



Study On Behavioural Aspects Of Changes During Menarche Among School Going Adolescent Girls Of Porbandar District.

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Abstract: Adolescent is the period between childhood and adulthood. Menarche is an unforgettable and significant event in girls. The menarcheal timing is associated with the health of the adolescent girls. The aim of this study was to study the behavioural changes during menarche among school going adolescent girls of Porbandar district. The study was performed in different schools of Porbandar. The inclusion criterion was adolescent girls who underwent menarche. Questionnaire was used as research tool to collect data. Purposive random sampling was used to select the girls for this research study. Among the 250 girls the highest percentage of 80% (200) was in normal age of reaching menarche. 44% of late menarching girls experienced weight gain when compared to early and normal menarching girls. Maximum percentage (68.29%) of girls who experienced moodiness was early menarching girls. highest percentage of 85.4% of girls from normal menarching group had an attraction towards opposite sex. Highest percentage of 90.2% was noted among early menarching girls who were interested in watching romantic films. Awakening the girls and parents with right information on menstruation will lessen the behavioural issues and assist the girls to keep in mind that menstruation as a normal physiological process of the body.

Key Words: Adolescent, Menarche, Behavioural Aspects

INTRODUCTION: Adolescence is the transitional stage of development between childhood and adulthood. The **WHO** defines adolescents as individuals in the age group 10-19 years. Maximum physical growth and mental development occurs during this stage of life. It is crystal clear that the progress and development of nation largely depends on adolescents. But girls of our nation receive comparatively less attention and care with respect to their nutritional status and reproductive health, the reason behind this may be due to the existence of gender inequality. Because of ignorance and poor knowledge girls are not conscious of their increased nutritional wants and due to which they are caught in the cycle of malnutrition. The poor nutritional status will result in obstetric risks during child bearing days and put their babies at risks. This way the vicious cycle continues and affects the growth of the nation because the health of the women and education are closely related. The first menstrual bleeding in girls is termed as menarche. Menarche is the first menstruation bleeding starting with the hormonal changes (**Deurgate et al, 2004**). Menarche is the most unforgettable and significant moment for girls. The transition of childhood to sexual maturity can be full of

anxiety, fear for the early adolescent. The beginning of menstrual cycle is frequently met with variety of responses. Varied feelings, such as being “excited but scared” and “happy and embarrassed” are common. (Chrisler & Zittel, 1998; Koff, Rierdan, & Jacobson, 1981). The first menarcheal age had been reported to be decreasing over the years. It was found that genetic and non- genetic factors play an important role in influencing the first menarcheal age. It is very difficult to estimate the accurate menarcheal age as it varies significantly by race, religion, geographical areas and other characteristics. Many factors were found to be responsible for decline in first menarcheal age.

This transitional period to adulthood may generate a state of chaos and confusion that makes the girls susceptible to many natures of problems such as Psychological, Emotional, Cognitive, Social, and Reproductive health related or sexuality related issues. During this stage, adolescents see themselves changed dramatically. At the same time, there is also a change in the way other people treat or deal with them. Adolescent girls begin to establish their own systems of values, life goals, beliefs and an independent identity. They become more self-conscious and believe in independent thinking. Adolescent girls may experience some of the psychosocial changes like irritability, anger, irritability. (Pratt HD, 2003). For the smooth transmission to adulthood it is significant to look for the behavioural issues so that appropriate supportive measures may be instituted. This study was undertaken to study behavioural issues coping by post menarcheal adolescent girls in Porbandar District.

METHODS:

The current study is a school based cross sectional that was carried out on adolescent girls aged 11 to 16 years in Porbandar district. For conducting this study schools catering to female students were selected by stratified random sampling method by distributing the Porbandar district into definite zones on the geographical lay out, to confirm the study to be symbolic of the whole district. Purposive Sampling Technique was used for selecting samples. The sampling is purposive because the researcher purposefully selected those girls who already attained menarche. Adolescent girls aged between 11 to 16 years who had undergone menarche have been selected for the study. The school going adolescent girls of Porbandar district were considered as target population for the study. Participants were recruited mainly through direct contact in their schools. 250 girls studying in various schools of Porbandar district were selected for the purpose of the study. The structured questionnaire was used as an appropriate tool for data collection. A pre designed and modulated questionnaire was used to collect the data for the research. This questionnaire was translated to Gujarati. Before filling the questionnaire, the objectives and importance of the research study was explained to the students. Assurances were provided in relation to confidentiality and anonymity. The data was collected during the period of March 2017 to December 2017. Using IBM Statistics version 20 the data drawn from the filled questionnaire were further studied in terms of frequencies, percentage distribution of girls, average and standard deviation. For testing of the hypothesis the technique of analysis of variance was used (**One-Way ANOVA**) as this research study involved many variables.

RESULTS: In the present study, post-menarcheal girls were selected randomly, so equal distribution of girls was not possible among three different menarcheal ages. The Adolescent girls participated in this research study were divided into three groups according to their age at menarche.

Categorization of Girls According To Menarcheal Age

Menarcheal Categories	Age at Menarche	No of Girls	Percentage
Early	9-11	41	16.4%
Normal	12-14	200	80%
Late	15-16	9	3.6%
TOTAL		250	100%

Above table shows the percentage distribution of girls according to their age at menarche. Among the 250 girls the highest percentage of 80% (200) was in normal age of reaching menarche. Only 16.4% (41) and 3.6% (9) of girls were belonging to early and late menarcheal category respectively.

Categorization of Girls according to the fluctuation in weight

Menarcheal Categories	Weight Gain	Weight Loss	No Loss or Gain	Total
Early Menarche 9-11	16(39%)	5(12.1%)	20(48.7%)	41(100%)
Normal Menarche 12-14	58(29%)	32(16%)	110(55%)	200(100%)
Late Menarche 15-16	4(44%)	3(33.3%)	2(22.2%)	9(100%)
Total				250

According to the observations of above table (44%) of late menarching girls experienced weight gain when compared to early and normal menarching girls. As far as weight loss was concerned 5(12.1%) of early menarching girls experienced it. On the other hand no loss or gain in weight was experienced by normal menarching girls 110 (55%).

Categorization of Girls according to the premenstrual symptoms

Menarcheal Categories	No. of Girls	Anger	Moodiness	Irritability
Early Menarche 9-11	41	21(51.2%)	28(68.29%)	32(78%)
Normal Menarche 12-14	200	121(60.5%)	109(54.5%)	122(61%)
Late Menarche 15-16	9	3(33.33%)	2(22.2%)	6(66.6%)
Total	250			

The results revealed that normal menarching girls (60.5%) experienced anger comparatively higher than the other two age groups. Minimum percentage of 33.33% was found among late menarching girls.

Anger was followed by the moodiness which was the next psychological changes mentioned in the above table. All the three menarching age groups experienced moodiness but in different proportions. Maximum percentage (68.29%) of girls who experienced moodiness was early menarching girls and minimum percentage (22.2%) was noted among late menarching girls.

Irritability was the last psychological changes mentioned in the above table. The trend for almost all the problems related to emotional changes was almost same in all the three categories. From the results of the above table it was very clear that the percentage of girls experiencing irritability was comparatively more among early menarching girls. Minimum percentage of 61% was noted among late menarching girls respectively.

Categorization of Girls according to their attraction towards opposite sex

Menarcheal Categories	No. of Girls	Yes	No
Early Menarche 9-11	41	35(85.4%)	6(14.6%)
Normal Menarche 12-14	200	142(71%)	58(29%)
Late Menarche 15-16	9	5(55.5%)	4(44.5%)
Total	250		

From the above table it was found that highest percentage of 85.4% of girls from normal menarching group had an attraction towards opposite sex followed by 71% and 55.5% of girls from normal and late menarcheal group had experienced attraction towards opposite sex. Minimum percentage 14.6% of girls from early menarcheal group never had any attraction to opposite sex.

Categorization of Girls according to their interest in watching romantic movies

Menarcheal Categories	No. of Girls	Yes	No
Early Menarche 9-11	41	37(90.2%)	4(9.75%)
Normal Menarche 12-14	200	165(82.5%)	35(17.5%)
Late Menarche 15-16	9	7(77.7%)	2(22.2%)
Total	250		

According to the findings of the research majority of girls were interested in watching romantic films. Highest percentage of 90.2% was noted among early menarching girls. 82.5% and 77.7% of normal and late menstruating girls were also found to be interested in watching romantic films. 22.2% of girls from late menarcheal were not interested in watching romantic films.

CONCLUSION:

Moodiness was also experienced by all the three maturing groups but at different proportions. Comparatively high percentage of 68.29% of early maturing girls experienced it. Highest percentage of 78% of girls who had their first menarche between 9 to 11 years experienced irritability. When the girls were asked about their attraction towards opposite sex majority of them responded positively to it. 85.4% of girls of early menarching category felt attraction towards opposite sex. 90.2% and 82.5% of early and normal menarcheal girls were interested in watching romantic movies. **Shweta Sinha, Jyoti Nath Modi (2014)** studied the psychosocial aspects of changes associated with adolescence among school going girls and found that excessive irritability was reported by 47% of girls; undue anger by 51.4%. In our study highest percentage of normal maturing girls felt anger and early maturing girls experienced irritability which was almost similar to the above findings. In this research paper author tried to highlight some of the behavioural issues of menarching girls. Drop in the age of menarche has made young girls expose to the possibilities of unexpected and unintended sexual abuse, unprotected sexual activity, earlier accidental pregnancy, illegal abortions, and sexually transmitted diseases. (**Kelsey JL1979 and Riley AP, Samuelson JL, Huffman SL 1993**). There is an absence of awareness and understanding among adolescents regarding sexual growth and behaviour; additionally, they may not be emotionally fully fledged enough to take the apt decision. So, they have to be reassured that these physical mental and emotional changes are a normal process of development.

RECOMMENDATIONS:

1. Awakening the girls and parents with right information on menstruation will lessen the behavioural issues and assist the girls to keep in mind that menstruation as a normal physiological process of the body.
2. This research survey uncovers the need for more extensive and regular adolescent school health programs in order to identify the behavioural problems before time and provide solutions accordingly.

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