

Menstrual Pattern of Adolescent School Girls of Bhavnagar (Gujarat)

Dr. P.B. Verma*, Dr. C.M. Pandya**, Dr. V.A. Ramanuj***, Dr. M.P. Singh****

*Professor & Head, Department of P.S.M., P.D.U. Medical College, Rajkot, **Assistant Professor, Department of P.S.M., Govt. Medical College, Baroda, ***Tutor, ****Professor, Department of P.S.M., Medical College, Bhavnagar. India

Abstract: Background: Menstruation is a normal physiological phenomenon for females indicating her capability for procreation. However this normal often associated with some degree of sufferings and embarrassment. The prevalence of menstrual disorders has been recorded as high as 87 % though there is a relative openness in the society as well as commercialization has increased, the menstrual hygienic practices have not changed much. Mostly it is because of a sense of hesitation and to an extent, because of financial restraints. Present study was carried in this line to find out problems. **Aims and Objectives:** To find out the age of menarche of girls and to know menstrual pattern and menstrual hygiene practice & to find out the prevalence and types of menstrual disorders. **Materials and Methods:** Present cross sectional study was carried out at Govt. High school of Bhavnagar city. Total 745 Adolescent school girls were interviewed by trained female interns Information was obtained in a self administered proforma in a local language related to age of menarche, total days of bleeding, regularity of cycle, menstrual hygiene and menstrual problems after verbal consent. **Results:** The mean age of menarche was found to be about 14 (13.99, S.D. 1.8). Most of the girls (88.1%) had the prior information about menstruation before the occurrence of the event. The most common menstrual pattern was 30/3-5 days. The most common menstrual disorder was dysmenorrhea (50.6%), followed by irregular menstruation (22.9%). Most of the girls (87.3 %) used old plain cloth as menstrual absorbent. **Conclusion:** Adolescent girls should be made educated about normal physiology of menstruation and menstrual hygiene at schools.

Key-words: Adolescent girls, Dysmenorrhea, menarche, menstrual hygiene, menstrual disorders, school girls

Corresponding Author: Dr. P.B. Verma, 20, Devmangalya Bungalows, B/h H.P. Petrol Pump, Motera, Ahmedabad - 380 005, Email: drpramodverma@rediffmail.com

INTRODUCTION: Menstruation is a normal physiological phenomenon for females indicating her capability for procreation. However this normal phenomenon is not an easy one. It is often associated with some degree of sufferings and embarrassment. It is common observation that every woman does experience one or other type of menstrual problems in her lifetime. The prevalence of menstrual disorders has been recorded as high as 87 %¹.

It is a common observation that girls are rarely informed about menstruation unless they experience it for the first time. It is mostly a traumatic experience for them. If the girls are well informed about menstruation, well in advance, it will help them in the life later on. Though there is a relative openness in the society as well as commercialization has increased, the menstrual hygienic practices have not changed much. Mostly it

is because of a sense of hesitation and to an extent, because of financial restraints.

The present study was planned to find out the menstrual pattern of girls in this region, as well as their menstrual hygienic practices. It was also tried to find out the prevalence of menstrual disorders and their types. Present Study was undertaken 1. To find out the age of menarche among the girls of this region 2. To know the menstrual pattern and menstrual hygiene practice.3. To find out the prevalence and types of menstrual disorders.

MATERIAL AND METHODS: This is cross sectional study carried out among 745 high school girls of Bhavnagar city. The data were collected by female intern doctors. All the interns were trained for data collection, data entry and analysis. The proforma was prepared in Gujarati language so to make it

understand easily by girls. The proforma was semi-structured. The proforma was self-administered, however female intern doctors were present to remove the inhibitions and provide the clarification of doubts if any and verbal consent was taken. The proforma contained the questions related to age of menarche, pattern of menstruation in the form of inter-menstrual gap, total days of bleeding, regularity of cycle. An enquiry was also made to know menstrual related problems like dysmenorrhea, menorrhagia, etc. It was also tried to find out menstrual hygienic practices among them.

RESULTS : Information about menstruation: Interestingly 88.1% girls had had the information about the menstruation before they achieved the menarche. Remaining girls were not informed about menses. The main source of information was mother (57.2%). An important finding was that in a girls' school, only 1.7 % girls got the information from their teacher. Other sources were elder sister, relatives, friends and books.

Table 1: Information Regarding Menstrual Cycle.

Information	Number of Girls	Percentage (n=745)
Yes	656	88.1
No	60	8.1
Not Stated	29	3.9
Total	745	100.0

Table 2: Source of Information Regarding Menstrual Cycle.

Source	Number of Girls	Percentage (n=745)
Mother	426	57.2
Sister	122	16.4
Teacher	13	1.7
Friend	78	10.5
Books	11	1.5
Others	4	0.5
Not Stated	91	12.2
Total	745	100.0

Menarche & Menstrual pattern: Out of total 745 girls, 20 girls didn't achieve the menarche at the time of study. Out of remaining 725 girls, 8 girls didn't state their age of menarche; so as per

records from 725 responses, the mean age of menarche came to 13.995 (S.D. 1.8). Range of age of menarche was 12- 14.6 years

TABLE 3: Duration of Menstruation.

Duration	Number of Girls	Percentage (n=725)
<=2 Days	20	2.8
3-5 Days	496	68.4
5-7 Days	172	23.7
Others	35	4.8
Not Stated	2	0.3
Total	725	100.0

The most common menstrual pattern found among girls was 30/3-5 days followed by 28/5-7 days. Out of 725 girls, who had achieved menarche, 75% felt that the amount of menstrual flow was normal, while 8.8% felt that it was below normal and 8.7% felt that it was more than normal. Forty (5.5%) girls did not respond to this question.

Menstrual disorders: Out of 725 girls, who achieved menarche, 40 (5.5%) didn't respond to the question regarding the regularity of menstruation. Out of remaining 685 girls, 519 (75.76%) found their menstruation to be regular and among only 24.24% girl's menstruation was irregular. Seventy five percent girls perceived the menstrual flow within normal limits, while 8.8 % considered it to be less than normal and 8.7 % more than normal.

Table 4: Prevalence of menstrual disorders

Menstrual disorder	No. of girls	*Percentage (n=725)
Dysmenorrhea	367	50.6
Hemorrhage	63	8.7
Oligomenorrhea	64	8.8
Irregular menstruation	166	22.9

* Multiple responses were allowed.

Out of 725 girls, who achieved the menarche, 367 (50.6%) were having dysmenorrhea, but out of them only 83 sought some help. Those who sought some help, 44 consulted a doctor and other sought the help of their mother or other female relatives.

Menstrual hygiene: Majority of girls (87.3%) used old plain cloth during menstruation and only 10.6 % used commercially available sanitary napkins. Remaining 13 (1.8%) girls didn't respond to this question

Table 5: Menstrual Hygiene

Use	Number of Girls	Percentage (n=725)
Cloth	633	87.3
Sanitary Pads	77	10.6
Others	2	0.3
Not Stated	13	1.8
Total	725	100.0

DISCUSSION: Our study suggested that 88.1% girls were informed about menstruation. The main source of information was the mother of the girl. However it was interesting to note that only 1.7% girls obtained the information from their teachers. The reason behind this may be that though it is a girl's school, about half of the teachers are male. At the same time, even female teachers may feel embarrassed talking on this topic. The mean age of menarche in our study was found to be 13.995 (S.D. 1.8). The results are almost same as by Singh M.M. et al². In their study, the mean age of menarche was 13.6. In another study in rural Orissa, the mean age of menarche was found to be 12.97 (S.D. 0.99)³. Although menarche is an occasion for celebration in south India, particularly in TAMILIAN people, the girls are rarely informed about it there also; very little information is given to young girls about the physiological processes involved and hygienic practices to be followed¹. The most common menstrual problem was dysmenorrhea (50.6%), followed by irregular menses (22.9%). Though the dysmenorrhea was common, out of those 367 who had it, only 22.6% sought for help either to a doctor or their mother. Remaining accepted it as their destiny. Other studies have also found the dysmenorrhea the most common menstrual disorder^{4, 5}. It was amazing to note that still most of the girls (87.3%) use old plain cloth as absorbent during menstruation and only 10.6% use commercially available sanitary napkins. However it was

not clear, whether the reason for this was their economic status or just their hesitation.

CONCLUSION AND RECOMMENDATION: Girls should be informed well in advance about the menstruation, physiological process involved, its importance etc. Mothers are primarily responsible for the transmission of such type of information. This will help the girls to take it positively. Hygiene during menstruation should be maintained, so to avoid any reproductive tract infection. Teachers' role for the transmission of information.

ACKNOWLEDGEMENTS: We are highly thankful to principal and teachers of the school for the providing permission and support to conduct the study. We also acknowledge all the girls who participated in this study.

REFERENCES:

1. Narayan K.A. et al: "Puberty Rituals, Reproductive Knowledge and Health of Adolescent Schoolgirls in South India.", Asia Pacific Population Journal, Vol. 16, No. 2, 224-236.
2. Singh M.M. et al "Awareness and health seeking behaviour of rural adolescent school girls on menstrual and reproductive health problems", I.J.M.R., 1999. Vol. 53, Issue 10, 439-43.
3. Dutta Himansu Sekhar, "Sexual health status of adolescent girls in rural Orissa", <http://www.orissavha.org/studies/shstudy/202001-2.doc>
4. Drakshayani Devi K. et al "A study on menstrual hygiene among rural adolescent girls", IJMS, 1994 Vol. 48 Issue 6, 139-43
5. Ganguly Mukherjee Gita et al "Knowledge of Reproductive Health Issues among the School going Teenagers of Rural Bengal", J. Obst. Gyne. India, Vo. 41, No. 1: Jan/Feb. 2001, 115-118