



Menstrual Hygiene and Management among Adolescent Girls in Rural Area - A School Based Study in Thrissur District of Kerala

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Abstract:

The present study is in a connotation to assess the menstrual hygiene practices among rural adolescent girls and their physiological problems associated with menstruation. This study results irregular bleeding and cycles among one fourth of the study population. One or more premenstrual symptoms are seen in more than two third of the respondents. Many are using one to two pads daily during menstrual cycle instead of minimum three. It may be due to inadequate toilet and pad discarding facilities reported by them or not to afford sanitary pads. Long period of keeping and using cloth pads may leads to reproductive tract infections and fungal infections. Hygienic practices like washing pubic area and trimming of pubic hair before menstruation are not properly practicing. Symptoms of urinary tract infections are reported by considerable number. Educational programs to girls along with their mothers, health check-ups, facilities in washrooms and issuing sanitary napkins free of cost can change their practices in a positive manner. It is better to improve hygienic practices through behavioural change and thereby facilitating the health status of adolescent girls.

Key words: Adolescent, hygiene, menarche, premenstrual symptoms, sanitary napkins

Introduction

Adolescence is a fascinating period of life that marks the transition from being a depended child to becoming an independently functioning adult. It is a period of rapid growth and development of secondary sexual characters. As adolescents possess a significant role, it is important to give ample opportunities for their physical, emotional and psychosocial development towards achieving their full potential.

Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact

on her response to the event of menarche. Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes. Menarche is a significant milestone in the transitory developmental journey of an adolescent. A normal menstrual cycle is an important determinant of reproductive development during adolescence.

Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic status, menstrual hygiene practices and RTI are noticeable. Today



millions of women are sufferers of RTI and its complications and often the infection is transmitted to the offspring of the pregnant mother.

Literature review

A high proportion of girls with continued irregularity in the menstrual cycle several years from menarche will continue to have prolonged irregularity and anovulation, and are at higher risk for reduced fertility (Southam AL, Richart RM (1966). In post menarche girls, about 80% of the cycles were an ovulatory in the first year after menarche, 50% in the third year and 10% in the sixth year (Apter D 1980).

The first menstrual bleeding is referred to as menarche and typically occurs about two years after thelarche (Tanner JM, Davis P S (1985). Ovulation is necessary for fertility, but may or may not accompany the earliest menses. Marshall (1986).

The age at which puberty begins varies between individuals; usually puberty begins between 10 and 13 years of age. The age at which puberty begins is affected by both genetic factors and by environmental factors such as nutritional state and social circumstances (Kaplowitz P B, et al (2001). More girls get knowledge about menstruation from media and from their mothers and not aware about the pills for postponement of periods, not using pills for premenstrual symptoms, (Jyothy Kamalam and B. Raja Lakshmi (2005) A significantly strong relationship between practices during menstruation and prevalence (reported symptoms) of RTIs, it was more than three times higher among girls having unsafe menstrual practices (Anoop Khanna and R.S.Goyal 2005)

Reproductive tract infections, which has become a silent epidemic that

devastates women's life is closely inter related with poor menstrual hygiene. Therefore, proper menstrual hygiene and correct perceptions and beliefs can protect the womenfolk from this suffering, (Dasgupta.A and M. Sarkar (2008). Awareness regarding menstruation was more in urban adolescent girls than rural and urban girls were using commercially available sanitary pads compared to rural ones, (Patle. R Kubde 2014)

Aim:-To study menstrual hygiene practices among rural adolescent girls.

Objectives:-

1. To elicit the hygienic practices of adolescent girls during menstruation
2. To assess the physiological problems related with menstruation

Methodology

Sampling unit - Adolescent girls from rural area.

Source list - Higher secondary school students from Erumapetty Higher secondary School, Thrissur district of Kerala, October 2014

Study design - Observational-Descriptive-Cross sectional study

Study tool - Pre-designed, Pre-tested questionnaire

Sample size -137

Inclusion criteria- Higher secondary level adolescent girls (late adolescents) included

Exclusion criteria- Pre adolescent and middle adolescent girls from the same school excluded

Data obtained were collated and analysed statistically by simple proportions mean and percentage.



Results and discussion

Mean age of the study population belongs to 16.39 years. More students are (65.7%) coming from nuclear family and 34.3% from joint families. Among the adolescent girls, 54.7% belongs to Hindu religion, 21.9% from Muslim and 23.4% are from Christian community.

Parents of these girls are literate but good percentages have an educational status of higher secondary level or less than that. Occupational status of the parents shows 52% skilled work and 41% semiskilled and unskilled work, 6% technical and 1% are not doing any work. 75% of the mothers are doing household work in their home, 9% office

work and others are doing unskilled and skilled work. 25% of the study population are coming from families with monthly income below ten thousands, 42% 10-20 thousands and 23%

20-30 thousands. Only 10% students are coming from >30 thousand monthly income group families. Minimum age at menarche of the study population is 13 years and maximum 15 years. Mean age of menarche is 13 years. More than 50% attained menarche under 13 years.

Among the respondents, 75% have regular menstrual cycles within 23-39 days, but the rest 25% have problems related to irregular cycles like periods once in 2-3 months or for a long period. While considering menstrual bleeding, 76% have normal bleeding within 2-7 days and normal flow without clots. 13% have excess and 11% have bleeding in scanty manner.

Table -1-Distribution of study population based on age at menarche

Age at menarche	Frequency	Percent
11 years	21	15.3
12 years	49	35.8
13 years	40	29.2
14 years	23	16.8
15 years	4	2.9
Total	137	100.0



Table-2- Classification of study population on problems related to menstruation

Cycles	Frequency	Percent
Regular	103	75.2
Irregular	34	24.8
Total	137	100.0
Menstrual bleeding		
Normal	104	75.9
Excess	18	13.2
Scanty	15	10.9
Total	137	100
Pimples		
Present	67	48,9
Absent	70	51,1
Total	137	100
Premenstrual symptoms		
No symptoms	20	14.6
Anyone of the symptoms	32	23.4
Two symptoms	50	36.5
More than 2 symptoms	35	25.5
Total	137	100.0

Problem of pimples is one of the main issue among adolescents during menstrual, luteal or proliferate phase. Almost half of the respondents have the problems of pimples (49%). In the case of premenstrual symptoms like anger, anxiety, breast tenderness, abdominal pain, backache, headache etc, 85% have one or more symptoms, only 15% are away from pre-menstrual symptoms.

More respondents(74.5%) are using both sanitary pads and cloth pads during menstrual periods, 15.3% using cloth pads and 10.2% of the respondents are using sanitary napkins only. Even though it is better to use three pads daily, 51.8% are using 1-2 pads only. The remaining 33.6% are using three pads and 14.6% more than three pads daily.



Table -3: Distribution of study population on type and number of pads used

Pad used	Frequency	Percent
sanitary napkin	14	10.2
cloth	21	15.3
both napkin and cloth	102	74.5
Total	137	100.0
Number of pads used daily		
1-2pads	71	51.8
3pads	46	33.6
morethan3pads	20	14.6
Total	137	100.0

Pad supply on one rupee/pad is available at school. 77% of the students are collecting it in emergency situations and 23% are not comfortable in collecting it.
 Table -4 Study population based on duration of cloth reuse

Duration of cloth reuse	Frequency	Percent
1-2 months	31	22.6
2-4months	49	35.8
For a long period	43	31.4
No use	14	10.2
Total	137	100.0

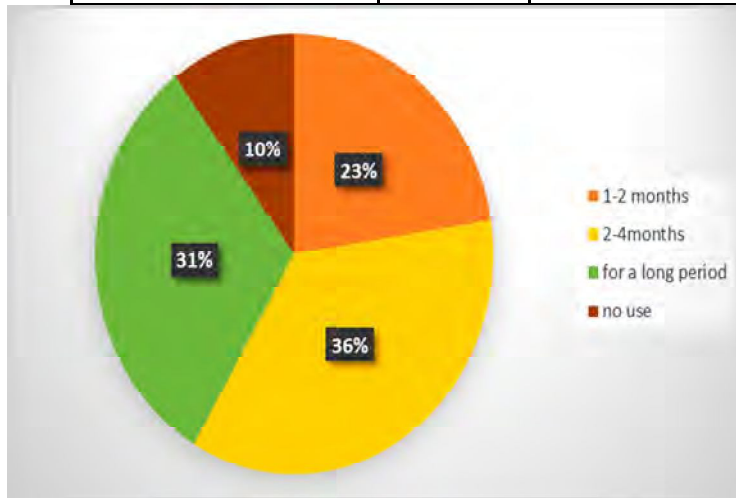


Chart-2- Study population based on duration of cloth reus



Cloth pads can be used in hygienic conditions. Used cloths should be washed & sundried before re use and do not use more than three months.31.4% of the respondents are reusing cloth for a longer period,35.8% 2-4 months and the rest 22.6% are aware and reusing cloth within1-2 months .

Table -5.Awareness of respondents on Toilet facilities and pad discarding facilities at school

Toilet facilities at school	Frequency	Percent
Inadequate	102	74.5
Sufficient	35	25.5
Total	137	100.0
Pad discarding facility at school		
No facility	19	13.9
Inadequate	35	25.5
Sufficient	18	13.2
Don't know	65	47.4
Total	137	100.0

Among the girls 47.7% are not aware about the facility of pad discarding at school .13.9% states that there is no pad discarding facility at school.25.5% opined inadequate facilities are there and remaining 13.1 % are satisfied with the services .

Table -6-Hygienic practices by the study population

Bath during menstruation	Frequency	Percent
Twice daily	85	62.0
Once daily	52	38.0
Total	137	100.0
washing pubic area after Urination		
Regularly	64	46.7
Sometimes	73	53.3
Total	137	100.0
Trimming pubic hair before menstruation		
Yes	40	29.2
No	97	70.8
Total	137	100.0



Bath during menstruation	Frequency	Percent
Twice daily	85	62.0
Once daily	52	38.0
Vaginal discharge		
Pearl white	104	75.9
colour with itching	33	24.1
Total	137	100.0
Urinary tract infection		
Yes	14	10.2
No	83	60.6
Don't know	40	29.2
Total	137	100.0

Hygienic practices shows 62% are taking bath twice daily and 38% once during menstruation. 46.7% are having practice of washing pubic area after urination but 53.3% having irregular practices. Before one set of flow trim the hair around the genitalia is recommended but 70.8% are not aware about it. 24.1% having vaginal discharge color with itching instead of pearl white condition. 10.2% are having symptoms of urinary tract infection and 29.2% don't know about the condition. Health Education classes are attended by 69.3% of the adolescent girls instead 38.7%.

Conclusions and recommendations

It may be concluded that menstrual hygiene practices of adolescent girls are not good enough to overcome menstrual problems. Life style practices leads to the attainment of early menarche and problems related to menstrual hygiene. Socioeconomic level of parents are also not in a better level, more of them are coming from nuclear families and are having less chance of awareness from grandmothers or other elder kins.

Irregular cycles and associated bleeding problems are reported in one third of the study population may be due to nutritional or hereditary factors. A major portion of the girls are suffering from one or more premenstrual symptoms. Cloth and sanitary pad combination followed by a good portion, but reusing of cloth pads for a longer period leads to fungal infection, reproductive tract infection etc. Even though it is better to change three pads daily, many are following one to two pads. Either it may be due to lack of privacy and insufficient toilet and pad discarding facilities at school reported by many or they can't afford to buy sanitary pads. Some of them are even not heard about the pad discarding facilities at school.

Hygienic practices of the girls are also not satisfactory. Though all are taking bath daily during menstruation, only half of them have the practise of washing pubic area after urination. Only a small group is following trimming of pubic hair before menstruation. Healthy vaginal discharge is pearl white but one



fourth is having discharge colour with itching/smell. Some also reported having symptoms of urinary tract infections. The State government scheduled programs to improve adolescent health are conducted, but nearly half of them attended these health education classes.

Based on the findings the following recommendations are suggested

1. Awareness programs could be scheduled in different sessions from early adolescence to late adolescence in school curriculum.
2. Intermittent awareness programs to mothers of adolescent girls
3. Implementation of these programs by LSGs, ICDS and school authorities on an emergency basis.
4. Supply of specific number of cotton sanitary pads to students who attained menarche free of cost every month (social marketing).
5. Improving toilet and pad discarding facilities along with proper water supply in wash rooms constructed with adequate facilities and privacy.
6. Appointing students' monitors to report the problems of girls to teacher in charge of counsellor.
7. Arranging health check-up for adolescent girls in schools.

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