-2008.
8. John C. A study of menstrual problem in adolescent girls. IMA Kerala Medical Journal. 2010;1:7-10.
9. Sharma M, Gupta S. Menstrual pattern and abnormalities in the high school girls of Dharan: a cross sectional study in two boarding schools. Nepal Medical College Journal: NMCJ. 2003 Jun;5(1):34-36.
10. El-Gilany AH, Badawi K, El-Fedawy S. Menstrual hygiene among adolescent school girls in Mansoura, Egypt. Reproductive Health Matters. 2005 Jan 1;13(26):147-152.