

MENSTRUAL NORMS IN INDIAN GIRLS

by

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Introduction

Menstrual norms are given in all standard text books. However, except age of menarche and the factors influencing it, very few studies are done in Indian girls about menstrual norms.

Material and Methods

Menstrual data was collected from 335 girls. This includes 132 medical students and 200 student nurses. All of them were from 18 to 25 years of age. When satisfactory information of any factor was not obtained, that form was excluded from the study for that factor. The data was analysed for the duration of bleeding cycle, menstrual pattern in relation to first three menstrual periods, time taken to regularise the cycles since menarche, the pain associated with menstruation and treatment if any taken for menstrual problems.

Results

Duration of Cycle

In 6 girls (2%) the menstrual cycles were less than 21 days. In 263, 86.4% the cycles were within a normal range of 22-35 days. Individual variation in the

cycle was only 3 or 4 days, that is the girls had cycle range of 22-25 or 24-28 or 29-32 or 31-35 and are grouped together in this range of 22-35 days. Individual girls having cycle range really varying from 22 to 35 days are grouped as from 22 to 35 days are grouped as having a cycle range of more than 35 days but upto 50 days was present in 14 girls, 4.6%. Amenorrhoea was a problem in only 1 girl (0.3%) (Table 1). Sixteen

TABLE I
Duration of Cycles

Cycle duration days	No. of Girls	%
15-20	2	
20	1	
21	1	
18-23	1	
20-24	1	
22-35	263	86.4%
35-42	3	
39-43	4	
40-45	7	
irregular at present	16	5.3%
Amenorrhoea	1	(0.3%)
Total	300	

girls, 5.3% had irregular menstruation (Table II). One girl had secondary amenorrhoea following treatment for menorrhagia with cyclic hormones.

Among all the girls oligomenorrhoea was present in 26 girls (8.6%).

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TABLE II
Irregular Cycles in the 16 Girls

Type of Irregularity	No. of Girls
15-30 days	1
18-40 days	1
22-35 days	2
30-40 days	3
30-45 days	1
35-55 days	1
40-50 days	1
1½-2 months	1
2-3 months	3
3-4 months	2
	16

All the others (96.2%) had menstrual bleeding of 3 days or more and less than 8 days.

The very first menstrual period was 9 days or longer in duration in 11 patients (3.4%). The second menstrual period of 9 days or more in duration in 7 girls 2.1% and third menstrual period was of 9 days or more in duration in 6 girls (1.8%). Among these, 6 girls had only first period of more than 9 days duration, 4 had only the second period of more than 9 days and 1 girl had only the third period more than 9 days duration.

History of severe bleeding in present menstrual cycles as well as first 3 cycles was given by 14 girls (4.3%) and 4 girls

Table III describes the bleeding pattern

TABLE III
Duration of Menstrual Bleeding

Average duration in first 3 cycles	Present menstrual duration days					Total
	2-3	3-4	4-5	6-7	8-10	
2-3	Nil	3	1	—	—	4
3-4	2	60	14	1	—	77
4-5	1	15	92	3	1	112
5-6	1	8	28	21	—	58
6-7	1	5	20	27	1	54
8-10	—	5	7	4	3	19
	5	96	162	56	5	324
	1.5%		96.2%		1.5%	

in these girls in relation to the average bleeding pattern in first three menstrual periods.

All the 5 girls with a bleeding pattern of 2-3 days at present had good menstrual flow of 4-7 days duration in their first 3 cycles. Only 3 (15.8%) of the girls with initial 3 periods of 8-10 days had menstrual bleeding of 8-10 days in the present cycles. Menorrhagia of more than 8 days was present in 5 girls out of these 324 (1.5%) and bleeding of 2-3 days per month was present in 1.5% only.

gave history of severe menstruation in present cycles only, Thus, severe menstrual flow in present cycle was described by 18 girls (5.5%). Menstrual flow was considered mild in nature in present cycles by 6 girls and mild flow in present as well as first three cycles was described by 7 girls. Thus at present, 13 girls (4%) gave history of mild bleeding. In first 3 cycles only menstrual blood flow mild in nature was described by 16 girls and severe by 6 girls. Thus first 3 cycles were with mild flow in 23 girls (7.1%)

and severe in 20 girls (6.1%) 14 (70%) out of these 20 girls with severe flow in first 3 cycles continued to have severe flow in the present cycles and only 7 (30%) of these 23 girls continued to have mild menstrual flow in the present cycles.

Only 3 girls out of 18 with severe menstrual flow in present cycle had menstrual bleeding of more than 8 days and 1 girl had bleeding of only 3 days in duration in this group. Similarly, in only 1 girl with mild menstruation was having present menstrual bleeding of 2-3 days in duration. All others in this group had menstruation of 3-5 days and 2 girls had menstrual bleeding of 5-6 days. Menstrual flow was described mild in characters in first 3 cycles by 1 girl, even though the duration of bleeding was 8-12 days. Only 1 girl with first 3 menstrual cycles of mild, had bleeding of 1-2 days and 2 others in this group had bleeding of 2-3 days.

Table IV describes the time taken to regularise the menstrual cycles after menarche. In 191 patients (57.5%) the menstrual cycles were regular since menarche and later on irregularity of 18-40 days and 35-55 days developed in 2 girls. Menstrual cycles were regular within 6 months in another 25% of cases.

Thus, in 332 cases, 82.5% of girls were regularised by 6 months. In another 34 girls (12.4%) the cycles were regularised by 1 year. Only in 2.1% of these girls menstruation was regularised after 1 year and upto 4 years. Fourteen (58%) out of the 24 girls not regularised till 1 year after menarche, continued to have irregular menstruation in present cycles.

Table V describes the pain during menstruation in these girls. Among 298 girls with pain in the present cycles, 142 (48%) had no pain in relation to menstruation. Dysmenorrhoea was present in 156 girls (52%). Severe pain was present in 5.3% of these 298 girls. Treatment of dysmenorrhoea was taken by 26 girls (8.4%). Most of them took analgesics or antispasmodics. Two girls had taken hormonal treatment for dysmenorrhoea. One girl underwent hysterectomy for severe dysmenorrhoea and in 1 girl dysmenorrhoea was relieved after sympathectomy.

In first 3 cycles no pain was experienced by 166 girls (52%) out of 315 cases with pain. Out of 154 girls with no pain during initial 3 cycles, 112 girls (72.7%) had no pain in the present cycles. Only 4 girls in this group (2.5%) had severe pain in present cycles. Seven (77.7%) out of

TABLE IV
Regularisation of M.C. After Menarche

Time taken to regularise	No. of patients	%
Since Menarche	191	57.5%
3 months	37	82.5%
6 months	46	25%
1 year	34	12.4%
2 years	6	
3 years	2	
4 years	1	
10 years	1	
irregular still	14	4.2%
	332	

TABLE V
Dysmenorrhoea

First 3 periods Pain	Present cycles: Pain					Total
	Un- known	Nil	+	++	+++	
Nil	12	112	21	17	4	166
+	1	6	32	4	—	43
++	10	19	21	42	5	97
+++	Nil	1	Nil	1	7	9
Un- known	—	4	Nil	2	Nil	6
Total No.	23	142	74	66	16	321

9 girls with severe pain in first 3 cycles continued to have severe dysmenorrhoea in present cycles. Among 129 girls with mild to moderate pain in first 3 cycles, 104 (80%) continued to have mild or moderate pain in the present cycles. Totally among 138 girls with some pain in first 3 cycles, 112 (81%) continued to have some pain in the present cycle.

Hormonal treatment was taken by 12 girls in this group (3.6%). This was for dysmenorrhoea by 3, for irregular periods by 3, for menorrhagia of 22 days in second cycle by 1 for cyclic menorrhagia by 1. Amenorrhoea of 4 months after first 4 regular periods and of 1 year after 6 regular periods by 2 girls and delayed menstruation for 4 to 8 months after first period by 2 girls.

Summary

1. Irregular menstruation, and oligomenorrhoea and amenorrhoea was present in 5.3%, 8.6% and 9.3% respectively in the present cycles.

2. History of mild menstrual flow was given by 4% of girls in the present cycles.

3. Menstrual bleeding of 9 days or more was present in only 1.5% of cases. Severe menstrual flow in the present cycles was described by 5.5% of girls.

4. 82.5% of the girls regularise their cycles by 6 months. Among the girls who do not regularise by one year after menarche, 58% continue to have irregular cycles in later life.

5. Dysmenorrhoea was present in 52% of girls. It was totally absent in 48% of girls. Treatment for dysmenorrhoea was required by 8.4% of girls. Dysmenorrhoea severe in degree was present in 5.3% of girls. Whenever no pain is experienced in the first 3 cycles, 72% of the girls continue to be free from the dysmenorrhoea in later life. Eighty per cent of girls with pain in first 3 cycles continue to have pain in later cycle.

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