

Menstrual Health Issues and Menstrual Hygiene Practices Followed by College Going Girls: A Study in Khurdha District of Odisha

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Abstract

When a woman bleeds for a few days from her vagina, this is known as her menstruation. Typically, this occurs every 28 days or so for most women, although it's not uncommon for periods to occur more frequently or less frequently than this, anywhere from every 23 days to every 35 days. As teens begin to menstruate, they may experience new vulnerabilities. When they menstruate, many teenage girls experience stigma, bullying, and social exclusion. Keeping these perspectives in mind, the present study was carried out in khurdha district of the state of Odisha which is one of the poor states of India with a huge concentration of people living in rural areas. A well constructed interview schedule was prepared and pretested before the study. The sample size for this study was 278 which was calculated using Yamane's formula. The major findings of the study suggests that Majority of the respondents (27%) belonged to the age of 17 years and majority (44.4%) respondents belonged to rural area, Majority of the respondents (68%) faced menstrual health issues. Among them majority of the respondents (84%) faced stomach cramp followed by back pain (76%), muscle cramp (65%), dizziness (64.5%), and irritability (60%) respectively. Majority of the respondents (72.5%) had a period delayed up to 2-3 months. Whereas 08 (20%) respondents reported that their period is delayed for more than 3 months.

Keywords: Menstruation, Health issues, Menstrual hygiene, Practices, Restrictions

Introduction

Every month, a woman's body prepares for pregnancy; if no pregnancy occurs, the uterus, or womb, sheds its lining. The menstrual blood, which is partly blood and partly tissue from inside the uterus, passes out of the body through the vagina. Menstruation, or period, is normal vaginal bleeding that occurs as part of a woman's monthly cycle.¹

On any given day, more than 300 million women around the world are menstruating; however, an estimated 500 million lack access to menstrual products and adequate facilities for menstrual hygiene management (MHM). To effectively manage their menstruation, girls and women need access to water, sanitation, and hygiene (WASH) facilities, affordable and appropriate menstrual products, and WASH facilities.²

The WHO/UNICEF Joint Monitoring Programme 2012, defined menstrual hygiene management as: "*Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary, using soap and water for*

washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear.”

Menstruation is a normal and healthy part of life for the majority of women and girls, but in many societies, the experience of menstruation continues to be constrained by cultural taboos and discriminatory social norms, which results in a lack of information about menstruation and causes unhygienic and unhealthy menstrual practices as well as misconceptions and negative attitudes.²

Poor menstrual hygiene, however, can pose serious health risks, like reproductive and urinary tract infections which can lead to future infertility and birth complications. When girls and women have access to safe and reasonably priced sanitary products to manage their menstruation, they reduce their risk of infections. This can have cascading effects on overall sexual and reproductive health, including reducing teen pregnancy, maternal outcomes, and fertility.²

Awareness of menstrual hygiene helps to create a non-discriminatory, gender-equal environment where female voices are heard, girls have choices about their futures, and women have options to become leaders and managers. Promoting menstrual health and hygiene is a crucial way to protect women's dignity, privacy, bodily integrity, and, consequently, their self efficacy ²

Objectives:

1. To study about menstrual hygiene practices followed by college going girls
2. To study menstrual health issues and restrictions faced by college going girls

Methodology:

A cross sectional research design was used for the study. Sample size was calculated using Yamane’s formula. Which is:

$$n = \frac{N}{1 + N(e)^2}$$

Where n= sample size after correction

n= corrected sample size, N = population size, and e = Margin of error (MoE), e = 0.05 based on the research condition.

After using the formula the sample size was **278 respondents**. (Where N= 900, and e= 0.05). Simple random sampling technique was used for the study. The data collection was done from January 20th to April 10th. For this study Women’s college khurdha of khurdha district was selected purposively.

Results and discussions

Table 1: Distribution of respondents based on age

| Respondents based on age | Number | Percentage (%) |
|--------------------------|--------|----------------|
| 16 | 66 | 25 |
| 17 | 73 | 27 |
| 18 | 48 | 17 |
| 19 | 46 | 16 |

| | | |
|--------------|------------|------------|
| 20 | 45 | 15 |
| Total | 278 | 100 |

This table shows that majority of the respondents (27%) belonged to the age of 17 years. Since the study was confined to college going girls, therefore none of the respondents were below 16 years of age.

Table 2: Distribution of respondents based on guardian’s occupation and area of resident.

| Respondents guardian’s occupation | Number | Percentage (%) |
|--|---------------|-----------------------|
| Business | 66 | 24 |
| Private/company job | 111 | 40 |
| Daily labourer | 45 | 16 |
| Govt service | 56 | 20 |
| Total | 278 | 100 |
| Area of the resident | Number | Percentage (%) |
| Rural | 123 | 44.4 |
| Urban | 78 | 28 |
| Semi urban | 77 | 27.6 |
| Total | 278 | 100 |

This table shows that majority of the respondent’s (40%) guardian’s occupation was private job. Khurda is one of the industry rich areas of Odisha with many private companies manufacturing facilities. This is justified from the results obtained.

As per the Reserve Bank of India, The classification of rural, urban and semi urban area is as follows:

- Rural: population less than 10,000
- Semi-Urban: 10,000 and above and less than 1 lakh
- Urban: 1 lakh and above and less than 10 lakh
- Metropolitan: 10 lakh and above

Based on this the respondents place of resident were categorised. As evident from the table above, it is clear that majority (44.4%) respondents belonged to rural area followed by 28% and 27.6% respondents who belonged to urban and semi urban area respectively.

Table 3: Distribution of respondents based on age of attaining puberty

| Respondents age of attaining puberty | Number | Percentage (%) |
|---|---------------|-----------------------|
| 10-12 | 139 | 50 |
| 13-15 | 111 | 40 |
| 16-18 | 28 | 10 |
| Total | 278 | 100 |

Puberty is the period during which an adolescent gets sexual maturity and ability to reproduce. From this table it is evident that majority of the respondents (50%) belonged had their first menstrual cycle around 10-12 years of age.

Table 4: Distribution of respondents based on facing menstrual health issues.

| Respondents facing menstrual health issues | Number | Percentage (%) |
|--|------------|----------------|
| Yes | 189 | 68 |
| No | 89 | 32 |
| Total | 278 | 100 |

Menstrual health issues are basically the problems women face during and specifically because of menstruation. This table shows that majority of the respondents (68%) faced menstrual health issues.

Table 5: Distribution of respondents based on type of menstrual health issues faced by them

| Type of menstrual health issues faced by respondents | Yes | Percentage (%) | No | Percentage (%) | Total |
|--|-----|----------------|-----|----------------|-----------|
| Stomach cramp | 159 | 84 | 30 | 16 | 189(100%) |
| Back pain | 144 | 76 | 45 | 24 | 189(100%) |
| Muscle cramp | 123 | 65 | 66 | 35 | 189(100%) |
| Dizziness | 122 | 64.5 | 67 | 35.5 | 189(100%) |
| Irritability | 113 | 60 | 76 | 40 | 189(100%) |
| Vomiting | 47 | 25 | 142 | 75 | 189(100%) |
| Fever | 14 | 7 | 175 | 93 | 189(100%) |
| Mood swings | 13 | 6 | 176 | 94 | 189(100%) |

When asked about whether facing any menstrual health issues, 189 respondents (68%) said yes. Then those 189 respondents were further asked about the type of menstrual health problem they were facing. This table shows that majority of the respondents (84%) faced stomach cramp followed by back pain (76%), muscle cramp (65%), dizziness (64.5%), and irritability (60%) respectively.

Table 6: Distribution of respondents based on bleeding during menstruation

| Respondents based on bleeding during menstruation | Number | Percentage (%) |
|---|------------|----------------|
| Heavy | 79 | 29 |
| Scanty | 43 | 15 |
| Manageable | 156 | 56 |
| Total | 278 | 100 |

Menstrual blood is a complex biological mixture of blood, uterine lining and vaginal secretions. The type of bleeding a woman experiences, varies a lot. Usually, menstrual bleeding lasts about 4 to 5 days and the amount of blood lost is small (2 to 3 tablespoons). However, women who have menorrhoea usually bleed for more than 7 days and lose twice as much blood⁴. This table shows that majority of the respondents (56%) had manageable flow. Only 79 respondents (29%) had heavy menstrual bleeding.

Table 7: Distribution of respondents based on intake of medication for menstrual health issues.

| Respondents based o on intake of medication for menstrual health issues | Number | Percentage (%) |
|---|------------|----------------|
| Yes | 89 | 32 |
| No | 189 | 68 |
| Total | 278 | 100 |

Prescribed non steroidal anti-inflammatory drugs are also available to help control the pain of cramps. Over-the-counter pain relievers, such as ibuprofen (Advil, Motrin IB, and others) or naproxen sodium (Aleve), at regular doses beginning the day before you anticipate the start of your period, can help control the pain of cramps.⁵

Sometimes women take medicines to get relief from extreme menstrual discomfort or before any important event. This table shows that majority of the respondents (68%) did not take medication for delayed period. Only 89 respondents (32%) respondents took medication to relieve menstrual discomfort.

Table 8: Distribution of respondents based on who prescribed the medication

| Respondents based on who prescribed the medication | Number | Percentage (%) |
|--|-----------|----------------|
| Doctor | 26 | 29 |
| Friends | 32 | 36 |
| Relative | 08 | 09 |
| Pharmacy | 23 | 26 |
| Total | 89 | 100 |

As shown in table 7 previously, only 89 respondents (32%) took medication to relieve menstrual discomfort. So these respondents were further asked about who prescribes these medicines to them. This table shows that majority of the respondents (36%) did take medication prescribed by friends. Whereas only 29% and 26% respondents took medicines prescribed by doctor or pharmacy respectively.

Table 9: Distribution of respondents based on their menstrual cycle length

| Respondents based on their menstrual cycle length | Number | Percentage (%) |
|---|------------|----------------|
| 24-28 days | 18 | 07 |
| 30-35days | 220 | 79 |
| 40-45 days | 31 | 11 |
| More than 45 days | 09 | 03 |
| Total | 278 | 100 |

This table shows that majority of the respondents (79%) had a cycle length of 30-35 days., which is quite normal. Followed by 31 respondents (11%), who had a cycle length of 40- 45 days. Cycle length is a key indicator of the health of a woman. Regular cycle represents a good and well functioning reproductive system.

Table 10: Distribution of respondents based on duration of delayed period

| Respondents based on duration of delayed period | Number | Percentage (%) |
|---|-----------|----------------|
| Usually over a month | 03 | 7.5 |
| 2-3 months | 29 | 72.5 |
| More than 3 months | 08 | 20 |
| Total | 40 | 100 |

As evident from table 9, out of 278 respondents, 40 respondents reported irregular periods. This table shows that majority of the respondents (72.5%) had a period delayed up to 2-3 months. Whereas 08 (20%) respondents reported that their period is delayed for more than 3 months. This is concerning as the students are very young and should have good menstrual health.

Table 11: Distribution of respondents based on their use of types of sanitary napkin

| Respondents based on their types of sanitary napkin | Number | Percentage (%) |
|---|------------|----------------|
| Cotton cloth | 58 | 21 |
| Pads | 182 | 65 |
| Both cloth and pads | 38 | 14 |
| tampon | - | - |
| Menstrual cup | - | - |
| Total | 278 | 100 |

This table shows that majority of the respondents (65%) used pads followed by 21% and 14% respondents who used cotton cloth and both pad and cotton cloth respectively. Though sanitary napkins are affordable and easily available now a days, in rural areas women still use cloths as major absorbent during menstruation. Majority respondents (44.4%) in this study belong to the rural area (table 2). This may be the reason behind a lot of students using cloth as absorbent during menstruation.

Table 12: Distribution of respondents based on their duration of changing pads .

| Respondents based on duration of changing pads | Number | Percentage (%) |
|--|------------|----------------|
| 1-3 hours | 14 | 08 |
| 3-6 hours | 111 | 62 |
| More than 6 hours | 57 | 20 |
| Total | 182 | 100 |

Changing pads regularly, which is every 3-4 hours and more if flow is heavy is essential and good hygienic practice. It controls bad odour, prevents leakage and keeps bacterial infection at bay. Therefore the students were asked about the frequency or duration of changing pads.

This table 18 shows that majority of the respondents (62 %) changed pad within 3-6 hours duration, followed by 20% changed their pads after more than 6 hours of use. Few respondents (08%) changed their pads in 1-3 hours. This may be due to their heavy flow. Overall majority of the students showed good menstrual hygiene practice in terms of frequency of changing pads.

Table 13: Distribution of respondents based on disposal of pads.

| Respondents based on disposal of pads | Number | Percentage (%) |
|---------------------------------------|------------|----------------|
| Burrry in the ground | 03 | 2 |
| Throw in the dustbin | 179 | 98 |
| Burn it | - | - |
| Any other | - | - |
| Total | 182 | 100 |

Disposing pads properly is essential for the environment. Menstrual waste disposal is a crucial component of menstrual hygiene. It's crucial to understand that managing menstrual hygiene calls for awareness and information. Many people are unaware of how to properly dispose of sanitary items and how they affect both the environment and human health. Pathogens and dangerous bacteria can live inside of soiled sanitary products like pads and tampons.

This table shows that majority of the respondents (98%) dispose their pads in dustbin followed by 3 respondents (2%) who dispose their pads by burrring in ground. Since only 189 respondents out of 278 respondents used pads during menstruation, therefore the total number of respondents here is 189.

Table 14: Distribution of respondents based on taking bath during menstruation.

| Respondents based on taking bath during menstruation | Number | Percentage (%) |
|--|------------|----------------|
| Yes | 278 | 100 |
| No | - | - |
| Total | 278 | 100 |

Menstruation was once considered taboo or dirty, and in some cultures it still is, so there are many period myths that have been passed down through the generations. There are several myths about what taking a bath can do to your flow. For example, some people think that taking a bath or shower in hot water will make bleeding heavier. Another common myth is that being in water stops your period (Santos-Longhurst, 2022).

This table shows that majority of the respondents (100%) taking birth during menstruation.

Table 15: Distribution of respondents based on washing hands before changing napkin and using hand sanitizer/soap for washing hands before changing napkin

| Respondents based on washing hands before changing napkin | Number | Percentage (%) |
|---|------------|----------------|
| Yes | 222 | 80 |
| No | 56 | 20 |
| Total | 278 | 100 |
| Respondents based on using hand sanitizer/soap for washing hands before changing napkin | Number | Percentage (%) |
| Yes | 156 | 70 |
| No | 66 | 30 |

| | | |
|--------------|------------|------------|
| Total | 222 | 100 |
|--------------|------------|------------|

Washing hands with soap and water before and after changing menstrual products is crucial to prevent the spread of germs and bacteria. Ignoring this can result in infections and illnesses as blood is a good medium for the growth of microorganisms (Gupta, 2023).

This table 15 shows that majority of the respondents (80%) washing their hands before using hand sanitizer for washing hands before changing napkin. Out of these 222 respondents who washed their hands before and after changing menstrual products, 70% used hand sanitizer or soap for cleaning their hands while the rest (30%) cleaned their hands only using water.

Table 16: Distribution of respondents based on facing restriction during menstruation

| Respondents based on facing restriction during menstruation | Yes (%) | No (%) | Total |
|--|----------------|---------------|--------------|
| Restriction to enter kitchen | 168 (60%) | 110 | 278 |
| Restriction to enter puja room | 278 (100%) | 0 | 278 |
| Restriction to touch male members of family | 80 (29%) | 198 | 278 |
| Restriction to take part in any spiritual activity | 275(99%) | 3 | 278 |
| Restriction to sleep on bed | 45 (16%) | 238 | 278 |

Some people continue to hold restrictive beliefs for menstruation even today. Some communities believe women and girls can spread misfortune or impurity during menstruation (or other vaginal bleeding). As a result, women may face restrictions on their day-to-day behaviour, including prohibitions on attending religious ceremonies, visiting religious spaces, handling food or sleeping in the home. (UNFPA)

This table shows that all of the respondents (100%) had restriction to enter puja room during menstruation followed by 99% respondents who are restricted to take part in any spiritual activities. Other restrictions faced by the respondents were restrictions to enter kitchen(60%), restrictions to touch male members of the family (29%) and sleeping on bed (16%). This shows that traditional beliefs regarding menstruation still exists today.

Table 17: Distribution of respondents based on whether any infection of irritation on vaginal area during menstruation.

| Respondents based on whether any infection of irritation on menstrual area. | Number | Percentage (%) |
|--|---------------|-----------------------|
| Yes | 83 | 30 |
| No | 195 | 70 |
| Total | 278 | 100 |

Menstrual cycle includes hormonal changes that can create an imbalance in vaginal pH. When this occurs, bad bacteria can flourish, potentially resulting in infections such as bacterial vaginosis (BV). Along with vaginal itch, symptoms of BV may include: discomfort when you pee, watery or foamy vaginal discharge, unpleasant odour etcetera.

This table shows that 83 respondents (30%) had infection or irritation on vaginal area during menstruation. This may be due to poor hygienic practices such as not cleaning hands properly before and after changing napkins, not changing pads frequently and using same cloth for more than 2-3 months and not cleaning and drying them properly.

SUMMARY, CONCLUSION AND IMPLICATIONS:

From the present study, following conclusions can be drawn which may help in further broader and intensive research on menstrual health and hygiene topic.

- Majority of the respondents (27%) belonged to the age of 17 years and majority (44.4%) respondents belonged to rural area.
- Majority of the respondent's (40%) guardian's occupation was private job. Khurdha is one of the industry rich areas of Odisha with many private companies manufacturing facilities. This is justified from the results obtained.
- Majority of the respondents (68%) faced menstrual health issues. Among them majority of the respondents (84%) faced stomach cramp followed by back pain (76%), muscle cramp (65%), dizziness (64.5%), and irritability (60%) respectively.
- Majority of the respondents (56%) had manageable flow. Only 79 respondents (29%) had heavy menstrual bleeding. Sometimes women take medicines to get relief from extreme menstrual discomfort or before any important event. It was found that majority of the respondents (68%) did not take medication for delayed period. Only 89 respondents (32%) respondents took medication to relieve menstrual discomfort
- Majority of the respondents (72.5%) had a period delayed up to 2-3 months. Whereas 08 (20%) respondents reported that their period is delayed for more than 3 months. This is concerning as the students are very young and should have good menstrual health.
- Disposing pads properly is essential for the environment. Menstrual waste disposal is a crucial component of menstrual hygiene. Majority of the respondents (98%) dispose their pads in dustbin followed by 3 respondents (2%) who dispose their pads by burring in ground
- Washing hands with soap and water before and after changing menstrual products is crucial to prevent the spread of germs and bacteria. It was that majority of the respondents (80%) were washing their hands before and after using menstrual products. Out of these 222 respondents who washed their hands before and after changing menstrual products, 70% used hand sanitizer or soap for cleaning their hands while the rest (30%) cleaned their hands only using water.
- It was found that 83 respondents (30%) had infection or irritation on vaginal area during menstruation. This may be due to poor hygienic practices such as not cleaning hands properly before and after changing napkins, not changing pads frequently and using same cloth for more than 2-3 months and not cleaning and drying them properly.

From this study it can be concluded that the menstrual health of college going girls in the study area was average. It was seen that the young girls faced many stigma and taboos related to menstruation and were not encouraged to talk about menstrual issues with their family members freely. Though most of the respondents used disposable sanitary napkins during their periods, many still used traditional absorbents such as old cotton cloths and were following unsafe menstrual habits.

It is essential to create awareness regarding menstrual health and hygiene to young girls to promote their reproductive health. Government should coordinate with different educational institutions to create awareness about menstrual health and hygiene for a better future and sustainable growth of women.

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