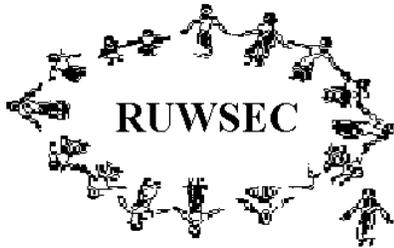


Health needs of poor unmarried adolescent girls-
A community based study in rural Tamil Nadu

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Draft Paper

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Introduction

Adolescent girls constitute one fifth of the female population in the world. Generally this group is considered healthy and has not been given adequate attention in health programmes. The reason is age specific mortality is comparatively low in this age group as compared to others. In countries like India, adolescent girls face serious health problem due to socio-economic, environmental conditions and gender discrimination. These factors make them more vulnerable to health risks. A vast majority of girls in India are suffering from either general or reproductive morbidities. If these are not treated early, they could lead to various disabilities and consequently affect their valuable lives. Adolescent girls will become mothers in the subsequent 5 – 10 years and these morbidities may affect the well being of future generations. The present study is an attempt to assess the health needs of rural poor, disadvantaged, adolescent girls who are more vulnerable to health risks.

Review of literature

There are various studies in India that explain the high prevalence of morbidity among adolescents. The highlights of selected studies are as follows.

Joseph et al study on “General and reproductive health of adolescent girls in rural south India” observed that the most frequently cited health complaints were fatigue, palpitations, frequent headaches, backaches and abdominal pain. Over 20 percent suffered from joint pains, loss of weight, poor appetite and recurrent respiratory problems. Those with higher educational status had fewer health complaints.

Jawaharlal Nehru Institute of post graduate medical education and research (JIPMER) study in Tamilnadu on “Puberty rituals” (2001) showed the association between menstrual hygiene with reproductive tract infections. In another community based survey on “Dysmenorrhoea in adolescent girls in a rural area of Delhi” (1997) covered 300 girls aged 11-18 years. The study reflected that 70.8% of girls experienced dysmenorrhoea. The mean day of menstrual flow was significantly correlated with painful menstruation.

One more study in rural Tamil Nadu (2000) assessed prevalence of reproductive tract infections among married adolescents; out of 415 women interviewed 265 (59%) reported had one or more gynecological problems and only 35 percent of the women accessed treatment, with the majority accessing traditional or unqualified practitioners.

Organization and settings

Rural Women’s Social Education Centre (RUWSEC) is a grassroots women’s organization in Tamil Nadu, India. The organisation has been working for women’s

health and well being through women's empowerment since its inception on 1981. The organisation carries out a wide spectrum of activities towards meeting the goal.

RUWSEC has been providing technical support to other NGO'S working on similar issues in the region. RUWSEC has been providing support to an NGO, Grama Pengal Iyakkam (GPI) towards developing a community-based reproductive health programme. The organization works with women in Sithamoor block of Madhuranthakam taluk of Kanchipuram District of Tamil Nadu. As part of this project, a base-line household survey was completed to assess the health needs of the population within the context of their socio-economic situation. This paper is based on the household health survey of unmarried adolescent girls.

Methodology and objectives

The study covered a complete house-to-house survey of unmarried adolescent girls (11-18 years) in the 13 villages of Chunampet panchayat, Chitamur Union, Madhuranthakam block Kanchipuram district.

The field investigators for the survey were the 'sangham' leaders of Grama Pengal Iyakkam who were residing in the hamlets covered by the survey. All of them were women, mostly in their late teens and early 20s, and had a maximum of 7 years of schooling.

The study was conducted in the month of December 2000. The main objective of the study was to explore health needs of adolescent girls. The specific objectives were:

- To document menstrual practices and patterns; menstrual hygiene of girls who had attained puberty between the ages of 11-18 yrs.
- To assess general and reproductive health status of adolescent girls and to explore social economic demographic determinants of health.
- To assess care seeking behavior of adolescents for their reproductive and general illness.

Study area and Population

According to 2001 census of India, Tamil Nadu is the sixth largest state in India in terms of population (62.1 million). The population density is 478 persons per square kilometer and the state has become one of the more urbanized states in the country. The state crude birth and death rates has decreased considerably during 1971-98 and the current birth and death rates were 19.2 and 8.5 respectively. Tamil Nadu is one of the more advanced states in the country vis-à-vis literacy. The literacy rate of population aged seven and above was 73 percent in 2001 and the male & female literacy rates were 82 percent and 65 percent respectively (NFHS-II)

There were 1490 households in the study area, with a population of 6800 (June 2000). The average household size was 4.56 persons. All the households belonged to the dalit

(Scheduled) caste. Almost all households were Hindus, and only 10 households were Christians. Sixty per cent of the households owned land but the size of the land owned was very small.

The Overwhelming majority (86%) of the households lived in mud huts with thatched roofs, most of which have mud floors with a small percentage of cemented floors. Ninety-four per cent of the houses had one or two rooms. In 70 percent of the households cooking was done in the living area, and there was no separate kitchen. Although firewood was the main cooking fuel used, only 13 per cent of houses had smoke outlets.

Although all hamlets were electrified, i.e. they had electric streetlights, 30 per cent of the households did not have electricity connections for their houses. The public tap was the single most important source of drinking water supply and other domestic purposes. Ninety percent of households depended on public water sources. Modern toilet facilities were almost totally absent in the study area. Only twelve households had a toilet within the house. The others used the fields, open wasteland and backyards.

In more than three -fourths of the households, men bathed outside the house, at public wells. Likewise in 43 per cent of the households women bathed at wells and ponds where cattle were cleaned, and clothes washed.

Findings from the study

A. Characteristics of the Study Participants:

The study covered 391 adolescent girls in the age group 11-18 years. The following table summaries socio economic characteristics of the adolescent girls. Higher proportion (29 percent) of girls was in the ages of 13 and 14 years; nearly half of the girls were in early adolescence (11-14) and the other half in the late adolescence (15 –18 yrs). The mean age of the girls was 14.56 years.

Table no. 2.1

Socio Economic characteristics of the adolescent girls		
1.Age		
Age group	No. Of adolescent girls	Percentage
11 – 12	85	<i>21.74</i>
13 – 14	113	<i>28.9</i>
15 – 16	93	<i>23.79</i>
17 – 18	100	<i>25.58</i>
2.Religion		
Hindu	386	<i>98.72</i>
Christian	5	<i>1.28</i>
3.Occupation		
Working	130	<i>33.25</i>
Not working	261	<i>66.75</i>
4.Literacy		
Had schooling	347	<i>88.75</i>
Had no single Years of schooling	44	<i>11.25</i>
5.Landowning status		
Land owning	<i>260</i>	<i>66.5</i>
Landless	131	<i>33.5</i>
6. Menarche		
Had attained puberty	263	<i>67.26</i>
Had not attained	128	<i>32.74</i>
Total	391	<i>100.00</i>

All but five were Hindus and all belonged to the ‘dalit’ community. Four- fifths of the girls lived in nuclear families. Overwhelming majority of girls (89%) had attended school; of 347 literate girls 264 (68%) were in school only 83 girls were school dropouts.

Among the dropouts, majority were primary and middle school level dropouts. Among the girls who were not attending school, 79 percent were working and 21 percent were not. Household chores and other work for daily wage were the major reasons for dropping out. Among the working girls, nearly two-thirds were engaged in household work, and 35 percent were agricultural workers. Little more than two third of the girls were from households that owned land but the size of the land was very small. About 67.26 percent of the girls interviewed had reached menarche.

B. Menstrual Health and Hygiene

Menstrual pattern

Two hundred and sixty three [263] of the 391 adolescent girls interviewed (67 percent) had attained puberty. Half of the girls had started menstruating at the age of 13 and 14 years and one fourth of the girls before they reached the age of thirteen. The mean age at menarche was 13.48 years.

Overwhelming majority (84 percent) of girls had 3-5 days of menstrual flow, 13 percent had more than 5 days bleeding and only three percent had two days flow. About two third of girls reported that they had normal bleeding and 21 percent had scanty bleeding.

Three out of four girls reported that they had a regular menstrual cycle (28 – 30 days) and 62 out of 263 girls had irregular cycles. Among the latter, many reported that their cycle was not predictable, shorter cycles in some months and longer in others.

Menstrual tension and stress

About 61 percent of girls felt tired during periods and 22 percent felt nauseous. About two fifth of the girls felt tense, anxious and angry during their periods. This was also highlighted in Singh and et al study on “Adolescent girls’ anxieties” in India, that 10.33 percent of girls had menstrual tensions. There are a large number of traditional beliefs and restrictions around menstruation in India. In this study an overwhelming majority (84 percent) ate regular food during menstruation and 16 percent of girls (43 out of 263 girls) avoided eating certain types of food. For example, Sweets/jaggery, groundnut and non-vegetarian food, mainly fresh & dry fish. It is believed that consuming fish during periods could result in bad/foul odour. Sweets and groundnuts were avoided because they were believed to cause excessive bleeding.

87 percent of girls stated that they carried on with their daily routine (household activities) during menstruation. About 34 girls were not able to; 22 of them felt tired and had severe pain during menstruation. Twelve girls stated that their families imposed restrictions and they were not allowed to do household chores.

Menstrual Hygiene

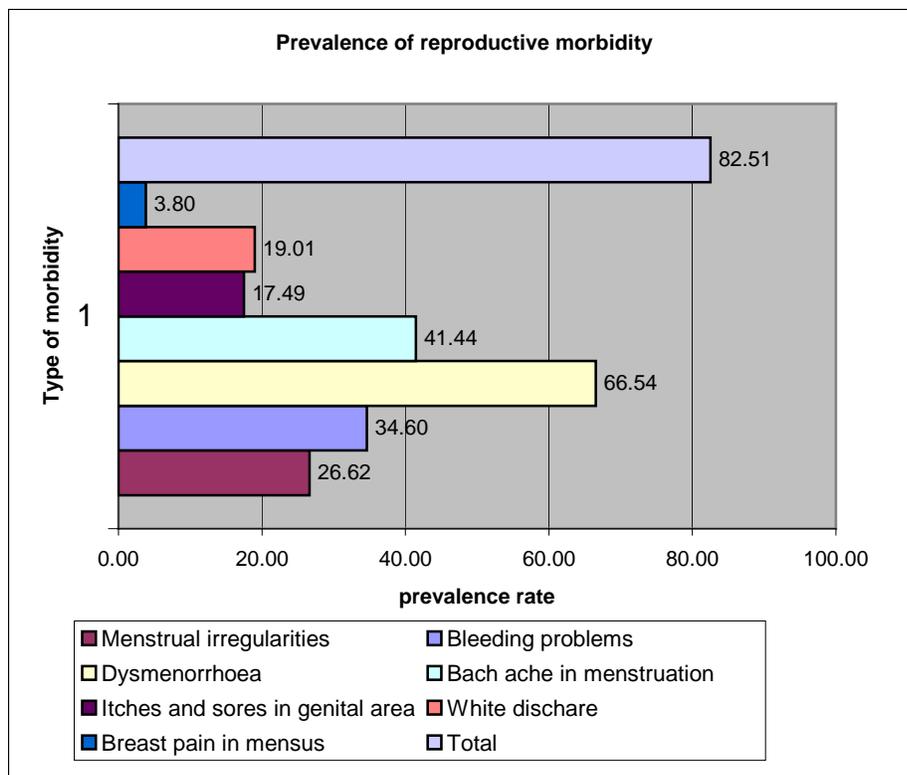
An overwhelming majority of girls said that they bathe every day during menses. About 14 girls bathed on the second day and about three girls bathed only on the final day of

periods. One out of four girls bathed in rivers, lakes and ponds during menstruation. All respondents used old clothes and undergarments as “pads” for protection. No one used modern sanitary napkins. Nearly one third (32 percent) of the girls used panties without any additional cloth for protection. These panties were washed and reused which was less hygienic if they were not washed properly. Reproductive tract infections may be caused due to the bathing and sanitary protection practices recorded here.

C. Reproductive Morbidity

The prevalence of reproductive morbidities was very high among the study group; about 82 percent of girls reported having had at least one reproductive health problem during the survey. The mean number of problems reported was 2.5. Prevalence of dysmenorrhoea, severe backache during menstruation and white discharge were the major morbidities reported.

Nature of self reported reproductive morbidity



Dysmenorrhoea is a common gynecological complaint, which is highly prevalent in rural poor adolescents. A study conducted among adolescents in rural areas of Delhi found that the prevalence of dysmenorrhoea was 71 percent. In this study two-third of the girls had dysmenorrhoea and it accounted for one third of the morbidity reported. Severe backache during menstruation was the second highest reported morbidity. There have been a number of studies in India and abroad that found that menstrual irregularities were

common among adolescent girls. More than one third of girls (91/263) in the study had scanty/ excessive bleeding (56 had scanty and 35 had excessive bleeding problems) and about one fourth had irregular cycles. One fifth of the girls had white discharge problems and 17.5 percent had itches and sores in the genital areas.

Only 10 percent of the morbidities were of recent origin (current month). Thirty-five percent had experienced the problems for 6- 12 months and another 36 percent for more than a year. Two fifth of these girls were in the age of 17 or 18 years and slightly more than one fourth (26 percent) was below 15 years of age. Dysmenorrhoea was highly reported by girls in late adolescence (15-18 years). The incidence of severe backache and scanty bleeding was higher among early adolescents (11-14 years). Menstrual irregularities and skin diseases were prevalent across all age groups.

Social economic correlates of reproductive morbidity

There was no significant relationship observed between age and reproductive morbidity. But there was a negative association between age at menarche and morbidity, i.e. prevalence of morbidity increased with age at menarche. The prevalence was slightly high among illiterates and Hindus than Christians but this relationship was not statistically significant.

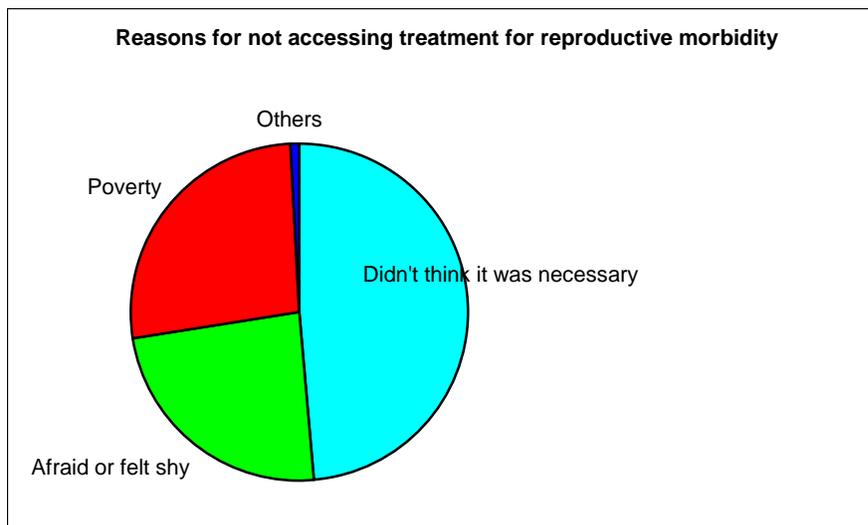
Table no. 2.2

<i>Prevalence of reproductive Morbidity cross classified with selected variables</i>							
1.Age							
Age group	Had one or more illness	%	No illness	%	Total	%	Chi-square value
11 - 12	4	80.00	1	20.00	5	1.90	0.8750 <i>N.Sig</i>
13 - 14	60	84.51	11	15.49	71	27.00	
15 - 16	70	79.55	18	20.45	88	33.46	
17 - 18	83	83.84	16	16.16	99	37.64	
2.Religion							
Hindu	216	82.76	45	17.24	261	99.24	1.4759 <i>N.Sig</i>
Christian	1	50.00	1	50.00	2	0.76	
3.Literacy							
Literate	188	82.1	41	17.9	229	87.07	0.2098 <i>N.Sig</i>
Illiterate	29	85.29	5	14.71	34	12.93	
4.Occupation							
Working	99	84.62	18	15.38	117	44.49	0.6477 <i>N.Sig</i>
Not working	118	80.82	28	19.18	146	55.51	
5.Landowning status							
Land owned	148	82.68	31	17.32	179	68.06	0.0115 <i>N.Sig</i>
Landless	69	82.14	15	17.86	84	31.94	
6. Family Type							
Nuclear	174	82.86	36	17.14	210	79.85	0.0873 <i>N.Sig</i>
Joint	43	81.13	10	18.87	53	20.15	
7. Household Size							
2 - 4	43	76.79	13	23.21	56	21.29	2.0653 <i>N.Sig</i>
5 - 7	155	84.70	28	15.30	183	69.58	
8 +	19	79.17	5	20.83	24	9.13	
8. Age at menarche							
11 - 12	59	89.39	7	10.61	66	25.10	2.9298 <i>N.Sig</i>
13 - 14	107	79.85	27	20.15	134	50.95	
15 - 16	51	80.95	12	19.05	63	23.95	
9. Bathing place							
Home	158	80.61	38	19.39	196	74.52	1.919 <i>"b"</i>
Out side	59	88.06	8	11.94	67	25.48	
10. Type of Menstrual cloth used							
Old cloth	143	80.34	35	19.66	178	67.68	12.558 <i>Sig</i>
Panties only	74	89.16	9	10.84	83	31.56	
Two in skirts	0	0.00	2	100.00	2	0.76	
TOTAL	217	82.51	46	17.49	263	100.00	
Note: <i>N.Sig</i> - Not Significant; <i>"a"</i> - Significant @ 0.20 level; <i>Sig</i> - Significant @ 0.05 level.							

There was significant association between bathing place and type of pad used with reproductive morbidity. The rate was 10 percent higher among girls who used undergarments for sanitary protection than girls who used old cloth. Similarly, girls bathing in rivers, lakes and ponds had higher morbidities than the others. The association between the two variables was statistically true. Therefore some of the reproductive morbidities were the outcome of poor personal hygiene. This could be easily avoided through health education.

Treatment seeking behaviour

The care seeking behaviour for reproductive morbidity was very low; less than one out of five girls (19 percent) had accessed treatment for their illness. (About 50 percent went to government health centers and 41 percent to private clinics/ doctors and the remaining used home-based remedies). It was clearly found that care seeking was fairly high for white discharge and very low for menstrual irregularities and skin diseases.



'Did not think it was necessary' was the single most common reason for not seeking treatment, 'poverty' was the cause reported by 27 percent and nearly one fourth said they 'were afraid or felt shy' to go for treatment.

Table no. 2.3

<i>Adolescent girls care seeking behaviour for Reproductive morbidity by selected variables</i>							
1.Age							
Age group	Had Taken	%	Not Taken	%	Total	%	Chi-square value
11 - 12	1	11.11	8	88.89	9	1.63	15.9029 <i>Sig</i>
13 - 14	25	18.25	112	81.75	137	24.86	
15 - 16	19	10.38	164	89.62	183	33.21	
17 - 18	57	25.68	165	74.32	222	40.29	
2.Religion							
Hindu	102	18.58	447	81.42	549	99.64	0.456 <i>N.sig</i>
Christian	0	0.00	2	100.00	2	0.36	
3.Literacy							
Literate	79	16.81	391	83.19	470	85.30	6.1489 <i>Sig</i>
Illiterate	23	28.4	58	71.6	81	14.70	
4.Occupation							
Working	51	20.16	202	79.84	253	45.92	0.8405 <i>N.Sig</i>
Not working	51	17.11	247	82.89	298	54.08	
5.Landowning Status							
Land owned	65	17.38	309	82.62	374	67.88	0.9892 <i>N.Sig</i>
Landless	37	20.90	140	79.10	177	32.12	
6. Family Type							
Nuclear	80	18.18	360	81.82	440	79.85	0.1577 <i>N.Sig</i>
Joint	22	19.82	89	80.18	111	20.15	
TOTAL	102	18.51	449	81.49	551**	100.00	
Note: **217 girls reported 551 morbidities; in case of multiple problems some had taken treatment for one and not for the other. So, total morbidity was taken.							

It is observed from the table that care-seeking behaviour was slightly high among age attained, illiterate and working girls. These girls provided economic support to their family and therefore had better access to health care. The other group (girls in school and those who were not employed) was economically dependent on their families and their health needs were not attended to adequately.

D. General Health Status

Three hundred and ninety one adolescent girls were asked questions related to general health problems. About 40 percent reported having had one or more general illness on the day of the survey. The mean number of morbidities per girl was 1.62 (157 girls had 254 illness).

Table no 2.4

Nature of self reported morbidity			
General morbidity	No.of episode	%	Prevalance Rate
Head Ache	40	15.75	10.23
Fever	30	11.81	7.67
Cold/Cough	65	25.59	16.62
Oral Disease	25	9.84	6.39
Body Pain	46	18.11	11.76
Stomach Problem	32	12.60	8.18
Anemia	3	1.18	0.77
Wheezing	4	1.57	1.02
Urinary Retention	4	1.57	1.02
Others	5	1.97	1.28
Total	254	100.00	40.15

Common ailments like cold, cough, fever and headache were the major illness reported and these three problems were the cause of half of the reported morbidities. The prevalence of cold and headache was 16.62 and 10.23 respectively. About 7.67 percent of the girls surveyed had non-specific fever and another 8 percent had digestive problems. The same type of trend was observed in a study (year 2000) conducted in Tamil Nadu (Christian Medical College - Vellore)

Body pain and backache are illnesses that are most prevalent among the elderly. But here 12 percent of the girls reported that they had these problems. This may be because of poverty and related low nutritional status of girls in this area.

Among the girls in the age group of 17-18 years, higher proportion of morbidity was reported. Fever, cold and cough were slightly higher in early adolescents; whereas joint and body pain was highly reported among the late adolescents. Two third of the morbidities were recent episodes and around one fifth were experienced for more than three months (mainly aches and pains).

Table no. 2.5

<i>General health status of adolescent girls</i>							
1.Age							
Age group	Had one or more illness	%	No illness	%	Total	%	Chi-square value
11 - 12	28	32.94	57	67.06	85	21.74	6.9904 N.Sig
13 – 14	50	44.25	63	55.75	113	28.90	
15 – 16	31	33.33	62	66.67	93	23.79	
17 – 18	48	48.00	52	52.00	100	25.58	
2.Religion							
Hindu	154	39.90	232	60.10	386	98.72	0.8302 N.Sig
Christian	3	60.00	2	40.00	5	1.28	
3.Occupation							
Working	50	38.46	80	61.54	130	33.25	0.232 N.Sig
Not working	107	41	154	59	261	66.75	
4.Literacy							
Literate	132	38.04	215	61.96	347	88.75	5.7297 Sig
Illiterate	25	56.82	19	43.18	44	11.25	
5.Landowning status							
Land own	100	38.46	160	61.54	260	66.50	0.9244 N.Sig
Landless	57	43.51	74	56.49	131	33.50	
6. Maturity							
Age attained	109	41.44	154	58.56	263	67.26	0.5576 N.Sig
Not attained	48	37.50	80	62.50	128	32.74	
Total	157	40.15	234	59.85	391	100.00	

Note: N.Sig – Not Significant; Sig- Significant @ 0.05 level

The prevalence of general morbidity increased with age and it was high among illiterate than literates. The association between the two was statistically proved to be true. The morbidity was slightly higher among Christians, among girls who had attained puberty; were unemployed and girls who were from land-owning households than among Hindus, employed and girls from land less households.

Treatment seeking behaviour for general health problem:

Among the 254 girls who had reported morbidities only 52 percent (133 girls) had sought treatment for their problems. Among those who had accessed treatment, 45 percent had done so at government hospitals, twenty-three percent at private clinics and around 16 percent received treatment from the Village Health Nurse or through self-medication. Home-based remedies/ self-medication was mostly for fever, cold and headache. The care seeking behaviour was fairly high for common illness and digestive problems and low for body aches and oral diseases. Poverty was the main reason for not seeking treatment. About 77 percent said that they ‘did not think it was necessary’ and this was the second most common reason for not seeking treatment.

Table no. 2.6

Treatment seeking behaviour for general morbidity							
1.Age							
Age group	Had Taken	%	Not Taken	%	Total	%	Chi-square value
11 - 12	30	62.50	18	37.50	48	18.90	3.7461 <i>N.Sig</i>
13 - 14	40	54.05	34	45.95	74	29.13	
15 - 16	19	43.18	25	56.82	44	17.32	
17 - 18	44	50.00	44	50.00	88	34.65	
2.Religion							
Hindu	131	52.40	119	47.60	250	98.43	0.0091 <i>N.Sig</i>
Christian	2	50.00	2	50.00	4	1.57	
3.Literacy							
Literate	112	52.58	101	47.42	213	83.86	0.0256 <i>N.Sig</i>
Illiterate	21	51.22	20	48.78	41	16.14	
4.Occupation							
Working	36	42.35	49	57.65	85	33.46	5.131 <i>Sig</i>
Not working	97	57.40	72	42.60	169	66.54	
5.Landowning status							
Land owned	90	54.55	75	45.45	165	64.96	0.8998 <i>N.Sig</i>
Landless	43	48.31	46	51.69	89	35.04	
6. Family Type							
Nuclear	101	49.03	105	50.97	206	81.10	4.8549 <i>Sig</i>
Joint	32	66.67	16	33.33	48	18.90	
TOTAL	133	52.36	121	47.64	254**	100.00	
Note: N.Sig – Not Significant; Sig- Significant @ 0.05 level							
** - 157 girls had 254 morbidities.							

While analyzing care-seeking behavior by selected variables we found that girls who were employed and girls who came from joint families had sought treatment in higher proportion than others. This was statistically found true but there was relation observed between education and health care sought.

E. General and reproductive health status of girls who have attained puberty

Overwhelming majority (87 percent) of girls who had attained puberty had any one of the morbidities at the time of survey (reproductive or general or both). 46 percent had reproductive morbidity, 5 percent had general illness and 37 percent had both general and reproductive illness. The prevalence of morbidity increased with age of the girls. Literacy had a significant association with morbidities; among literates one third (34 percent) and

among illiterate girls, a little more than half (53 percent) reported both general and reproductive morbidities.

Table no. 2.7

Health status of adolescent girls cross classified with selected variables										
Variables	Had One or More Problem						Had No Problem	%	Total	%
1.Age Group	RM	%	GM	%	Both RM and GM	%				
11 – 12	2	40.00	0	0.00	2	40.00	1	20.00	5	1.90
13 - 14	33	46.48	3	4.23	27	38.03	8	11.27	71	27.00
15 - 16	46	52.27	5	5.68	24	27.27	13	14.77	88	33.46
17 - 18	40	40.40	5	5.05	43	43.43	11	11.11	99	37.64
2. Religion										
Hindu	120	45.98	12	4.60	96	36.78	33	12.64	261	99.24
Christian	1	50.00	1	50.00	0	0.00	0	0.00	2	0.76
3. Literacy Status										
Literate	110	48.03	12	5.24	78	34.06	29	12.66	229	87.07
Illiterate	11	32.35	1	2.94	18	52.94	4	11.76	34	12.93
4. Occupational Status										
Working	61	52.14	5	4.27	38	32.48	13	11.11	117	44.49
Not Working	60	41.10	8	5.48	58	39.73	20	13.70	146	55.51
5. Land Owning Status										
Land Own	83	46.37	9	5.03	65	36.31	22	12.29	179	68.06
Land less	38	45.24	4	4.76	31	36.90	11	13.10	84	31.94
6. Bathing Place During Menstruation										
Home	85	43.37	12	6.12	73	37.24	26	13.27	196	74.52
Out Side	36	53.73	1	1.49	23	34.33	7	10.45	67	25.48
7. Age at Menarche										
11-12	29	43.94	2	3.03	30	45.45	5	7.58	66	25.10
13 - 14	72	53.73	4	2.99	35	26.12	23	17.16	134	50.95
15 - 16	20	31.75	7	11.11	31	49.21	5	7.94	63	23.95
TOTAL	121	46.01	13	4.94	96	36.50	33	12.55	263	100.00
Note: RM – Reproductive Morbidity; GM – General Morbidity										

The prevalence of reproductive morbidity was higher among working girls; general morbidity was slightly higher among girls who did not work. There was no noticeable difference observed in morbidity by landowning status. The overall morbidity was higher among girls who bathed outside home. The relationship between reproductive morbidity and bathing place was clearly seen in the study.

III

Main findings of the study

The prevalence of reproductive morbidity was very high among the girls who participated in this study; 82 percent of girls who had attained puberty had one or more gynecological problems. Dysmenorrhoea and menstrual irregularities were highly reported. There was a close relationship observed between menstrual hygiene and reproductive morbidity. Girls who bathed in rivers, lakes and ponds reported higher morbidities. The treatment seeking behaviour for reproductive illness was very low. 'Did not think it was necessary', 'felt shy and was afraid' and 'poverty' were the reasons for not seeking treatment. There were belief about food habits and restrictions observed during menstruation in the study population.

Two fifth of the girls in the study had general health problems on the day of the survey; cold, cough, fever and headache were the major illnesses reported. The treatment seeking behaviour for general illness was comparatively good; around fifty percent of the girls had undergone treatment for these illnesses. It was apparent that adolescent girls had some reservations in seeking treatment for reproductive illness even though they had it for long time.

Overwhelming majority (87 percent) of adolescent girls in the survey had any one of the morbidities, reproductive or general or both at the time of survey. Around 46 percent had reproductive morbidities, while 5 percent had general and 37 percent had both general and reproductive morbidities.

Conclusion

The overall findings indicate that the girls suffered the health consequences of their socio-economic status, poor personal hygiene and lack of nutrition. Improving awareness about self-care practices and care seeking behaviour may prevent the reproductive morbidities that were the outcome of poor personal hygiene. In addition to awareness there is an urgent need for accessible health services for adolescent girls in rural areas.

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