MENSTRUAL AND HYGIENE RELATED KNOWLEDGE AMONG THE SCHOOL STUDENTS IN NEW DELHI: A CROSS SECTIONAL STUDY

Dr. Sonia Digra, Kratika Tyagi, Akanksha Priya, Dr. Rinku Choudhary, Dr. Neha Singh

Dentist, Student of Bachelor of Dental Science, Homoeopathic Physician and student at Department of Public Health

Rama dental college and research centre Lakhvanpur Kanpur, Kantipur Dental College, Kathmandu, Nepal, Delhi Pharmaceutical Science and Research University, New Delhi

ABSTRACT

Background: Menstruation is a natural phenomenon that is uniquely associated with the females of reproductive age group. The commencement of menstruation is one of the most significant changes young girl’s experiences during their adolescent years. Menarche occurs between the ages of 13 and 16 years in India.

Objective:
1. To obtain the research population's views and conceptions on menstruation, and
2. To determine the level of menstrual hygiene among adolescent females.

Material and Methods: A cross-sectional study was carried out among 220 adolescent females from a secondary school in New Delhi, using a pre-designed and pre-tested questionnaire distributed through online portals. Simple proportions and percentages were used to assess data statistically.

Result: Out of 222 responses, 178 (80.2%) females were aware of menstruation prior to reaching menarche. In most cases, the mother was the first source of information about menstruation. 138 (62.1%) girls thought it was a physiological procedure. 108 (48.6) of the girls knew how to use a sanitary pad during menstruation. In terms of behaviours, just 80 (36) of girls utilised sanitary pads during menstruation.

Conclusion: In developed countries such as India there are still major observed differences in terms of knowledge and understanding related to menstruation and hygiene. Studies have indicated that inappropriate hygiene practice done during the Menstruation predispose young girls to major long term issues such as vaginal thrush or reproductive tract infection. Hence it is menstruation hygiene practices and promoting education should be focus of healthy families.

Keywords: Adolescent girl, menstrual hygiene, sanitary pad

INTRODUCTION

In Indian society, menstruation is still considered as taboo or days of absentees from family and friends (2,6). The reaction to menstruation is determined by one’s level of awareness and knowledge of the matter. The way a girl learns about menstruation and its associated changes may influence her reaction to the event of menarche. Because the issue is under-recognized and under-served, girls reach puberty with information gaps and misconceptions, particularly in developing nations (15). The adults around them, including parents and teachers, are misinformed and uncomfortable discussing reproduction and related topics (2). These social rules and restrictions make menstruation a burden and an event that causes females to develop feeling of fear, disgust, and shame towards them (12). Management is an important component of reproductive health since misconceptions or taboos can force one to deal with otherwise normal physiological phenomena.
with mental and physical distress. Unsanitary habits during this period raise the risk of urinary tract infections, pelvic inflammatory disorders, and vaginal thrush (11).

Women's hygiene routines during menstruation are critical since they have a health impact in terms of increased vulnerability to reproductive tract infections (9). There is a notable interaction between socioeconomic level, menstrual hygiene behaviours, and RTI. Research of 10-19-year-old females in our country have found that almost half of the girls lacked information or awareness about menstruation. Only around a quarter of them used proper hygiene procedures (3,5,7). During menstruation, more than half of the women who did not utilise any hygiene procedure developed vaginitis. India is the world’s largest country, with state-by-state diversity in the usage of menstruation absorbents ranging from 93.4 percent in Mizoram to 31 percent in Bihar (1).

These researches have demonstrated a lack of understanding about menstruation as well as poor menstrual hygiene practices among this demographic. Furthermore, little is known about the gynaecological morbidity linked with menstruation disorders in young populations (11). Due to the significance of the topic this study intended to understand the menstrual hygiene practices among school students in Delhi, India. The purpose of the study is to evaluate the menstrual knowledge of the school girls aged between 13-16 years and then further assess the factors affecting the knowledge. The study also assess the hygiene practices of the participants.

**MATERIAL AND METHODS:**

**Study type:** The study was a cross-sectional observational study conducted in a community.

**Study place:** The current study was conducted among adolescent schoolgirls in a senior secondary school in a suburban neighbourhood of the capital Delhi.

**Study duration:** The study will last one month, from 15.12.2021 to 15.1.22.

**Study participants:** Two hundred twenty-two females from the school located in the sub urban area of the National Capital New Delhi from class IX to class XI were chosen for the study. Every class included three sections with each covered in phase wise manner.

**Study tool:** A pre-tested questionnaire was used as a research technique distributed through online portal as google forms.

**Methodology:** After obtaining permission from the school authority, the goal of the study was described to the students and subsequently a online meet was held with all the girl in class IX to IX, and rapport was formed with the girl students, and verbal consent was acquired from them.

The students were briefed on the questionnaire through Zoom meet and questionnaire was forwarded on their email ids. This pre-tested, and structured questionnaire covered subjects such as menstruation awareness, sources of knowledge about menstruation, menstrual hygiene, and limited activities during menstruation. The research worker satisfactorily answered all of the students' questions at the end of the study, after collecting the questionnaire from them.

**Study Variables:** The predictor variable was chosen after a thorough analysis of the literature on levels and factors linked with menstruation: age, religion, Caste, education of the father, occupation of the father, occupation of the mother, monthly wage, family type, and place of residence.

Statistical analysis: The collected data was compiled and statistically evaluated using basic proportions.

**RESULTS**

Sixty-two percent of the girls were from general castes, twenty-two percent from other backward groups, and sixteen percent from scheduled castes/scheduled tribes. The majority of the students polled (78 percent) were Hindus, with the remainder being Muslims. Thirty-nine percent of girl's' fathers were high school graduates, fifty-five percent were graduates, and the rest were postgraduate or above. In the study it was noticed that most of the families were dependent on the private jobs for their income, 56% students' fathers were into private jobs where as 25% were in government employment, rest 38% were self-employed. When it comes to mother almost 82% of the mother were homemakers, 50% of the mothers of participants have passed school whereas only 18% were graduated from a regular college. The study also found that the average income of the reported household was below 50,000 rs per month.

Out of 222 responses, 178 (80.2%) females were aware of menstruation prior to reaching menarche. In most cases, the mother was the first source of information about menstruation. 138 (62.1%) girls thought it was a physiological procedure. 108 (48.6) of the girls knew how to use a sanitary pad during menstruation. In terms of behaviours, just 80 (36) of girls utilised sanitary pads during menstruation.

More over half (57.8 percent) had their menarche between the ages of 12 and 15 years, and 54.8 percent had menstrual flows lasting 3-5 days. The majority of school girls (74 percent) have experienced abdominal pain...
during menstruation, followed by backpain (40.8 percent), weakness (32.8 percent), irritability (71%), anorexia (24.3 percent), headache (08 percent), acne (25.1 percent), vomiting (10.3%), bloating (9.6%), insomnia (9.1%), constipation (7.9%), and breast pain (7.1 percent). Before the commencement of menarche, less than half of the students (45.7%) were aware of menstruation.

**DISCUSSION**

Unfortunately, 32.5 percent of the girls in this study were unaware of menstruation before menarche. Although for healthy county and families it is responsibility of the governing bodies to increases the awareness regarding menstrual cycles among school girls. Importance of the hygiene in the menstrual period should not be neglected due to long term consequences associated (4). According to the findings of this study, the majority of the girls preferred cloth pieces over sanitary pad. During menstruation, only 80 out of 222 of girls used sanitary pads. It is highly reflected that the socio-economic condition of the families is influencing the inclination to use sanitary pads or cloth, hence the authorises should develop program where free of cost sanitary pads and study material should be distributed of the girls. The study has also shown that the mothers are the primary knowledge giver for these participants hence it is necessary to sanitize the parents regarding the importance of hygiene to be maintained during this period to ensure healthy physical and mental well-being. During the discussions, several of the girls indicated that they were unaware of the phenomena of menstruation, but knew that the females in their household avoided certain activities for two to three days every month. Those from nuclear families were less likely to practise excellent hygiene practises than students from joint families.

**CONCLUSION**

Most school students had limited understanding about menstruation to observe proper sanitary procedures. It demonstrates the necessity for appropriate awareness building and advocacy activities to improve students' understanding of menstruation. Discussing the difficulties that females endure during menstruation with family, friends, and schools might help to reduce anxiety and tension. The issues can be addressed by providing appropriate reading material and sanitary products. This study underlines the vital, urgent, and underappreciated need for the community, particularly college students, to have right knowledge.

**REFERENCES**


