

Impact of parenting style and upbringing on menstrual stress in adolescent South Indian girls

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ABSTRACT

Background: School absenteeism because of major symptoms like dysmenorrhea has ranged from 14% to 51% and this has affected the participation of school going girls in school related activities. In developing countries, adolescent girls face health issues due to socio-economic, environmental conditions and gender discrimination. The parenting style has been explained by Baumrind, which harbours a particular coping mechanism. This study aimed to determine the level of stress in adolescent girls during menstruation using one of these standardised scales. Objective of this study was to assess stress levels during menstrual period among adolescent girls, problems faced during menstrual period and parenting skill effect on menstrual stress.

Methods: This was a cross sectional study done on adolescent girls 13 to 19 years of age. The tool used in this study included demographic details, parenting style, (PSDQ scale), prevalence of stress (PSS). All the adolescent girls aged 13-19 years.

Results: The study participants 54 (24.9%) felt stressed during the days of the menstrual period, 186 (85.7%) regarded their mother as the major source for menstruation related health issues, 112 (49.3%) did not get support from their family during the time of the menstrual period. Girls with parents who are very authoritarian 28 (31.5%) and very involved 34 (34%), had stress during the menstrual period.

Conclusions: Parents play a very important role during the growing phase of an adolescent girl. The communication between parents and children related to menstrual health issues is dependent on educational status of the parents and their knowledge about menstrual health.

Keywords: Menstruation, Parenting, Stress, Uninvolved

INTRODUCTION

Dysmenorrhea and menstrual problems show that an estimate of over 600 million hours are lost from work every year.² School absenteeism or work absenteeism because of major symptoms like dysmenorrhea has ranged from 14% to 51% and this has affected the participation of school going girls in school related activities.²⁻⁵ About 50% of these students miss school because of dysmenorrhea.¹⁻³ Literature review focuses on menstrual symptoms pertaining only to primary pre-

menstrual syndrome and not on mental health of adolescent girls during menstruation.^{1,6-8}

In developing countries, adolescent girls face health issues due to socio-economic, environmental conditions and gender discrimination.⁸ Menstruation related health issues apart from being an economic burden, are also one of the most common causes of absenteeism and poor academic performance among young girls.⁸ Menstrual patterns can be affected by age, ethnicity, family history, smoking, physical activity, and dietary habits. Stress can

be a major cause or contributor of various menstrual irregularities.⁸ Many researchers like Cohen et al deduced various scales to understand stress levels faced by individuals at a given point in time.⁹ This study aimed to determine the level of stress in adolescent girls during menstruation using one of these standardised scales.

Parents play an important role in the development of their child's mental and physical growth. The type of parenting style has been explained by Baumrind and other researchers, namely, Uninvolved, Authoritative, Authoritarian, Permissive parenting styles.^{10,11} Each style of parenting harbours a particular characteristic coping mechanism in the child to various situations in life.^{10,11} This study being one of the few studies, looked into the relation between type of parenting style and its influence on menstrual issues in adolescent girls.

The objectives of this study were to assess stress levels during menstrual period among adolescent girls in a rural area of Karnataka; to assess the problems faced during menstrual period by adolescent girls in a rural area of Karnataka; to assess the impact of parenting skill on adolescent girls and its effect on menstrual stress.

METHODS

This was a cross sectional study done on adolescent girls 13 to 19 years of age from two government schools in a rural village of South India, Karnataka. The study commenced after taking permission from respective school principals. The school staffs were informed about the results of the study and were enlightened on the possible interventions for various coping mechanism for stress. Ethical clearance was obtained from the institutional ethical committee.

The tool used in this study included four parts. First part includes demographic details of the student, next part looked into the various type of parenting style (uninvolved, authoritarian, authoritative, permissive) using a short version of the PSDQ scale.^{10,12} The short version of the PSDQ scale had 24 questions that looked into various parenting styles assessed by children who were the study girls. The third part measured the prevalence of stress as assessed by the perceived stressed scale (PSS).⁹ This was a five-point likert scale which ranged from a scoring of never (zero) to almost always (four). High score was indicative of high stress levels.¹³ Questions with regard to problems faced during menstrual cycle was assessed using semi-structured, open ended, face validated questionnaire.

All (universal sampling) the adolescents girls aged 13-19 years, studying in two government schools located in rural villages in Karnataka and those present on the day of the study were included. Assent/consent was taken from 217 girls who agreed to be part of this study.

The study questionnaire was distributed to all the girls after a brief introduction about the questionnaire. The completed questionnaire was collected by the authors. At the end of the session, the children witnessed an infotainment program on life stressors and its impact on mental health.

Statistical analysis

Data was analyzed using the SPSS versions 16 after it was manually entered in Microsoft excel. Inter-quartile ranges were deduced for the PSS and the PSDQ scale for analysis of stress levels and parenting style respectively. The Pearson's chi-square, Fishers exact and multi nominal regressions was done for significance.

RESULTS

This study involved 217 girls in the age group 13 to 19 years. Most of the girls were underweight (BMI <18.5) and belonged to the lower middle-class socio-economic status group (BG Prasad classification).¹⁵ Majority of the girl's had both parents in the age group of 31-41 years and most of their parents had completed secondary education.

Table 1, among the study participants 54 (24.9%) felt stressed during the days of the menstrual period, 44 (20.3%) responded that they were unable to get sanitary pads freely, 186 (85.7%) regarded their mother as the major source for menstruation related health issues, majority availed sanitary pads from the shop 162 (74.7%) and 24 (11.1%) from anganwadi and 112 (49.3%) did not get support from their family during the time of the menstrual period. The most common problem faced by adolescent girls was described by them was "a samayadhalli thumba ayasa waguthede" (which means "excessive fatigue during menstrual period").

Total (N) varies with each section, because some girls did not or were unable to answer those questions. a=chi-square; b=Fisher's Exact; *statistically significant at $\alpha=5\%$ and $p<0.05$.

M1: (response: yes); stress was found to be more among girls who were 14 years of age 14 (35%), undernourished 18 (19.4%), parents more than fifty years (father 50% and mother 100%), parents with secondary education (father 24.2% and mother 24.8%) and with occupational skill level two (father 28% and mother 27.3%).

M2: (response: no); girls responded that they were not able to get sanitary pads freely and regularly. Girls who were underweight 21 (22.6%), lower socioeconomic class 9 (26.5%) had expressed their inability in availing sanitary pads. Girls with parents of skill level 1 (father 20.5% and mother 19%) had also replied difficulty in receiving sanitary pads.

M5: (response: no); stress was found to be more among girls who were 17 years of age 4 (57.1%), overweight 4 (80%), upper class 2 (66.7%), parents more than forty years (father 60.3% and mother 70%), parents with poor

educational qualification (father 100% and mother 84%) and with occupational skill level one (father 55.5% and mother 51.6%).

Table 1: Stressors faced by adolescent girls during menstruation.

Variables		Frequency	Percentage
M1: Do you feel stressed during the days of the menstrual period?	No	163	75.1
	Yes	54	24.9
M2: Are you able to get sanitary pads freely and regularly?	No	44	20.3
	Yes	173	79.7
M3: Who do you go to for help regarding questions of menstrual period?	No	21	9.6
	Mother	186	85.7
	Sister	1	0.5
	Mother and sister	3	1.4
	Sister and friend	1	0.5
	Friend	3	1.4
M4: From where do you get sanitary pads for use?	All (mother, friend, sister media)	2	0.9
	No	20	9.2
	Shop	162	74.7
	Anganwadi	24	11.1
	Both	6	2.8
M5: Are you getting support from your family?	Others	5	2.3
	No	112	49.3
	Yes	113	50.6
	Father	2	0.9
M6: Are you getting time to take care of yourself?	No	111	51.2
	Yes	106	48.8
M7: Do you face any problems during the menstrual period?	No	160	73.7
	Yes	57	26.3
M7: Do you face any problems during the menstrual period?	Descriptive: “a samayadhalli thumba ayasawaguthede” was a common complain of the girls of the schools which was responded by many		And another symptoms pain abdomen stomach pain, general pain

Description of stressors faced by adolescent girls during menstruation and responses to various situations during the menstrual cycle. The most common problem faced by adolescent girls was described by them as “a samayadhalli thumba ayasa waguthede” (which means “excessive fatigue during menstrual period”).

M6: (response: no); stress was found to be more among girls who were 15 years of age 56 (56%), overweight 3 (60%), lower class 24 (70.6%), parents more than fifty years (father 66.7% and mother 100%), and with occupational skill level two (father 54% and mother 54.5%).

M7: (response: yes); stress was found to be more among girls who were 17 years of age 3 (42.9%), BMI >30 kg/m² 1 (50%), upper middle class 5 (35.7%), parents more than thirty years (father 41.8% and mother 29.9%), and with occupational skill level two (father 28 and mother 27.3%).

Total (N) varies with each section, because some girls did not or were unable to answer those questions. a=chi-square; b = Fisher’s Exact; *statistically significant at α=5% and p<0.05.

M1: (response: yes); girls with parents who are very authoritarian 28 (31.5%) and very involved 34 (34%), had stress during the menstrual period.

M2: (response: no); the level of stress of not receiving sanitary pads freely and regularly was mild 30 (34.5%, p<0.001). Girls with parents who were not involved 18 (22.5%) did not receive sanitary pads freely and regularly. Parents with not authoritative type of parenting style had girls who did not receive sanitary pads freely and regularly 4 (28.6%).

M5: (response: no); stress level are very severe 36 (53.7%) when girls don’t get support from their family during menstruation. Significant associations were seen in not authoritative 14 (100%, p=0.001), not authoritarian 15 (100%, p<0.001), not permissive 24 (75%, p=0.015) parenting style, who had girls who did not receive support from their family.

Table 2: Contributing stressors in the menstrual cycle.

Variables	Total N=217 N (%)	M1: Yes	P value	M2: No	P value	M5: No	P value	M6: No	P value	M7: Yes	P value	
Age	13 years	8 (100)	2 (25)	0.443 ^b	2 (25)	0.085 ^b	3 (37.5)	0.805 ^b	4 (50)	0.661 ^b	2 (25)	0.829 ^b
	14 years	40 (100)	14 (35)		8 (20)		21 (52.5)		21 (52.5)		12 (30)	
	15 years	100 (100)	26 (26)		27 (27)		55 (55)		56 (56)		24 (24)	
	16 years	61 (100)	11 (18)		7 (11.5)		29 (47.5)		27 (44.3)		16 (26.2)	
	17 years	7 (100)	1 (14.3)		0 (0)		4 (57.1)		3 (42.9)		3 (42.9)	
	19 years	1 (100)	0 (0)		0 (0)		0 (0)		0 (0)		0 (0)	
Body mass index (Kg/meter square)¹⁴ (WHO)	Underweight (<18.5)	93 (100)	18 (19.4)	0.104 ^b	21 (22.6)	0.194 ^b	57 (61.3)	0.025 ^b	54 (58.1)	0.345 ^b	25 (26.9)	0.705 ^b
	Normal (18.5-24.9)	54 (100)	9 (16.7)		5 (9.3)		24 (44.4)		25 (46.3)		17 (31.5)	
	Overweight (25.0-29.9)	5 (100)	1 (20)		1 (20)		4 (80)		3 (60)		2 (40)	
	Class I obesity (30.0-34.9)	2 (100)	0 (0)		0 (0)		0 (0)		0 (0)		1 (50)	
	Class II obesity (35.0-39.9)	0 (0)	0 (0)		0 (0)		0 (0)		0 (0)		0 (0)	
	Class III obesity (>40.0)	2(100)	2 (100)		0(0)		0 (0)		1 (50)		0 (0)	
Socio-economic status (modified BG Prasad classification) All India 2014 standards¹⁵	Lower class (<811)	34 (100)	7 (20.6)	0.624 ^b	9 (26.5)	0.754 ^b	20 (58.8)	0.967 ^b	24 (70.6)	0.414 ^b	9 (26.5)	0.634 ^b
	Lower middle class (812-1569)	70 (100)	19 (27.1)		18 (25.7)		41(58.6)		37 (52.9)		14 (20)	
	Middle class (1570-2651)	34 (100)	7 (20.6)		8 (23.5)		18 (52.9)		17 (50)		9 (26.5)	
	Upper middle class (2652-5356)	14 (100)	4 (28.6)		3 (21.4)		9 (64.3)		8 (57.1)		5 (35.7)	
	Upper class (>5357)	3 (100)	0 (0)		0 (0)		2 (66.7)		2 (66.7)		0 (0)	
Father's age	<30 years	4 (100)	0 (0)	0.177 ^b	0 (0)	0.537 ^b	2 (50)	0.748 ^b	2 (50)	0.000 ^b	0 (0)	0.010 ^b
	31-40 years	67 (100)	17 (24.4)		12 (17.9)		34 (50.7)		40 (59.7)		28 (41.8)	
	41-50 years	58 (100)	11 (19.0)		13 (22.4)		35 (60.3)		34 (58.6)		12 (20.7)	
	50-60 years	6 (100)	3 (50.0)		1 (16.7)		3 (50)		4 (66.7)		0 (0)	

Continued.

Variables	Total N=217 N (%)	M1: Yes	P value	M2: No	P value	M5: No	P value	M6: No	P value	M7: Yes	P value				
Mother's age	<30 years	32 (100)	9 (28.1)	0.416 ^b	4 (12.5)	0.290 ^b	12 (37.5)	0.060 ^b	13 (40.6)	0.076 ^b	9 (28.1)	0.634 ^B			
	31-40 years	107 (100)	27 (25.2)		20 (18.7)		63 (58.9)		67 (62.6)		32 (29.9)				
	41-50 years	10 (100)	3 (30)		4 (40.0)		7 (70)		7 (70)		1 (10)				
	50-60 years	1 (100)	1 (100)		0 (0)		0 (0)		1 (100)		0 (0)				
Father's education	Illiterate	7 (100)	0 (0)	0.066 ^b	0 (0)	0.084 ^b	7 (100)	0.041 ^b	6 (85.7)	0.230 ^b	2 (28.6)	0.897 ^b			
	Primary Education (1-4 th standard)	16 (100)	8 (50)		6 (37.5)		9 (56.2)		6 (37.5)		6 (37.5)				
	Secondary Education 5-10 th standard)	124 (100)	30 (24.2)		22 (17.7)		61 (49.2)		70 (56.5)		34 (27.4)				
	Pre- Graduation 11-12 th standard/pre university)	10 (100)	3 (30)		4 (40)		5 (50)		4 (40)		2 (20)				
	Graduation (>12 th standard)	5 (100)	1 (28)		1 (20)		2 (40)		3 (60)		1 (20)				
Mother's education	Illiterate	0 (0)	0 (0)	0.408 ^b	5 (20)	82 (72.6)	0.303 ^b	62 (54.9)	0.850 ^b	31 (27.4)	0.622 ^b				
	Primary education (1-4 th standard)	25 (100)	10 (40)									21 (84)	13 (52)	4 (16)	
	Secondary education 5-10 th standard)	113 (100)	28 (24.8)									27 (23.9)	82 (72.6)	62 (54.9)	31 (27.4)
	Pre- Graduation 11-12 th standard/pre university)	14 (100)	4 (28.6)									1 (7.1)	10 (71.4)	9 (64.3)	4 (28.6)
	Graduation (>12 th standard)	1 (100)	0 (0)									1 (100)	1 (100)	1 (100)	0 (0)
Occupation of father (ISCO-08)¹⁶	Skill level 1	146 (100)	36 (24.7)	0.640 ^a	30 (20.5)	0.483 ^a	81 (55.5)	0.161 ^a	74 (50.7)	0.686 ^a	40 (27.4)	0.453 ^a			
	Skill level 2	50 (100)	14 (28)		8 (16)		22 (44)		27 (54)		11 (22)				
Occupation of mother (ISCO-08)¹⁶	Skill level 1	184 (100)	38 (20.7)	0.612 ^b	35 (19)	1.000 ^b	95 (51.6)	0.325 ^a	92 (50)	0.770 ^a	52 (28.3)	0.516 ^b			
	Skill level 2	11 (100)	3 (27.3)		2 (18.2)		4 (36.4)		6 (54.5)		4 (36.4)				

Total (N) varies with each section, because some girls did not or were unable to answer those questions. a=Chi-Square; b=Fisher's exact; *statistically significant at $\alpha=5\%$ and $p<0.05$. Factors that contributed to the overall stress levels and underlying causes for the same. Responses are indicative of the respective factor namely, M1: (response: yes); M2: (response: no); M5: (response: no); M6: (response: no); M7: (response: yes).

Table 3: Stressors faced by adolescent girls during menstruation and parental style.

Variables		Total N=217 N (%)	M1: Yes	P value	M2: No	P value	M5: No	P value	M6: No	P value	M7: Yes	P value
PSS quartiles⁹	Mild stress	87 (100)	27 (31)		30 (34.5)		46 (52.9)		52 (59.8)		24 (27.6)	
	Moderate stress	63 (100)	17 (27)	0.065 ^a	10 (15.9)	0.000 ^a	30 (47.6)	0.749 ^a	29 (46)	0.114 ^a	13 (20.6)	0.460 ^a
	Severe stress	67 (100)	10 (14.9)		4 (6.0)		36 (53.7)		30 (44.8)		20 (29.9)	
Domain 1 uninvolved parenting style^{10,11}	Very involved	100 (100)	34 (34)		21 (21)		56 (56)		50 (50)		23 (23)	
	Moderate involved	37 (100)	6 (16.2)	0.016 ^a	5 (13.5)	0.516 ^b	23 (62.2)	0.053 ^a	22 (59.6)	0.533 ^a	6 (16.2)	0.066 ^a
	Not involved	80 (100)	14 (17.5)		18 (22.5)		33 (41.2)		39 (48.8)		28 (35)	
Domain 2 authoritative parenting style^{10,11}	Not authoritative	14 (100)	2 (14.3)		4 (28.6)		14 (100)		6 (42.9)		0 (0)	
	Moderate authoritative	89 (100)	28 (31.5)	0.150 ^b	16 (18)	0.638 ^b	43 (48.3)	0.001 ^a	43 (48.3)	0.563 ^a	24 (27)	0.045 ^b
	Very authoritative	114 (100)	24 (21.1)		24 (21.1)		55 (48.2)		62 (54.4)		33 (28.9)	
Domain 3 Authoritarian parenting style^{10,11}	Not authoritarian	15 (100)	1 (6.7)		3 (20)		15 (100)		4 (26.7)		1 (6.7)	
	Moderate authoritarian	113 (100)	25 (22.1)	0.053 ^b	30 (26.5)	0.045 ^b	58 (51.3)	0.000 ^a	64 (56.6)	0.23 ^a	27 (23.9)	0.075 ^b
	Very authoritarian	89 (100)	28 (31.5)		11 (12.4)		39 (43.8)		43 (48.3)		29 (32.6)	
Domain 4 permissive parenting style^{10,11}	Not permissive	32 (100)	11 (34.4)		12 (37.5)		24 (75)		12 (37.5)		6 (18.18)	
	Moderate permissive	133 (100)	25 (18.8)	0.033 ^a	22 (16.5)	0.029 ^a	62 (46.6)	0.015 ^a	73 (54.9)	0.206 ^a	38 (28.6)	0.511 ^a
	Very permissive	52 (100)	18 (34.6)		10 (19.2)		26 (50)		26 (50)		13 (25)	

Total (N) varies with each section, because some girls did not or were unable to answer those questions. a= Chi-square; b = Fisher's exact; *statistically significant at $\alpha=5\%$ and $p < 0.05$. Description of stressors faced by Adolescent girls during Menstruation in relation to parental style of upbringing and its influence on overall stress faced during the menstrual cycle. Responses are indicative of the respective factor namely, M1: (response: yes); M2: (response: no); M5: (response: no); M6: (response: no); M7: (response: yes).

M6: (response: no); The level of stress was overall mild 52 (59.8%). Very authoritative 62 (54.4%) type of parenting style was associated with girls who did not receive time to take care of themselves during menstruation.

M7: (response: yes); Not involved 28 (35%), very authoritarian 29 (32.6%), and very authoritative 33 (28.9%, $p=0.045$) type of parenting style showed girls to face more complaints during the menstrual period.

DISCUSSION

Menstrual disorders affect health and increase the financial burden on society worldwide. A major gynecologic complaint leading to school absenteeism is dysmenorrhea.^{1,3,17} This study looked into menstrual stress levels in adolescent rural girls and the impact parenting had on coping with this stress. Smetana et al looked into parenting styles, dimensions and beliefs.¹⁸ The original authoritative, authoritarian and permissive parenting styles was conceptualized and involved a fourth dimension of uninvolved style.¹⁸ This study looked into which of these parenting styles would affect adolescent girls during the menstrual period.

Girls who had very involved parents (34%, $p=0.016$) felt stressed during menstruation, probably due to their parents over concerned attitude of the same. Very authoritarian (31.5%) parenting styles showed girls to be stressed during menstruation. This style is common in non-western cultures and has a protective effect on adolescents.^{18,19} Studies have shown children to have adjustment issues with this parenting style although they are culturally acceptable.^{18,20-22} This has been tested in this study showing an inverse relation.

Very authoritative (54.4%) parenting, showed girls felt that they did not get enough time to take care of themselves during menstruation, the possibility being the need to be more academically inclined during this phase of growing, causing them to neglect menstrual problems. Girls who did not get support from their family during the menstrual period had not authoritative (100%, $p=0.001$), not authoritarian (100%, $p<0.001$), not permissive (75%, $p=0.015$) type of parents, which is a well-adjusted type of parenting style for an Indian culture. The possibility of these girls internalizing and externalizing their problems is the outcome in this type of parenting (authoritarian rule), which is a harsh guilt induction parenting.¹⁸ In this type of parenting, parents wish to know if their adolescents are involved in dangerous activities.^{18,23}

The overall stress faced by these adolescent girls was mild stress (PSS).⁹ The stress level was found to be severe (29.9%) when it came to problems faced during the menstrual period and not getting support from family members during the menstrual period (53.7%). This probably shows that rural adolescent girls have high coping mechanism and are strong willed. It also supports

the reasoning of Indian families needing support which could decrease problems on mental health when it comes to menstrual stress. The DASS-21 assessed the association of stress and menstrual signs and showed 47.2% has stress, similar to this study.²⁴ A study in Pune showed moderate stress in 46.6%, and 43.3% to have low stress and 10.1% to have high stress during menstruation, similar to this study.²⁵

Agarwal et al showed source of information regarding menstruation was from mothers (41.61%), sisters (12.41%) and friends (13.87%).²⁶ In this study mothers (85.7%) were the major source of information followed by friends (1.4%) and sisters (0.5%), similar findings were seen by Kamath et al.²⁷

Main complaints faced in this study participants was fatigue, followed by abdominal discomfort and pain, which compared with a Indian study showed pain abdomen (59.70%) to be the major complain followed by headache (23.57%) and loss of appetite (11.79%).²⁶ Other studies done in West Bengal (66.9%) and Garhwal (62.75%) stated that dysmenorrhea was the most common complaint faced by adolescent girls.^{28,29}

This study noticed low utilization of sanitary pads from the anganwadi (11.1%). One study suggested the possibility of poor ASHA social marketing scheme implementation, needing the NRHM+A to market the availability of sanitary pads in Anganwadi by ASHA workers.³⁰ Girls above 15 years felt they did not receive support from their family and faced problems during the menstrual period, as care in an Indian society mostly goes to the younger child.

Girls with low BMI felt stressed (19.4%), faced lesser complaints during the menstrual period (26.9%) leading to the possibility of hormonal imbalances that exists in low nutritional state. Low SES groups had issues in getting sanitary pads freely and regularly (26.5%), inability to take care of themselves (70.6%), faced more problems (73.5%) and got less support from their family (58.8%) during the menstrual period, due to low resources at home and neglect. Another outlook to this could be low income families have parents working double shift to make ends meet leading to inability to spend time with their daughters as they need to sustain the family.

Girls who had fathers of an older age group (66.7%), had no time to take care of themselves during the menstrual period, in comparison with girls with fathers of younger age group (50%) ($p<0.001$), probability of change in paternal parenting style from authoritarian to permissive in a developing country. Girls with fathers educated to graduate level (60%) had daughters who received good support from their family during the menstrual cycle ($p=0.041$). This could be awareness of parents to be supportive to their daughters during the menstrual period

showing a new trend in modern society where fathers are involved in menstrual care.

Limitations of this study was post intervention analysis on stress levels could have been done.

CONCLUSION

Parents play a very important role during the growing phase of an adolescent girl. The communication between parents and children related to menstrual health issues is dependent on educational status, of the parents and their knowledge about menstrual health. Mothers play a vital role and hence it's important that they be armed with appropriate information and knowledge about reproductive health. It is essential for the teachers to impart knowledge on reproductive health. Integrating menstrual hygiene into curriculum, provision of toilets and even supplying sanitary napkin at schools is the need of the hour especially in rural areas of India. Introducing stress management programmes in schools would create a huge impact on adolescents in dealing with not only health related stress but also mental stress. ASHAs along with village health and sanitation committee and local bodies must be oriented towards menstrual hygiene practices and help spread the awareness through IPC. Professional bodies like IAP and NGOs like UNICEF, UNFPA and PHFI should actively promote menstrual hygiene for better practices in the community.

Recommendations

National programmes focusing on mental health in the NRHM+A scheme is warranted. This study was the first of its kind to see the association of the perceived stress scale with type of parenting skill of the parents and its effect on mental health in the adolescents

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