

# Research in Pharmacy and Health Sciences

## Research Article

### The burden of menstrual problems and factors affecting adolescent school going girls in Jaipur

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#### ABSTRACT

**Objective:** The objective of this study was to find out the burden of menstrual problems and factors affecting adolescent school girls. **Methods:** Study population included all the adolescent school going girls of 10-19 years age group, residing in the field practice area of RHTC Achrol. The study began in January, 2015 till the estimated sample size of 400 was achieved. **Results:** Menorrhagia (6 to 8 days) was seen in 104 (26.0%) adolescent girls. 72 (18.0%) girls had polymenorrhoea (<20 days) & 6 (1.5%) had oligomenorrhoea (>35 days). **Conclusion:** The study revealed that menstrual disorders like oligomenorrhoea, hypomenorrhoea, polymenorrhoea and menorrhagia ranged from 1.5% to 26.0% and around 20% girls had PMS. As per GOI through Rajiv Gandhi scheme for empowerment of adolescent girls -SABLA in an effort to provide adolescent reproductive and sexual health information and services along the continuum of care, community based intervention and demand generation initiatives should be linked to facility based service across all levels of health system.

**Keywords:** Menstrual problems, Menarche, Patterns, Adolescent girls, Jaipur

**Received:** 02-9- 2017

**Revised:** 12-10-2017

**Accepted:** 16-10-2017

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**Funding:** Nil

**Competing Interests:** None

## INTRODUCTION

Menstrual problems are generally perceive as only a minor public health concern and thus irrelevant to the public health agenda particularly for women in developing countries who may face life threatening conditions. Menstrual disorders frequently affect the quality of life of adolescents and young women. Menstrual disorders are a common presentation by late adolescence and about 75% of girls experience some problems associated with menstruation.

Singh.A. et al, (2008)<sup>1</sup> conducted a study among 107 first & second year female medical students and observed that in 7.47% of the subjects, length of the cycle was abnormal i.e.4.67% had <20 days & 2.80% had >35 days. 10.28% subjects had abnormal duration of bleeding period; of these 1.86% subjects had duration <2 days & 8.41% had > 7days; 21.49% subjects had reported abnormal blood loss per cycle (of these, 12.14% had blood loss <30 ml & 11.21% had >100 ml blood loss). Begum J, et al (2009)<sup>2</sup> showed that regularity of the menstrual cycle, it was regular in 152 (87.4%) respondents, whereas 22(12.7%) had irregular cycle. Regarding menstrual flow, it was found to be average in 100 (57.5%) respondents, while it was scanty in 72 (41.4%) and heavy in 2 (1.1%) respondents. Other researcher found that 17.6% of the adolescent girls reported excess bleeding,70.63% had duration of menstrual bleeding between 3-6 days &

10.33% had more than 6 days duration of menstrual cycle. Scanty blood loss was seen in 26% and excess blood loss in 17.67% of the girls.[3]

Other studies also reported that the average menstrual duration of the students in the study group was 28.73±7.25 days (minimum 10, maximum 90) & many students cycle duration was between 21& 34 days (87.5%). Most of the students menstrual bleeding was less than 7 days (68.7%). About 80.0% reported experiencing regular menstruation i.e. 79.8%. Various aspects such as physiology, pathology and psychology of menstruation have been found to associate with health and well being of women: hence it is an important issue concerning morbidity and mortality of female population.[4,5]

In some studies the following findings have been shown regarding the inter menstrual period. It was reported to be 21-35 days by 69.52%, 36-45 days for 13.73% and more than 45 days for 8.38% girls. This could be because of changing trends in lifestyle, dietary habit, stress, hormonal imbalance or some medical reason which requires gynecological assessment at the earliest.

#### METHODS:

This was a school based study on adolescent school girls aged between 10-19 years of age was conducted at Achrol

village in schools near Rural Health Center (NIMS), Achrol.

Study population included all the adolescent school going girls of 10-19 years age group, residing in the field practice area of RHTC Achrol. The study began in January, 2015 till the estimated sample size of 400 was achieved, i.e. in June 2016.

A pre designed, semi structured questionnaire was used for collecting data. Health education and adequate counseling was provided to all the students of the concerned class. If any student/ subject was found to have any problem, adequate treatment and referral to NIMS Medical college and hospital was done. All the collected data was entered and analyzed based on its type using SPSS software ver.17. Ethical approval was granted by the ethical committee of NIMS Medical college and Hospital, Jaipur before the beginning of the study. Verbal and written consent was taken from each participant in the study.

## RESULTS AND DISCUSSION:

Table 1 shows distribution of adolescent girls according to age. Majority of the adolescent girls i.e. 252 (63.0%) were in 13-15 years of age group, followed by 16-19 and 10-12 years i.e. 81 (20.3%) & 67 (16.7%) respectively. The age of the youngest girl was 10 years & oldest was 18 years.

Table 2 shows distribution of adolescent girls according to duration of menstrual flow. The duration of menstrual flow varied from 2 days to more than 8 days. In the majority of the adolescent girls i.e. 283 (70.8%), it was normal, followed by menorrhagia in 104 (26.0%) girls. However there were 13 (3.2%) adolescent girls who had hypomenorrhoea. Table 3 shows distribution of adolescent girls according to length of the menstrual cycle (days). The average menstrual cycle frequency for the adolescent girls was 24.3 days with minimum of 18 days and maximum of 36 days. More than 80.0% of the adolescent girls i.e. 322 (80.5%) had normal menstrual interval i.e. 21 to 30 days, while 72 (18.0%) girls had polymenorrhoea and 6 (1.5%) had oligomenorrhoea.

Table 4 shows the distribution of adolescent girls according to age & menstrual problems. Out of 295 (73.8%), adolescent girls having menstrual problems, majority i.e. 205 (51.3%) were from 13 to 15 years of age group, followed by 16 to 19 years age group i.e. 60 (15.0%). It was lowest i.e. 30 (7.5%) in 10 to 12 years of age group. On application of Chi square test, the difference was found to be statistically significant (P<0.05).

**Table 1: Distribution of adolescent girls according to age**

Age in years	N (%)
10-12	67 (16.7)
13-15	252 (63)
16-19	81 (20.3)
<b>Total</b>	<b>400 (100)</b>

**Table 2: Distribution of adolescent girls according to Duration of menstrual flow**

Duration of Bleeding	N (%)
Hypomenorrhoea ( $\leq 3$ days)	13 (3.2)
Normal (3-5 days)	283 (70.8)
Menorrhagia (6 to 8 days)	104 (26)
<b>Total</b>	<b>400 (100)</b>

**Table 3: Distribution of adolescent girls according to frequency of menstrual cycle**

Frequency of Menstruation	N (%)
Polymenorrhoea (<20 days)	72 (18)
Normal (21-30 days)	322 (80.5)
Oligomenorrhoea (>35 days)	06 (1.5)
<b>Total</b>	<b>400 (100)</b>

**Table 4: Distribution of adolescent girls according to age & menstrual problems**

Age (in years)	Menstrual problems					
	Yes		No		Total	
	No	%	No.	%	No.	%
10-12	30	7.5	37	9.2	67	16.8
13-15	205	51.3	47	11.8	252	63.0
16-19	60	15.0	21	5.2	81	20.2
<b>Total</b>	<b>295</b>	<b>73.8</b>	<b>105</b>	<b>26.2</b>	<b>400</b>	<b>100.0</b>

Chi-Square(X<sup>2</sup>) – 36.5748 p<0.00001 P<0.05

## CONCLUSION:

This study reveals that in the majority of the adolescent girls i.e. 283 (70.8%) the menstrual flow was normal (3-5 days), followed by menorrhagia (6 to 8 days) in 104 (26.0%) girls. However there were 13 (3.2%) adolescent girls who had hypomenorrhoea (less than 3 days). More than 80.0% of the adolescent girls i.e.322 (80.5%) had normal menstrual interval of 21-30 days, while 72 (18.0%) girls had polymenorrhoea (<20 days) and 6 (1.5%) had oligomenorrhoea (>35 days).

**Acknowledgement:** None

**Competing interests:** None declared

**Funding:** None

**Abbreviations:** None

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