

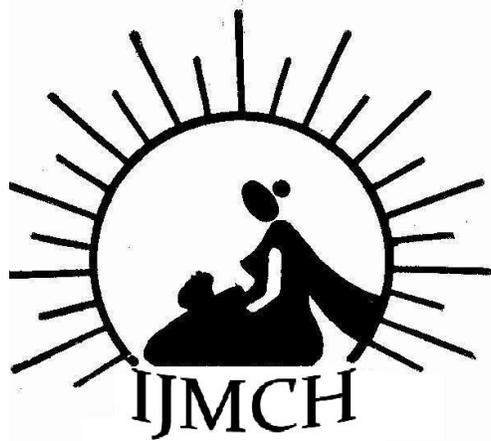
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Puberty and Menstruation: Perceptions and Practice among school going adolescents in Tamilnadu

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ABSTRACT

This study made an attempt to assess adolescent's perception and practices on puberty and menstruation in rural and urban settings.

Primary data was collected from IX & X standard students. Multistage sampling method was used to select study population. It is proposed to select 4 rural based high/secondary schools and 2 urban based matriculation schools in Cuddalore district. Lottery method was applied to select sample population. All together a sample of 188 adolescent girls in the age range of between 14 and 17 years participated.

It has been observed that urban students are better positioned than rural students with regard to understanding on puberty related issues. Overall, the understanding about menstruation was not satisfied at both locations however, urban adolescents are slightly better informed than rural respondents.

Also it is seen that due to cultural and religion restrictions, rural girls received no sufficient information regarding menstrual hygiene, causing incorrect and unhealthy practices during their menstrual period.

Key words: Puberty, Menstruation, hygiene

INTRODUCTION

International Conference on Population and Development held in Cairo (1994) recommended that Governments should focus more attention on adolescents through an integrated approach to their health, education and social needs. The ICPD Programme of Action urges governments and health systems to establish, expand or adjust programmes to meet adolescents' reproductive and sexual health needs, to respect rights to privacy and confidentiality, and to ensure that attitudes of health care providers do not restrict adolescents, access to information and services. It further urges governments to remove any barriers (laws, regulations or social customs) between adolescents and reproductive health information, education, and services. Adolescent's health needs, behaviours and expectations are distinctive and routine health care services are not well geared to provide these services. Data indicate that this is the most vulnerable group with respect to HIV risk caused by unsafe sex. Most of them face these risks with too little factual information, too

little guidance about sexual responsibility, and too little access to health care. Their educational and health status, their readiness to take on adult roles and responsibilities, and the support they receive from their families, communities and governments will determine their own future and the future of their countries. Educating these youngest adolescents both at on-campus and off-campus about reproductive health and helping them develop life skills can be especially effective strategies for safeguarding their sexual health and well being. Under this backdrop, this study made an attempt to assess adolescent's perception and practices on puberty and menstruation in rural and urban settings.

MATERIALS AND METHODS

The design adopted in this study was descriptive survey. The primary data was collected from the high/higher secondary school students (IX & X standard) at two different ecological settings – rural and urban. The Multistage sampling method was used to select the study population. **Study area:** Cuddalore district was chosen as the study area and has a population of 2,600,880, with a sex ratio of 984, and a literacy rate of 79.04 percent. Totally 248 Schools are functioning in Cuddalore district. It is proposed to select 4 rural based high/secondary schools and 2 urban based matriculation schools.

Selection procedure for the urban based matriculation schools: The simple random sampling method was applied to select one Matriculation school from Chidambaram town and another one from Cuddalore town. There are about 202 students (109 in X Standard and 93 at XI Standard) presented on the day of survey at Chidambaram. It was decided to select one-fifth of the total available target population and it was around 40 students, the lottery method was applied to select the sample population. Likewise, at Cuddalore a sample of 46 students (one-fifth of the total target population) was selected from the total 230 students presented on the day of survey (120 in X standard and 110 in XI standard). All together, 86 students were selected from the urban based schools.

Selection procedure for the rural based high/higher secondary schools: Again simple random sampling method was applied to select rural schools. Of the 12 schools identified at Chidambaram taluk, 2 schools are selected by lottery method; similarly at Cuddalore taluk 2 schools are selected out of 15 schools located at isolated area. In these schools totally 325 students are presented on the day of the survey. It was decided to select one-third of the students from each school by simple lottery method with the support of school attendance register. In total 108 students was selected from rural areas. All together a sample of 194 adolescent girls in the age range of between 14 and 17 years participated in the study. Of these 194 selected respondents, only 188 respondents were completed the questionnaire, yielding a response rate of 96.9 percent. At the end, the total sample size was **188** respondents.

RESULTS AND DISCUSSION

Personal characteristics: The analysis of adolescent's background characteristics reveals that the age structure and religion composition of the adolescents at both locations are not

much different – a simple majority of the respondents fall in the 17 age group and most of them were Hindus. Differentials are existed in some selected background characteristics across the respondent's location. Urban adolescents are better habituated to nuclear family system than their rural counterpart. Again the differentials are observed in parents' background conditions. It can be seen that urban adolescent fathers are better educated and well-placed in jobs than their rural counterpart. The same pattern was reflected with respect to respondent mother's educational attainment and their occupation - the urban mothers are much better-off than the rural mothers.

Puberty: Puberty marks the biological beginning of adolescence, but markers of its completion are various and not well-defined (Susman and Rogel (2004). In this survey adolescent respondent's knowledge on puberty was assessed with some statements. The first statement present before the respondents was "If a girl not attains puberty at the age 14, she may be having biological problems". This statement was approved by more than three-fourth of the urban adolescent students (84.7 percent), however, only two-third of the rural adolescents (68.0 percent) was approved. "The over bleeding during menstruation is an indication of poor reproductive health of a woman" this statement was accepted by little more than half of the urban girls (51.8 percent) and only one-third of the rural adolescent students. A significant proportion of rural respondent students are not aware of the boy's puberty. The poor understanding on puberty matter was again confirmed by majority of the rural adolescents than the counterpart with regard to statement on "Use of perfumes cause dryness, irritation, infection". So it can be concluded that the urban students are better positioned than the rural students with regard to understanding on puberty related issues.

Menstruation is the discharge of blood and tissue that occurs each month as part of a woman's menstrual cycle. Menstruation is also called monthly bleeding, menstrual period, menstrual course, and period (Adams Hillard, 2002). Most menstrual periods last from three to five days. At both the study area the respondents are asked whether they know anything on menstruation cycle before they experienced their puberty. It clearly shows that more than half of the adolescent (57.5 percent) in the rural area are not aware of anything about menstruation before they had menstruation. It is co-exist with the findings of Singh, Devi and Gupta (1999) and Audinarayana, Sakilarani, and Jothimani (2005). On the other hand among the urban adolescents, more than eighty-eight percent of them are familiar with the menstruation before they experienced it (88.5 percent). It shows the differentials seen in the level of understanding on their own health condition at two locations. Adolescents receive a wealth of information from diverse sources a good deal of that information is incorrect, incomplete or misleading. Under this situation, in the survey, the respondents were asked whether they discussed about the menstruation with anybody before they experienced it. It reveals that only around 40 percent of rural students and fifty percent of urban students are discussed about menstruation, before they experienced it. It shows that existing of social restriction on getting information about the reproductive health issues at

both the settings was well-established. However, the urban adolescent girls had relatively better position than their counterpart. Moreover, of the total rural respondents who discussed the menstruation with someone, majority are discussed this matter with their friends (47.6 percent) who had incorrect, incomplete or misleading information. The next highest proportion of adolescents are discussed these matters with their mothers (23.8 percent). Whereas, the discussion pattern of the urban adolescents shows a different scenario. The primary source for their menstrual discussion was with their mothers (48.8 percent), followed by their friends (32.6 percent). It is inferred from the analysis that a significant proportion of the rural adolescents (59.2 percent) had hesitation to discuss menstrual issues with others. This result coincides with the findings of Koffe et al (1995) and Ravishankar (2011) that many girls felt uncomfortable talking about menstruation with others except friends and mothers. Overall, the understanding about the menstruation was not satisfied at both the locations however, the urban adolescents are slightly better informed than the rural respondents.

The respondents' knowledge on normal age at which a girl got the first menstruation was assessed in the study area. It is found that the urban school student's perception on 'normal age at menarche' was relatively better than the rural adolescent's perception. During the survey more than three-fourth of the rural students (77.7 percent) and little more than two-third of the urban students (68.2 percent) are reported that they had their menstruation cycle at regular intervals. However, nearly half of the rural respondents (49.5 percent) and little less than one-third of the urban respondents (31.8 percent) reported that their length of menstrual cycle between two successive periods was more than 28 days. And little above one-fifth of the both locality respondents replied that their length of menstrual cycle was less than 25 days. It reveals that at both end the respondent's correct knowledge on length of menstruation cycle was poorly understood. The menstrual period usually lasts about five days each month for most women. At both the locations, the accurate knowledge on the duration of menstruation cycle was very poor – little more than one-third of the urban students (37.6percent) and little less than one-third of rural students (32.0 percent) reported that the menstrual period usually lasts about five days. On contrast, a study done in University of Alexandria by EL Shazly, Hassanein, Ibrahim, and Nosseir (1990) had the results that over 85.0 percent of the students were acquainted with age of menarche, length of the menstrual cycle, and duration of menstrual bleeding.

Knowledge and attitude on preventing bloodstains: In the study area the respondents are asked about the methods they knew to prevent the blood stains, to assess their knowledge on preventing the bloodstains during the menstrual episode. All the respondents in the urban area and overwhelming majority of the rural respondents (97.1 percent) are aware of the sanitary napkins to prevent the bloodstains during the menstruation. It can be concluded that the knowledge on use of sanitary napkin to prevent the blood stains was highly appreciable at both the locality. However, the differentials are observed between rural and urban students with regard to use of sanitary napkins.

TABLE 1 Percentage distribution of Rural and Urban adolescent school girls by their hygienic practices during Menstruation

Hygienic practice during Menstruation	Adolescent students		
	Rural	Urban	Total
Method to prevent bloodstains ** 12.991			
Cloth	11.7	-	6.4
Locally made napkin	1.9	7.1	4.3
Sanitary napkin	86.4	92.9	89.4
How often you used to change the pads ** 14.214			
Whenever soaked	30.8	58.8	44.3
After urination	26.4	17.6	22.2
Early morning or at to go bed	36.3	20.0	28.4
Once in a day	6.6	3.5	5.1
Sub Total	91	85	176
How many times do you take bath NS			
Once	76.7	63.5	70.7
Twice	23.3	31.8	27.1
Whenever feel	-	4.7	2.1
Feel uneasiness during the menstrual period ** 8.52			
Yes	63.1	82.4	71.8
No	36.9	17.6	28.2
If yes, what could be done **13.677			
Wash feel discomfort	24.6	52.9	39.3
Wash after urination	47.7	30.0	38.5
Wash morning and night	15.4	14.3	14.8
While taking bath	12.3	2.9	7.4
Sub Total	65	70	135
Hygienic measures usually taking during menstruation ** 15.367			
Water alone	83.5	58.8	72.3
Medicated water	5.8	10.6	8.0
Soap with water	10.7	28.2	18.6
Wipe with cotton	-	2.4	1.1

***, **, * refers to significant at 0.1%, 1% and 5% level (chi-square results – Hygienic practice and residence). NS- Not significant

All the urban students are habituated with sanitary napkins to prevent the bloodstains. In contrast, among the rural school going adolescents, only 88.3 percent are using the sanitary napkins and the remaining 11.7 percent of the rural students are using the cloths. A similar finding was observed by El-Gilany, Badawi and El-Fedawy (2005) that using of sanitary napkins was not much familiar among girls from rural and poor families.

Menstrual Hygiene: With regard to cleanliness during menstruation, the urban adolescent student's awareness was much higher than the rural adolescents. It reveals that more than three-fourth of the rural girls had taken bath once in a day (76.7 percent) and 23 percent of them taken bath twice a day. While looking in to urban girls, little less than one-third taken

TABLE 2 Percentage distribution of Rural and Urban adolescent school girls by their hygienic practices during Menstruation

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bath twice a day (31.8 percent) and another 5 percent of the urban girls taken bath whenever felt. It can be said that the students in the urban are much likely to be better than students in the rural to have more frequency of baths during periods. With regard to cleanliness of secret parts during menstruation, the urban adolescent's awareness was much higher than the counterpart. It is found that little less than two-fifth of the urban students are very conscious about cleanliness during the menstrual episode – they washing the secret parts with medicated water (10.6 percent), another 28.2 percent are clean with soap water. In contrast, only 15 percent of the rural students are cleaned with medicated water (5.8 percent) or soap water (10.7 percent) and majority of the rural students (83.5 percent) are clean their secret parts with water alone. It shows from the table that there are large variations in the washing practices of the secret parts during periods among the adolescents at two settings.

Among the pad users, more than two-fifth of the rural students reported that they had changed their pads early in the morning and before going to bed (42.9 percent) and another

26 percent of the rural adolescents changed their pads after urination and defecation. It is also observed that only thirty percent of the rural girls are changed their pads whenever it soaked. With regard to urban girl's practices, about sixty percent of the students changed their pads whenever it soaked (58.8 percent) and another 17 percent of the rural adolescents changed their pads after urination. The above analysis shows that urban girls are likely to be better use of pads than rural girls. In the survey, the respondent's feel during menstruation are also examined. It reveals that more than eight percent of the urban girls (82.4 percent) and more than two-fifth of the rural students (63.1percent) are reported that they feel discomfort during their menstrual periods. Among those who felt discomforts are further asked what could be done for this discomfort. More than half of the urban adolescents replied that they wash with water whenever they felt discomfort and this proportion for rural adolescents was just 24.6 percent.

CONCLUSION

It can be concluded that due to cultural and religion restrictions, many young girls especially the rural girls in this country received no sufficient information regarding menstrual hygiene, causing incorrect and unhealthy practices during their menstrual period. The results of this study indicate a need for development of a comprehensive education programme with strong puberty education components. The mothers of young girls should be educated with appropriate and menstrual health hygiene, and be empowered with necessary skills to communicate with and transfer the information to their children.

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