Knowledge on Puberty and Management during Menstruation: A Study among Slum Dwellers in AP

Ravindra kumar. V. K | Professor, Department of Population Studies and Social Work, Sri Venkateswara University, Tirupati-517502, A.P

Reproductive and Child Health (RCH) was given top priority after the International Conference on Population and Development held at Cairo during 1994. From then onwards research has focused on RCH, in both developed and developing countries, with the aim of improving the health status of both mothers and children. RCH has gained importance in India also, as nearly 69 per cent of its population falls in the age group of 0 to 40 years covering children and women in their reproductive ages. But the Maternal Mortality rate was still high at 540 per one lack live births, more than half of the women (52 per cent) were anemic, 39 per cent of women had any kind of reproductive health problem, infant Mortality rate was 66 per 1000 live births and Child Mortality rate was 95 per 1000 live births and nearly one fourth of the babies were born under low birth weight (NFHS-II). The slum population is on the rise in the urban areas due to high fertility, further augmented by rural exodus to urban areas. The slum dwellers generally give birth to large number of children due to their ignorance, fatalism and poverty and, the large family size affect the Health status of both the mother and children. The reproductive health status of the mother will be adversely affected by the larger family size, coupled with shorter birth intervals. Studies also revealed that the obstetrical complications would also be high among women with high parity, involving high-risk incidence of Maternal Mortality. Further, the knowledge on puberty and management during menstruation is very poor especially among female slum dwellers. Hence the present study focuses on this aspect to provide certain implications to improve the situation.

STUDY AREA

The study was carried out in all the three regions of Andhra Pradesh, to make the findings applicable for the entire state. Since, it is difficult to cover the entire state due to paucity of time and funds, one city from each of the regions viz, Tirupati from Rayalaseema, Vijayawada from Coastal Andhra and Hyderabad from Telangana region, were purposively selected for the study.

SAMPLE FRAME AND SIZE

The sampling unit for the study was the couples in the reproductive age group of 15-49 years having one or more conceptions. For the selection of sample from the slums in three cities, cluster sampling was followed.

All the notified slums in each of the selected three cities were listed based on this information collected from the Municipalities/Corporations. In each city, slums were classified into three categories based on the number of households viz, small, medium and big. From each city a sample of 225 households were selected randomly giving due representation to the above stated three categories of slums. In case of more than one couple in any given household, the youngest couple was considered. Thus the total sample for the study was 675 couples from the three cities covering 225 from each.

The respondents here were the females among the couple.
1. Knowledge on puberty and maintenance during Menstruation

Findings
Table 1: Percent distribution of women by different aspects of puberty and menstruation

Characteristics	Tirupati N=225	Vijayawada N=225	Hyderabad N=225	Total N=675
Age at Puberty				
12 or less	20.4	29.3	17.8	22.5
13	51.1	42.2	47.1	46.8
14	19.1	17.8	26.7	21.2
15 & above	9.3	10.7	8.4	9.5
Experience at onset of puberty				
Frightened	25.3	38.2	32.9	32.1
Normal	74.7	61.8	67.1	37.9
Timing of bath after puberty				
Same day	57.3	20.4	39.1	39.0
Second day	36.9	25.3	33.3	31.9
3-10 days	5.8	24.9	20.9	17.2
11 and above days		29.3	6.7	12.0
Days kept outside after puberty				
1-5 days	28.0	20.4	18.7	22.4
6-10 days	44.9	35.1	46.2	42.1
11 days and above	27.1	44.4	35.1	35.6
Regularity of menstrual cycle				
Yes	76.4	28.7	81.3	80.1
No	23.6	17.3	18.7	19.9
Duration of menstrual cycle				
Less than 28 days	9.3	14.2	7.1	10.2
28-30 days	68.0	53.8	54.7	58.8
31- & above days	22.7	32.0	38.2	31.0
Level of menstrual flow				
Scanty	12.9	34.2	11.6	19.6
Moderate	75.1	56.9	75.1	69.0
Heavy	12.0	8.9	13.3	11.4
Type of protection during menstruation				
Solid cloth	5.3	33.3	11.6	16.7
Washed cloth	84.0	63.1	76.0	74.4
Sanitary napkin	10.7	3.6	12.4	8.9
Work during menstruation				
Yes	85.8	89.3	81.3	85.5
No	14.2	10.7	18.7	14.5
Sex during menstruation				
Yes	13.3	17.3	10.2	13.6
No	86.7	82.7	89.8	86.4
Knowledge on the period of conception during a menstrual cycle				
I week	1.3	8.9	25.3	11.9
II week	7.1	8.0	25.3	13.5
III week	5.8	10.2	4.9	7.0
IV week	4.9	2.7	2.5	
Don't know	85.8	68.0	41.8	65.2

0.1 Age at puberty

The percent distribution of women by age at puberty presented in Table – 1 revealed that 69.3 per cent of women attained puberty at the age of 13 or less. The proportion of women attained puberty at the age of 13 or less was highest at (71.5 per cent) both in Tirupati and Vijayawada and it was 64.9 per cent in Hyderabad.

0.2 Experience at onset of puberty

The per cent distribution of women by their experience at the time of onset of puberty presented in Table – 1 showed that more than two-thirds of women (67.9 per cent) were normal and 32.1 per cent were frightened at onset of puberty. The proportion of women frightened at onset of puberty was 38.2 per cent in Vijayawada, 32.9 per cent in Hyderabad and 25.3 per cent in Tirupati.

0.3 Timing of bath after puberty

The percent distribution of women by timing of bath after puberty is presented in Table – 1, it is found that in all 39 per cent of women had bath on the same day, followed by 31.9 per cent of women on the second day and the rest on 3rd or after 3rd day. The proportion of women who had bath on the same day was highest at 57.3 per cent in Tirupati compared to 39.1 per cent in Hyderabad and 20. 4 percent in Vijayawada.

1.4 Days kept outside after puberty

It is a common practice to keep girl outside home after puberty until the completion of the rituals as per the cultural practices prevailing in the community. The results of the study presented in Table – 1 revealed that in all 22.4 per cent of women were kept outside home after puberty for 1-5 days 42.1 per cent for 6-10 days and 35.6 per cent for 11 days of more. The practice is observed to be more common in all the three slum areas.

1.5 Regularly of menstruation

The percent distribution of women according to the regularity of menses after puberty is presented in Table – 1 it is observed that in all 80.1 per cent of women were having regular menstrual cycle. The region wise comparison did not show much variation in the proportion of women who had regular menses. It was 76.4 per cent in Tirupati, 82.7 per cent in Vijayawada and 81.3 per cent in Hyderabad.

1.6 Duration of menstrual cycle

The duration of menstrual cycle as reported by the women is presented in Table – 1 it is found that the duration of menstrual cycle was less than 28 days for 10. 2 per cent of women, 28-30 days for 58.8 per cent and 31 days or more for the remaining 31.0 per cent of women. Longer duration of menstrual cycle was observed to be highest at 38.2 per cent of women in Hyderabad compared to 32.0 per cent in Vijayawada and 22.7 per cent in Tirupati.

0.7 Menstrual flow

The percent distribution of women according to the level of menstrual flow presented in Table – 1 revealed that the menstrual flow was normal (moderate) for a majority of women in all the regions of the state. In all, 69 per cent of women were reported to have moderate menstrual flow. The proportion of women who had moderate (normal) menstrual flow was highest at 75.1 per cent both in Tirupati and Hyderabad and it was only 56.9 per cent in Vijayawada.

0.8 Type of protection

In order to assess the menstrual Hygiene, the women were asked about the type of protection they followed during menstruation. The results presented in Table -1 showed that in all only 8.9 per cent of women were using sanitary napkin and 74.4 per cent used washed cloth. The use of sanitary napkins was very low in all the three slum areas ranging from 3.6 per cent in Vijayawada to 12.4 per cent in Hyderabad. Use of washed cloth was the favorable method of protection followed by most of the women in all the three slums. It was 84.0 per cent in Tirupati, 76.0 per cent in Hyderabad and 63.1 per cent in Vijayawada. As

most of the slum populations are living below poverty line, use of sanitary napkin is a difficult task for them, as it required money to be invested for the purchase of sanitary napkins. The unhygienic practice seemed to be high in the slum areas Vijayawada (33.3 per cent) compared to only 11.6 per cent observed in Hyderabad and 5.3 per cent in Tirupati.

0.9 Work during menstruation days

In olden days women were not allowed to work even their duties at home during menstruation days. In order to assess the continuation of such practices, women were asked whether they work during menstruation. The results presented in Table -1 revealed that most of the women (85.5 per cent) used to work during menstruation. The slums wise comparison did not show much difference in their practice with the more than 80 per cent of women in all the region work during menstruation.

0.10 Sex during menstruation

As sex during menstruations considered as unhygienic, women were asked whether they indulged in sex during menstruation days. The results presented in Table – 1 indicated that most of the women (86.4 per cent) did not indulge in sex during menstruation days. Only a small proportion of women ranging from 10.2 per cent in Hyderabad to 17.3 per cent in Vijayawada were reported to have sex during menstruation days.

0.11 Conception period in a menstrual cycle

In order to assess the knowledge of women on safe period and fertile period during a menstrual cycle, women were asked to state the favorable period of conception during a menstrual cycle. The results presented in Table – 1 revealed that most of the women were not having correct knowledge about the fertile period in a menstrual cycle. A majority of them (65.2 per cent) reported their ignorance about the fertile period. Only one-fifth of women (20.5 per cent) had reported that 2nd or 3rd week in a menstrual cycle as a fertile period. The region wise comparison showed that a higher proportion of slum women in Hyderabad (30.2 per cent) had reported the second or third week as fertile period compared to 18.2 per cent in Vijayawada and 12.9 per cent in Tirupati.

2. Age at puberty and Caste

Table- 2 per cent distribution of women by age at puberty according to caste

Age at puberty	OC N=125	BC N=317	SC/ST N=233	All N=675
12 or less	25.6	23.0	20.2	152
13	48.0	45.7	47.6	316
14	16.8	21.8	22.7	143
15 and above	9.8	9.5	9.4	64
Chi-square 2.74	d.f -6 p<0.841			

The percent distribution of women by age at puberty according to their caste affiliate presented in Table- 2 revealed that age at puberty did not very much due to different caste. The chi-square test of significance showed that the differences observed in the age at puberty among different caste groups were not statistically significant.

3. Timing of bath and Cast

Table- 3 Per cent distribution of women by given bath after puberty according to Caste

Bath after puberty	OC N=125	BC N=317	SC/ST N=233	All N=675
Same day 263	33.6	43.2	3 6 . 1	
Second day 215	36.8	34.7	2 5 . 3	
3-10 days 116	20.8	12.9	2 1 . 0	
11 and above 81	8.8	9.1	1 7 . 6	
Chi-square	23.38	d.f -6 p<0.001		

The percent distribution of women by bath after puberty ac-

cording to caste presented in Table- 3 revealed significant differences in timing of bathing after puberty between women belonging to different caste groups. It is observed that a significantly higher proportion of women among BC and SC/ST gave bath after 11 or more days. The chi-square test of significance showed that the differences were statistically significant.

4. Days kept outside after puberty and Caste
Table- 4 Per cent distribution of women days kept outside after puberty according to Caste

Days kept outside after puberty	OC N=125	BC N=317	SC/ST N=233	All N=675
1-5 days	24.8	23.3	19.7	151
6-10 days	42.4	44.2	39.1	284
11 days and above	32.8	32.5	41.2	240
Chi-square 5.21	d.f -4 p<0.266			

The percent distribution of women by number of days kept outside after puberty according to caste presented in Table- 4 revealed that a higher proportion of SC/ST women were kept outside home for higher duration (11 days or more) after puberty. Though differences were observed in the number of days kept outside home, the differences were not statistically significant.

5. Organizing function for puberty
Table 5 Per cent distribution of women by function organized on the occasion of puberty according to Caste

Function organized	OC N=125	BC N=317	SC/ST N=233	All N=675
Yes	44.8	44.5	52.4	319
No	55.2	55.5	47.6	356
Chi-square	3.72	d.f -2 p<0.156		

The percent distribution of women by function organized on the occasion of puberty according to caste presented in Table-5 revealed that organizing function on the occasion of puberty was more among SC/ST than others. Though differences were observed in the proportion of women reported to have organized function on the occasion of poverty, the differences were not statistically significant.

6. Menstrual problems
Table- 6 Per cent distribution of women by major physical/health problems during menstruation

Menstrual problems BM	Tirupati			Vijayawada			Hyderabad		
	DM	AM (N=675)	BM	DM	AM (N=675)	BM	DM (N=675)	AM	
Backache	18.37	15.85	5.77	10.07	8.88	2.07	15.70	14.96	4.74
Stomachache/ Colon spam/ Constipation	19.25	17.03	4.88	10.67	8.74	2.07	16.14	14.96	4.74
Tiredness/Weakness/ Laziness/heavy Feelings etc.	17.48	15.40	4.0	8.29	6.07	1.77	12.44	11.40	2.81
Irritation/fear/ anxiety	10.51	8.4	2.66	5.03	3.25	1.33	4.59	4.0	1.33

Percentages may not be equal 100 due to multiple respondents

BM-Before menstruation: DM-During menstruation: AM-After menstruation

In order to assess the type of physical/health problems faced by women during menstruation, women were asked the type of problem they were experiencing before, during and after a menstrual cycle. The results presented in Table-6 revealed that backache, stomach pain, irritation, tiredness etc were reported to be the major health problems experienced by women during the menstrual periods.

7. Type of protection by selected background characteristics
Table 7: per cent distribution of women by type of protection followed during menstruation according to selected background characteristics

Background Characteristics	Solid cloth	Washed cloth	sanitary napkin	All N=675
Age				
15-19	8.9	73.2	17.9	56
20-24	16.9	75.4	7.7	284
25-29	15.2	69.6	15.2	79
30-34	18.3	74.6	7.1	126
35-39	18.9	73.3	7.8	90
40-49	20.0	80.0	40	
Chi-square	16.43	d.f-10	p<0.003	
Education				
Illiterate	19.4	76.4	4.2	284
Primary	16.5	74.4	9.1	164
Middle & Secondary	13.7	71.8	14.5	227
Chi-square	17.94	d. f-4 p	<0.001	
SLI				
Low	15.9	76.4	7.7	428
Medium	18.9	71.4	9.7	227
High	10.0	65.0	25.0	20
Chi-square	8.81	d. f-4	p<0.066	

The per cent distribution of women by type of protection followed during menstruation according to selected background characteristics is presented in Table- 7.

Use of sanitary napkins was observed to be high among young women than others. The chi-square test of significance indicated that the differences observed in the type of protection followed during menstruation were not statistically significant.

The use of sanitary napkins increased significantly with the increase in education. It has increased from 4.2 per cent among illiterates to 14.5 per cent among those who have studied up to middle and secondary. The differences observed in the use of sanitary napkins and the use of solid cloth was statistically significant.

The standard of living seemed to have significant influence on the use of sanitary napkins during menstruation. It is observed that the proportion of women using sanitary napkins increased from 7.7 per cent among women from low standard of living to 25 per cent among women from high standard of living.

In all it is observed that a significantly higher proportion of younger women, literate women and women from high standard of living were using sanitary napkins as a source of protection during menstruation days.
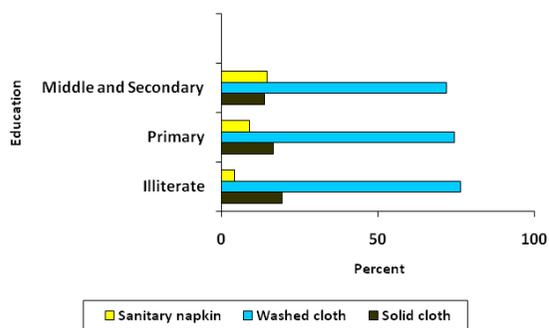
Figure- 1 per cent distribution of women by type of protection followed during menstruation according to education
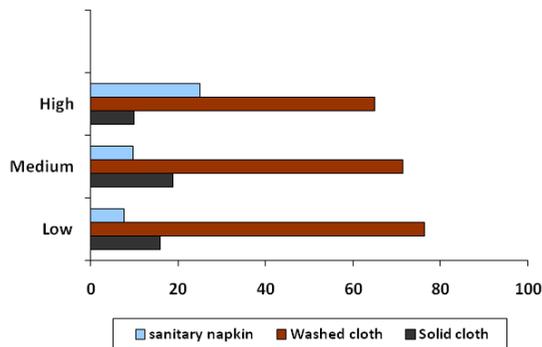

Figure- 2 per cent distribution of women by type of protection followed during menstruation according to standard of living index

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