ORIGINAL ARTICLE
pISSN 0976 3325 | eISSN 2229 6816
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MENSTRUAL HEALTH OF ADOLESCENT GIRLS IN SURAT CITY– A CROSS SECTIONAL STUDY

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Financial Support: None declared

Conflict of interest: None declared

How to cite this article:
Vyas S, Moitra M, Chaudhari V. Menstrual Health of Adolescent Girls in Surat City – A Cross Sectional Study. Ntl J of Community Med 2015; 6(3):374-378.

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Date of Submission: 07-04-15

Date of Acceptance: 19-08-15

Date of Publication: 30-09-15

ABSTRACT

Introduction: The aim of the study is to document the knowledge, practices and perceptions of the study population, pertaining to menstruation and also to document the treatment seeking behaviour of the study participants for menstrual problems.

Methods: Purposively selected sample of 301 college going & 77 out of college adolescents was studied. Adolescents belonging to the age group of 17 to 19 years and willing to participate in the study were included from one of the three pre-identified colleges. The out of college adolescents were approached through an NGO. These adolescents were studied between September 2010 and July 2011.

Results: Majority of the girls (73.2% college going, 66.2% out of college) had prior knowledge about menstruation, mothers being the main source of information. Most of the girls were forced to follow certain restrictions during the periods, most common being denial to go to temple. Significantly higher knowledge (73.2%) about place for treatment of menstruation related problems was observed in the college going girls with a significantly (p=0.0001) higher proportion (40%) of college going girls (especially professional college) preferring consulting gynaecologist.

Conclusion: Prior knowledge about a significant life event like menstruation was lacking in a sizable number of adolescents which needs to be addressed along with focus on health seeking behavior and practice regarding menstrual health.

Key Words: Menarchae, prior information, treatment seeking behaviour

INTRODUCTION

Adolescence is a stage of physical and mental transition that occurs between childhood and adulthood involving biological (i.e. pubertal), social, and psychological changes.[1]

"Around 1 in 6 persons in the world is an adolescent; that is 1.2 billion people aged 10 to 19. Most are healthy, but there is still significant death, illness and diseases among adolescents. Illnesses can hinder their ability to grow and develop to their full potential. Promoting healthy practices during adolescence, and taking steps to better protect young people from health risks are critical for the prevention of health problems in adulthood, and for countries' future health and social infrastructure."[2]

Menarche is an important landmark in a girl's life. Menstrual issues are mostly communicated from one generation to another and carry all the myths with them. Moreover, with the change in life style and other environmental effects, a shift in the age

of menarche is also observed in modern times.3Traditionally, even today, women bear the primary responsibility for the well-being of their families. Yet they are systematically denied access to the resources they need to fulfill their responsibilities. Considering these facts, this study is an attempt to document menstrual health related issues of adolescent girls of Surat city.

The aim of the study is to document the knowledge, practices and perceptions of the study population, pertaining to menstruation and also to document the treatment seeking behaviour of the study participants for menstrual problems.

METHODS

It was a cross sectional study. Purposive sampling technique was used with a sample size of 224 college students & 77 out of college (a total of 301) adolescents in Surat. Study period was between September 2010 and July 2011. Three colleges were selected i.e One professional college - Government Medical College, Surat; two General Stream colleges Akhanad Anand Arts & Commerce College and Sheth P. T. Sarvajanik Vanita Vishram College, Surat. The out of college cohort was approached through the NGO, NIWCD (National Institute for Women and Children Development) working in Surat city.

Inclusion Criteria: (a) COLLEGE GOING COHORT: All adolescent girls belonging to age group between 17 and 19 years, studying in one of the three selected colleges and willing to participate in the study. (b) OUT OF COLLEGE COHORT: Adolescents, currently not studying, belonging to age group between 17 and 19 years and capable of answering the self-administered questionnaire and willing to participate in the study.

The information was collected using a self-administered, predesigned questionnaire which had both open and close ended questions. The responses allowed multiple choices in the questionnaire. After the completion of data collection, data entry was done into Excel data file. Data analysis was done by Epi_info version 6.04 software. Prior to the commencement of the study, ethical clearance was received from the institutional review board. Verbal consent was taken from the college authorities and students more than 18 years and verbal assent was taken from 17 years old college students who participated in the study. Similarly verbal consent was obtained from 18years or older and verbal assent was obtained from 17years old out of college adolescents who participated in the study.

RESULTS

The median age of menarche in college, out of college and General Stream College was found to be 14 years while that in the Professional college was found to be 13 years. More than half of the girls in all the groups were aware about menstruation beforehand. Mother, friend and sister were among the most frequent sources of knowledge regarding menstruation, a significant difference was found in the source of knowledge within the two colleges (p=0.001).

Most girls reported to be forced to follow certain restrictions during the periods, most common being denial to go to the temple (93.3% college going and 85.7% out of college), followed by restrictions to enter the kitchen (23.2% college going and 19.5% out of college); household activity (13.4% college going and 10.4% out of college). Only 1.9% girls said that there was no restrictions imposed on them during menses, a paradox in modern India.

Table 1: Knowledge, practice & perception of the study population pertaining to menstruation

	College v/s out of college			Inter college		
	College	Out of College	Total (%)	General Stream	Professional College	Total (%)
Knowledge about menstruation prior to menarchae						
Had information	164 (73.2)	51 (66.2)	215 (71.4)	106 (70.2)	58 (79.5)	164 (73.2)
Did not have information	60 (26.8)	26 (33.8)	86 (28.6)	45 (29.8)	15 (20.5)	60 (26.8)
Total	224 (100)	77 (100)	301 (100)	151 (100)	73 (100)	224 (100)
Source of knowledge* (p = >0.05, df = 3)				(p = 0.001; df = 3)		
Mother	82 (39.2)	24 (43.6)	106 (40.2)	46 (34.3)	36 (48.0)	82 (39.2)
Friend	50 (23.9)	12 (21.8)	62 (23.5)	29 (21.6)	21 (28.0)	50 (23.9)
Sister	56 (26.8)	18 (32.7)	74 (28.0)	48 (35.8)	8 (10.7)	56 (26.8)
Others	21 (10.0)	1 (1.8)	22 (8.3)	11 (8.2)	10 (13.3)	21 (10.1)
Total	209 (100)	55 (100)	264 (100)	134 (100)	75 (100)	209 (100)

*This item was asked only to those who had prior knowledge about menarchae i.e. 215 individuals.

Table 2: Distribution of the Participants According To Restrictions to Be Followed By Them during Menstruation

	College v/s out of college			Inter college		
	College N = 224*	Out of College N = 77*	Total N = 301*	General stream college N = 151*	Professional College N = 73*	Total N = 224*
Can not go to temple	209 (93.3)	66 (85.7)	275 (68.2)	146 (96.7)	63 (86.3)	209 (67.6)
Can not enter kitchen	52 (23.2)	15 (19.5)	67 (16.6)	40 (26.5)	12 (16.4)	52 (16.8)
Can not do house hold activities	30 (13.4)	8 (10.4)	38 (9.4)	21 (13.9)	9 (12.3)	30 (9.7)
Others	12 (5.4)	4 (5.2)	16 (3.9)	2 (1.3)	10 (13.7)	12 (3.9)
No restrictions	6 (2.7)	2 (2.6)	8 (1.9)	6(3.9)	0	6 (2.0)

*Multiple answers were allowed.; Figures in parenthesis are percetage

Table 3: Knowledge of study population pertaining to treatment of menstruation related problems

	College v/s out of college			Inter college		
	College (%)	Out of college (%)	P value	General stream college (%)	Professional college (%)	P value
Does she know where to go for treatment?						
Yes	164 (73.2)	37 (48.1)	0.0001	99 (65.6)	65 (89.0)	>0.05
No	60 (26.8)	40 (51.9)	(df = 1)	52 (34.4)	8 (11.0)	
Total	224 (100)	77 (100)		151 (100)	73 (100)	
Knowledge about whom to go for treatment*						
Doctor	89 (54.3)	29 (78.4)	0.0001	69 (69.7)	20 (30.8)	0.0001
Gynecologist	66 (40.2)	2 (5.4)	(df = 1)	21 (21.2)	45 (69.2)	(df = 1)
Lady doctor	10 (6.1)	2 (5.4)		7 (7.1)	3 (4.6)	

*Multiple answers were allowed.

While attempting to study the knowledge part about treatment for menstrual problems, some interesting results were found. Knowledge about where to go for treatment for menstruation related problems was more (73.2%) in the college going girls which was statistically significant (p=0.0001).

On assessing the knowledge regarding treatment for menstrual problems, it was found that significantly (p=0.0001) higher proportion (40%) of college going girls preferred consulting gynecologist as compared to out of college girls.

Among the college going girls, professional stream girls preferred to consult a gynecologist as compared to the general stream girls who preferred any doctor, this was also statistically significant (p=0.0001).

DISCUSSION

The median age of menarche was 14 years for the out of college and General Stream College girls while it was found to be 13 years for the Professional College girls. Similar findings were reported in a study conducted in 2004, that out of those who had experienced their menarche, 50 % of them had achieved it by 12 years of age.4 In another study conducted in 2001 in Nagpur it was observed that the age of menarche in females ranged from 10 - 17 years, with majority having attained it at the age of 13 years.5 This is consistent with our findings in which majority of the girls had attained menarche at the age of 13 years.

Majority of the girls (73.2% college going and 66.2% out of college) had prior knowledge about menstruation in all the groups, mothers being the main source for all (39.2% college going and 43.6% out of college girls). Contrary to our findings, a study on Knowledge, Awareness, Belief and Practice on Sexuality and Reproductive Health of Adolescent in Slums of Ahmedabad conducted in 2000 reported that, 48 % girls did not know about menstruation before they started menstruating. Out of 24 % who had knowledge, 13 % learnt from their friends and 8 % from their mother and sisters.6 Similarly in a study done in the year 2005, it was noted that nothing was told to 44 % girls about menstruation prior to its onset. Moreover for information on menstruation, girls rely on two main external sources – family (especially mothers and elder sisters), and teachers or educational programmes.7 In a study of the year 2006 on

Knowledge and Practices of Adolescent Girls regarding Reproductive Health with Special Emphasis on Hygiene during Menstruation it was observed that about 70.6 % adolescent girls were not aware about the menstruation till its onset. Mother was the main source of information about menstruation for 37.6 % adolescent girls. The other main source of information has been siblings (32.8%) and friends (27.6%). Restriction of movements within the household had come down from 90.8 % in yesteryear mothers to 68 % in today's adolescent girls. 8 A study on urban adolescent girls of Haryana revealed that mothers were the most important source of knowledge (47.4%) regarding menstruation among the study subjects followed by friends/peers (23.8%), teachers (4.9%), and mass media (4.8%).9 Thus, even today where internet connections and social networking is so common, many girls (28.6%) do not have prior information about such an important life event, which is unfortunate.

Majority of the respondents (93.3% college, 85.7% out of college, 96.7% General Stream Colleges, 86.3% Professional College) could not go to temple/do worship during menstruation. Very few (2.7% college, 2.6% out of college, 3.9% General Stream Colleges and nil in Professional College) respondents said that they did not have to follow any restrictions during menstruation. Contradictory to our findings, in the study done in the year 2006 it was observed that restriction of movements within the household had come down from 90.8 % in yesteryear mothers to 68 % in today's adolescent girls.8 In a review on Pragmatic Approach for Sustainable Adolescent Health and Development in the year 2002 it was observed that practices such as not bathing, not entering to kitchen, eating selected food, was no longer being observed among most families, particularly among educated ones.10 Similar findings were also observed in a study done on adolescents of urban slum of Ahmedabad that 30 % were told about restrictions in worship, domestic work, and play.[7]

We found a significantly higher knowledge (73.2%)about where to go for treatment for menstruation related problems in the college going girls with a significantly (p=0.0001) higher proportion (40%) of college going girls preferring consulting gynecologist as compared to out of college girls. Among the college going girls, professional stream girls preferred to consult a gynecologist as compared to the general stream girls who preferred any doctor, this was also statistically significant (p=0.0001). A study done in the year 1999 also observed that only 3 girls out of 58 (5.2%) consulted a doctor, 13 (22.4%) took medications from the chemist shops, two (3.4%) took herbal medicines from traditional medical practitioner, two girls did not use any medications and took rest for relieving the symptoms.[11]

CONCLUSION

Prior knowledge about menstruation was found to be existing in 73.2% college and 66.2% out of college girls, with mothers being the main source of information in both the groups. The correct knowledge of consulting a gynecologist was predominantly observed among college going girls more so in the girls attending the professional college which reflects the poor health seeking behavior and practice of adolescent girls especially those who are out of college.

RECOMMENDATIONS

Considering that this basic information regarding menstruation should be available to 100% adolescents, we still have a long way to go. Dedicated efforts at the community level to break this information sharing barrier needs to be taken up with advocacy directed towards parents and school authorities to ensure percolation of timely and correct information about menarche in these young minds.

LIMITATIONS

Considering the sensitive nature of the topic, purposive sampling technique was used to conduct the interviews. Thus the findings cannot be extrapolated to the general population. Limitation of time did not allow for more in depth research.

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