# **Original Research Paper**



# **Community Medicine**

# A STUDY OF MENSTRUAL DISORDERS IN ADOLESCENT GIRLS IN GOVERNMENT MEDICAL COLLEGE HOSPITAL BARAMULLA JAMMU AND KASHMIR

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ABSTRACT Adolescence is the period of transition between puberty & adulthood. It is a period of rapid physical growth, psychological & social changes. This period is also marked by the onset of 1st menstrual cycle (i.e., menarche) in adolescent girls. Menstruation is a natural, biological process experienced by all adolescent girls & women in reproductive age. AIMS & OBJECTIVES: The objective of the current study was to observe the menstrual disorders among adolescent girls & to observe the demographic profile & assess hygiene practices during menstruation. RESULTS: While mean age at menarche was 12.5 years, 75.5 % had regular menstrual cycles. Among 45 adolescent girls, 84.5 % had pain & discomfort, 33.3% even missed their schools because of pain, while 68.8 % reported use of sanitary pads, and 31.2% still used old clothes. CONCLUSION: Dysmenorrhea & menstrual irregularity are more prevalent among adolescent females. It appears that occurrence of dysmenorrhea is increasing in the population; such sufferings would affect the productivity among females.

# **KEYWORDS**: Adolescence, Menstruation, Puberty

### INTRODUCTION

Adolescence is the period of transition between puberty & adulthood. Menarche is one of the markers of puberty & therefore can be considered as an important event in the life of adolescent girls. (1,2) For most females, it occurs between the age of 10 & 16 years; however, it shows a remarkable range of variation. (3) The normal range for ovulatory cycles is between 21 & 35 days. While most periods last from 3 to 5 days, duration of menstrual flow normally ranges from 2 to 7 days. For the first few years after menarche, irregular & longer cycles are common. (4,5)

Periods can be irregular, heavy (menorrhagia) & painful (dysmenorrhea, especially in the first few years following menarche. Serious pathology is rare; however, menstrual dysfunction can have a significant effect on daily activities & result in school absence. (6)

Due to the relative immaturity of the hypothalamic pituitary ovary axis in the first 2 years following menarche, more than half of the menstrual cycles are anovulatory. This results in irregular cycles where cycle frequency can vary from less than 20 days to more than 90 days. After the first 1-2 years, the capacity for estrogen – positive feedback on the anterior pituitary develops with the subsequent mid –cycle LH surge & ovulation, resulting in regulation of the menstrual cycle. (7)

Some of the menstrual characteristics, such as irregularity in the menstrual cycle, premenstrual pain & discomfort, pain & discomfort at the time of menstrual discharge & a heavy menstrual discharge, may affect the general or reproductive health of a woman. (8,9)

## MATERIALS & METHODS

A cross sectional study was carried out on 45 adolescent females using a questionnaire in of OPD of GMC Hospital of district Baramulla. They were explained about the protocol & the purpose of the study & were requested to complete the questionnaires to elicit information relating to demographic features, menarche age and menstrual characteristics.

Adolescent females who were willing to take part and fill the questionnaire were included and those who were not willing were excluded

## RESULTS

Demographic and clinical data was covered by the questionnaire. Results revealed that Majority were from rural background, mean age of adolescence was 17.5 & the mean age at was 12.5 years and the mean BMI was 22.9. 55.5 % were physically active.11% had duration of cycles <21 days 71% had duration of cycles between 21 to 35 days 18%

had a duration of cycles >35days, Majority had duration of menses between 3 to 7 days (68.8%) ,20% had duration of menses >7 days and11.2% had <3 days, while 84.5% of the adolescents had moderate to severe pain during menstruation. 75.5% had regular pattern of menstruation ,11.2% of adolescents had oligomenorrhea (scanty flow),13.3% had polymenorrhagia. 55.5% had premenstrual symptoms (PMS). Among them 33.3% of adolescents missed school during menstruation & the major cause of absenteeism was pain & discomfort. 53.3 % had feeling of tiredness during menstruation 68.8% girls have reported use of sanitary pads during menstruation while 31.2% have reported use of old clothes.

# **DEMOGRAPHIC CHARACTERISTICS**

Characteristic	Mean	Range
Age in years	17.5	16 to 19
Age at menarche	12.5	11 to 15
BMI	22.9	16.5 to 26.5
Physical Activity	No	%
Physically Active	25	55.5
Physically Inactive	20	45.5

## **CLINICAL DATA**

	N(number)	9/0		
Menstrual cycle length		•		
<21	5	11.1		
21 to 35	32	71.2		
>35	8	17.7		
Duration of menses				
3-7 days	31	68.8		
>7 days	9	20		
<3 days	5	11.2		
Pattern of cycle				
Regular cycles	34	75.5		
oligomenorrhea	5	11.2		
Polymenorrhea	6	13.3		
pain and discomfort				
Yes	38	84.5		
No	7	15.5		
PMS		•		
Yes	25	55.5		
No	20	44.5		
Missed schools because of pain				
Yes	15	33.3		

No	30	66.7		
Tiredness				
Yes	24	53.3		
No	21	46.7		
Use of sanitary pads	31	68.8		
Use of Old clothes	14	31.2		

#### CONCLUSION

Menstrual problems are frequent among adolescent girls. Dysmenorrhea & menstrual irregularity are more prevalent among adolescent females. It appears that occurrence of dysmenorrhea is increasing in the population, such sufferings would affect the productivity among females. Therefore, it can be stated that a comprehensive school education program on menarche & menstrual problems may help girls to cope better & seek proper medical assistance.

#### DISCUSSION

Menstruation & menstrual health issues which is one of the major areas of concern in reproductive health affects a large number of women throughout their reproductive life from adolescence.

The present study was conducted to find out the menstrual characteristics in adolescent girls of Kashmir in district Baramulla so that they can be addressed accordingly.

In our study, the mean age of menarche was 12.5 years. The average age of menarche in western European countries appears to have dropped over the past 150 years from over 16 to under 14 years old. The declining age of puberty has been attributed to better living standards, e.g adequate nutrition & health care. Majority of the adolescents experienced dysmenorrhea during menstruation which is consistent to many other studies while majority of them had regular cycles. Some of them (33.3%) even missed school during menstruation because of pain & discomfort. About 31.2% of adolescent girls still continued to use old clothes instead of sanitary pads.

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