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Psychosocial Problems of Adolescent Girls during Menstruation

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Abstract

Aim: To study the psychosocial problems of adolescent girls during menstruation.

Methods: Cross-sectional study was conducted in Chennai. Descriptive research design was used. Sample size: Sixty students were selected randomly by the teacher from Bhoodhur Govt high school, Sholavaram, Chennai and referred to researcher for the study purpose. Inclusion criteria: Adolescent girls who were aged 13–16 years and attained menarche.

Results: Majority (71.7%) of adolescent girls belong to the age group of 14 – 15 years, 68% were in ninth standard. Nearly half of the respondents were using pads (45%) and clothes (42%) as absorbent, majority (65%) preferred to discuss about their menstrual problems with mother, 28% with friends about menarche, 7% do not discuss with anyone. Most of them (58%) as faced physical problems during menstruation such as pre-menstrual syndrome (55%), menorrhagia (12%), sleep disturbance (12%), body pain (68%), head ache (45%), leg pain (55%).

Majority (67%) had psychological problems such as change in the mood (70%) irritability, (78%) restlessness, (63%) unstable mood, (58%) feeling stressed). One-third had faced psychosocial problems in terms of unaware of menarche before the onset (65%), 10% do not have privacy to change sanitary pad and do not know how to use pad, 32% faced restrictions during menarche.

Conclusion: Mental health education of adolescent girls is essential to deal with psychosocial problems related to menstruation.

Keywords

Menarche; School social work; Adolescents girls; Mental health education

Introduction

Menstrual health may be defined as a state of complete physical, mental and social wellbeing and not merely absence of menstrual problems¹. It is essential for improving global public health and achieving sustainable developmental goals. Psychosocial problems are common during menstruation in adolescent girls. Menstrual problems affect their,

academic performance, school attendance and social life. Menstrual problems are affective and somatic in nature. Although several studies have reported physical problems faced by adolescent girls during menstruation, however few studies focused psychosocial aspects of menstruation.

Adolescent girls face significant psychosocial problems during menstruation in terms of access to clean materials, lack of privacy for changing pads, disposal facilities for sanitary napkins, socio-cultural restrictions, less psychological and social support, poor knowledge about managing pain during menses, non-availability of counseling services, and inadequate information on menstruation and its management, no preparation before menarche, menstrual distress, burden and stigma.

Previous studies have reported that adolescent girls aged 15 – 19 years felt sick, sad, irritable, missed school during menstruation². They were unable to concentrate and pay attention during school hours. Before menstruation, adolescent girls were irritable and depressed, nervous and sad⁷ and during menstruation, these problems get aggravated³.

Most girls were scared at the onset of menarche. Other reactions were worry and sadness⁴. Few college students reported suicidal ideas and death wishes during the pre-menstrual period⁵. Pre-menstrual symptoms, depression, irritability, mood swings, sense of losing control, retention were significantly correlated with students who had suicidal ideas compared to women without suicidal thoughts. There seems to be an association between menstruation and suicide⁶.

Most common psychological problems reported by adolescents before menstruation were tiredness, anger, headache and irritability, fear, and depression⁸. Few studies reported psycho-social problems such as pre-menstrual symptoms, sleep disturbances, prolonged bed rest, inability to concentrate on studies, depression, irritability, headache, malaise, fear, anger, tiredness, foul odor, and anxiety, disturbance in daily routine, missed social activity^{8,9,10,11,12,13}. Young girls with premenstrual symptoms reported insomnia, nervousness, fatigue, headache¹⁴ and sleep problems¹⁵.

Many girls were unable to perform household activities and attend sports. Dysmenorrhea and menorrhagia increased the risk of school absenteeism among rural girls¹⁶. Coital activity is a common cause of many adolescent menstrual problems¹⁷. Seeking medical help for menstrual problems (dysmenorrhea) is very poor among teenage girls¹⁸. Dysmenorrhea and menstrual irregularities were linked with dietary habits (eating junk food, eating less) and pre-menstrual symptoms were related to lack of physical activities¹⁹, overweight, eating less, taking junk foods²⁰.

Duration and menstrual cycle regularity were determined by factors such as socio-demographic profile, psychosocial stress, disturbed sleep, arduous physical exercise, diet^{21,22,23}. Various studies have reported increased stress during menstruation is strongest predictor of menstrual irregularities. Unhealthy lifestyle as well contributes to menstrual abnormality. Increased stress was associated with disturbed sleep during menstruation²⁴. Poor knowledge, inadequate information, less awareness about menstrual problems, exclusion and shame lead to misconceptions and unhygienic practices during menstruation

among teenagers. Restrictions in social interaction, self-medication, lack of knowledge about unhealthy coping with menstruation were problems experienced by adolescent girls in low and middle-income countries²⁵.

Most studies found that girls were restricted from school activity and physical activities such as play, travelling, attending social gatherings, functions, festivals, marriages, worship, food restrictions, entering a temple, kitchen, others house, doing household work, taking a bath, attending school, touching people and pooja materials^{2,26,27,28,29,30}. Restriction in activity varies from culture and region. In some part of southern Indian villages, girls were even not allowed to enter their own house, and they were asked to sit and take rest in the house entrance during the menses. Girls were considered dirty and impure during periods. There is an association between educational level, activity restrictions and practice regarding menstruation³¹.

Socio-cultural practices regarding menstruation depend on girls' education, attitude, family environment, culture, and belief³². Adolescent girls in slum areas face multiple restrictions (such as staying out of the house and separation from family members, not touching anyone), not aware of menarche prior to menstruation, do not know the cause of bleeding, and organ where bleeding occurs, disposing the pads open area, using common toilet for changing pads³³.

Urban and rural girls were aware of menstruation before attainment of menarche³⁴. In urban girls, the mother was the main source of information about menstruation, whereas it was a teacher in the rural areas. Regarding onset of menarche, urban girls tend to attain puberty earlier than rural girls. Girls from upper socioeconomic status have lower mean age at menarche in rural and urban areas and higher mean age was found in urban girls involved in rigorous sports³⁵. Cleaning of external genitalia was more satisfactory in urban than rural area³⁶.

Pre-menstrual symptoms were more in urban than rural girls, whereas school absenteeism due to menstrual problems were more in rural girls. Menstrual practices were better in urban girls as compared to rural girls. More urban girls use sanitary pads than rural girls³⁷. There is a difference between rural and urban girls in terms of awareness about menarche and menstruation, type of absorbent used, method of disposal of the same, cleaning of external genitalia.

Majority of rural and urban girls feel no need to seek help from doctor for menstrual problems and do not get counselling for menstrual hygiene from professionals and most of them were counselled by their mothers regarding menstrual hygiene. Most of them felt depressed and scared about their bleeding and changes in body during menses. Most of the girls perceive that restrictions should not be imposed on them during menstruation³⁸.

There were two systematic review and meta-analysis on menstrual hygiene among adolescent girls in India. Van et al (2016)³⁹ reviewed 138 studies published from 2000 to 2015. Outcome measures were menarche awareness, type of absorbent used, disposal, menstrual hygiene, restrictions, and school absenteeism. Results revealed that half of them were aware about menarche, many faced restrictions, inappropriate disposal of absorbent,

one-fourth were absent from school during periods, one-third had facility in schools to change pad, half of them had toilets at home to change absorbent. Rural girls faced scarcity of water, non-availability of toilet, bathing space, lack of privacy and bathing restrictions during menses. Systematic review showed that most were surveys, few used mixed methodology and experimental design. Half of the studies were school based and one-third were community based. More studies were from south India.

A systematic review of 183 out of 1125 studies published inception to 2019 on menstrual hygiene preparedness among Indian schools. Results revealed that less than half of them were aware of menarche, teachers were less common source of information and half of the schools had separate toilet for girls⁴⁰.

Another systematic review on effects of Menstrual Hygiene Management (MHM) on health and psycho-social outcomes revealed that poor MHM is associated with reproductive tract infections. There is good evidence that educational interventions improve MHM practices and reduce social restrictions⁴¹.

Literature Gap

Most of the studies were focused on awareness, attitude, beliefs, conception, cultural aspects, determinants, experiences, general health, hygiene, help-seeking behavior, knowledge, perceptions, practices, prevalence, problems related to menstruation. Most of the Indian studies were school-based, and very few were community-based. Several studies focused on adolescent girls in rural and urban areas about menstruation, though urban studies outnumbered. Studies on out-of-school adolescent regarding menstruation and intervention studies are less. The majority of studies focused on menstrual pattern, practices and problems. There were no randomized controlled studies on intervention related to menstrual hygiene. No Indian studies have used standardized instruments to report the problems related to menstruation, preparedness, menstrual hygiene management.

There are no studies in India which focused explicitly on psychosocial problems of adolescent girls during menstruation. Therefore, the present study was carried out.

Materials and Methods

Descriptive research design was used. *Universe*: Study was conducted in Govt high school, Bhoothur village, Sholavaram Block, Thiruvallur District, Tamil Nadu, among adolescent girls studying in 8th, 9th 10th Std. *Sample*: 60 girl's students aged 13 – 16 years and attained puberty who showed their readiness to participate in the study were selected randomly by the teacher and referred to researcher. *Tools for data collection*: Semi-structured interview schedule consists of socio-demographic factors (9 items), physical problems (3 items), psychological problems (7 items), psychosocial problems of adolescent girls during menstruation (5 items). Interview schedule was used to collect data. *Statistical Analysis*: Frequency, percentage and Chi-square test were used for data analysis. Ethical clearance was obtained from Institute ethics committee. Oral informed assent was obtained prior to data collection from the girl students. Adolescent girls were briefed about the study before

collecting data. Written permission for the study was obtained from the school institution head.

Results

Table 1 shows majority of the adolescents (71.7%) belong to the age group of 14–15 years in the study, 68% of them were in 9th Grade. Nearly half of the (45%) respondents felt convenient to use branded items and few of the (13%) respondents felt convenient to use home-made items. Nearly half of the (45%) respondent's menstrual cycle lasted for 3–5 days, (43%) of respondents had 1–3 days. Nearly half of them (45%) felt shocked during their first menstrual cycle, 35% of the respondents felt shame during menarche. Majority of them (65%) try to discuss their rapid changes with their mother.

Table 2 shows that majority (61.6%) of the respondents agreed that they had sleep disturbance during menstrual cycle and 45% had headache before menstrual cycle, majority (61.6%) of them had lower abdominal pain and (68.3%) had back pain before menstrual cycle. Table 2 also indicates that nearly half of them (43.3%) get mood changes during menstrual cycle and 70% respondents felt irritated. 78.3% felt restless during menstrual cycle. More than one-third of them (39%) had stress before menstrual cycle and 63.3% felt moody and unstable during every menstrual cycle.

One-third of them reported that (35%) they were aware of menarche before the onset. Vast majority of them (90%) agreed that they had privacy to change the sanitary pad and they were taught how to use the sanitary pad. Majority of the respondents (68.3%) moved freely with others during the menstrual cycle.

Table 3 shows age difference in psychosocial problems and coping patterns of adolescent girls during menstruation. Chi-square test revealed that young girls aged 13 – 14 years were able to move freely with others ($\chi^2= 9.31, p=0.02$), and the same time they feel more isolated ($\chi^2= 4.36, p=0.03$) than girls aged 15– 16 years during periods.

Discussion

Present study showed that more than one-third of girls (35%) belong to 14 –15 years of age respectively. Similar findings were reported by Reddy et al⁸. Present study showed that 58% of them reported physical problems. Before menstrual cycle, 45% had headache, 61.6% lower abdominal pain and 68.3% had back pain.

In this study, more than one-third of them (39%) had experienced stress before menstrual cycle and 52% of the girls had pre-menstrual syndrome.

Most of girls felt restless and irritable, unstable mood and stress during menstruation. These findings were in consistent with previous study findings where majority of girls had irritability during menstruation [2, 7]. Nearly one-fourth of them were embarrassed by pubertal changes and felt shame and guilt³⁰, scared, shy, and sad during menarche³¹. During first day of menstruation, girls report psychological problems such as nervousness, poor concentration, sadness, irritability, excitement⁷. Present study showed that about two-third

of the adolescents were unaware of menarche before the onset. This finding is in consistent with previous studies^{8,10,26,31,28,42,43}. There is a significant finding from the study that 90% of the respondents did not have problem with regard to privacy to change the sanitary pad. This finding was in contrast to earlier studies where they reported that most of the children do not have adequate privacy and fully covered toilet facilities at school and at home to change the pad²⁷.

Noteworthy finding from the study is that two-third of the respondents does not have restrictions in physical activity and they were allowed to move freely during menstruation. This finding was contradictory to other study findings that almost all of them were practicing at least one kind of taboo related to menstruation³¹.

Reasons for restriction in physical activities could be because of the fact that there is loss of blood when they involve in physical activity such as running and manual labor would cause more bleeding. To prevent the heavy loss of blood above restrictions might be imposed on girls. However, restrictions on touching others, playing games, entering temple, others house travelling and attending social functions do not have any scientific base. Another reason could be to avoid discomfort in such places and activities these restrictions might be practiced. Though, these restrictions have some benefits in terms of avoiding discomforts during menses. However, in most of the places, these restrictions were enforced blindly on adolescents. These restrictions can be advised, nevertheless cannot be imposed. Few adolescent girls use pills to delay the menses in order to attend marriages, religious ceremonies, festivals, examinations and outings⁸.

Current study showed that 90% of girls were taught how to use the sanitary pad. Out of which nearly half of them (45%) were using napkin pad and 42% were using clothes as absorbent. Majority of girls had good knowledge about menstrual hygiene in Udupi taluk⁴⁶. Good menstrual hygiene was more among those whose mothers were literate¹⁰, properly disposed the absorbent.

Nearly half of them knew about using pads out of which only 11% were using pads, 43% were using old clothes as absorbent²⁷. Majority were using home-made pads in rural part of East Delhi²⁸. Most of the slum girls used old clothes, very few used pads and 1% does not use anything during menstrual period. Present study showed only 13% were using home-made absorbent. Majority of girls used soap and water to clean their genitalia^{27,43}.

In India, across cultures most of families enforce restrictions during menstruation several studies have reported that adolescent girls were restrained certain physical activities such as household work, attending social functions, worshipping, touching people and pooja materials, entering temple, kitchen, playing outside, travelling and taking bath. Majority of the people practice some sort of taboo during menstruation and half of them avoid holy places, religious functions and few were restricted from kitchen work⁴⁴. Some peculiar misconceptions were widely prevailing such as that placing broom stick, neem leaves, footwear around the menstruating girl would prevent entry of evil spirits, excessive sweet intake lead to heavy bleeding, menstrual blood is dirty, and sleeping on bed is prohibited during menstruation⁴⁵.

Hygiene during menstruation is of utmost importance in order to prevent Reproductive Tract Infections (RTI). In India, poor menstrual hygiene is one of the prime reasons for high prevalence of RTI's among adolescents and their sexual health needs mostly remain unaddressed. To address this issue, Indian government announced a new scheme to provide subsidiary napkin to rural adolescent girls.

There is a need to educate and make them aware about the environmental pollution and health hazards associated with disposable absorbents. Awareness should be created to emphasize the use of natural reusable sanitary products. Banana Fiber Pad (BFP) was highly feasible and acceptable in rural and urban adolescent girls during covid-19 pandemic. Adolescent girls were satisfied with banana fiber pad in terms of comfort and leakage. The microbial load on a 3 year reused BFP was found to be similar to an unused⁴⁷.

Strengths of the study

This study is first of its kind in India which examined the psychosocial problems of the adolescent girls during menstruation.

Limitations

During the study period the researcher approached private schools to conduct the study in and around Chennai. Private schools did not permit to conduct the study. Hence, the researcher was unable to compare the psychosocial problems faced by adolescent girls in private schools and government schools in urban area. The study did not use any standardized questionnaire to assess their physical and psychosocial problems. The study findings cannot be generalized to the other population due to limited sample size.

Implications for School Mental Health Education

School Social Workers have vital role in imparting awareness about menstruation and Menstrual Hygiene Management. Awareness programme can be delivered through Group Work mode. Knowledge, awareness and dealing with menstrual problems can be covered under menstrual health and life skill training. Following information can be specifically addressed during the programme. Average age at onset of menarche, normal duration of menses, menstrual cycle, pre-menstrual syndrome, common menstrual disorders, body mapping, secondary sexual characteristics, cleaning the genitalia with soap and water, changing the sanitary pad 3–4 times a day according to the need, clarifications about myths and misconception about menstruation, teaching them how to use sanitary pads and proper disposal of pads.

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Table 1:

Profile of Adolescent Girls

Sl. No	Profile of Adolescent Girls	Categories	N	
			f	%
1	Age	13 years	9	15.0
		14 years	21	35.0
		15 years	22	36.7
		16 years	08	13.3
2	Level of Education	8 th Std	05	8.3
		9 th Std	41	68.3
		10 th Std	14	23.3
3	Preference of Sanitary Napkin	Branded	27	45.0
		Home made	08	13.3
		Cloth	25	41.7
4	Duration of Menstrual Period (in days)	1–3	26	43.3
		3–5	27	45.0
		5–7	06	10.0
		7–10	01	1.7
5	Reactions during first menstrual cycle	Shock	27	45.0
		Alarming	7	11.7
		Guilt	05	8.3
		Shame	21	35.0
6	Preference to discuss about menarche	Friend	17	28.3
		Mother	39	65.0
		None	04	6.7

Table 2:

Psychosocial Problems faced by adolescent girls during menstruation

Problems	Problems during Menstrual Cycle	Agree		Neither agree nor disagree		Disagree	
		f	%	f	%	f	%
Psychological Problems	Sleep disturbance	37	61.6	21	35	2	3.3
	Headache before periods	27	45.0	23	38.3	10	16.6
	Mood change	25	14.1	26	43.3	9	15
	Irritability	42	70.0	16	26.6	2	3.3
	restlessness	47	78.3	9	15	4	6.6
	Stress before periods	35	58.3	21	35	4	6.6
	Unstable & moody before periods	38	63.3	11	18.3	11	18.3
Psychosocial Problems	Withdrawn behavior	45	73.4	7	11.7	9	17.0
	Awareness about menarche	22	35	20	33.3	18	30
	Privacy to change sanitary pad	54	90	1	1.6	5	8.3
	Taught to use the sanitary pad	54	90	2	3.3	2	3.3
	Discussing menstrual problems	40	66.7	3	5.0	17	18.3
	Social change after menarche	51	85.0	8	13.3	1	1.7
	Isolation	45	75.0	8	13.3	7	11.7
	Able to move freely	41	68.3	4	6.7	15	25
Physical Problems	Abdominal cramp	37	61.6	19	31.7	4	6.6
	Leg pain before periods	33	55.0	19	31.7	8	13.3
	Body pain	41	68.3	2	20	7	11.6

Table 3:

Age differences in psychosocial problems of adolescent's girls

S.No	Psychosocial problems	Age	Agreed	Not agreed	χ^2 test	'p' value
1	Mood change	13-14	9	21	3.36	0.06
		15-16	16	14		
2	Irritable	13-14	18	12	2.86	0.09
		15-16	24	6		
3	Move freely with others/ No restrictions	13-14	26	4	9.31	.002*
		15-16	15	15		
4	Feeling Isolated	13-14	26	4	4.36	0.03*
		15-16	19	11		

* Significant at p <0.05 level

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