



A STUDY ON KNOWLEDGE AND ATTITUDE ABOUT MENSTRUATION AND MENSTRUAL HYGIENE AMONG SECONDARY SCHOOL GIRLS

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Abstract

In the life of a female, the transition from childhood to adulthood occurs during the period of adolescence, which, according to the WHO, extends from 10 to 19 years of age. It starts with the onset of menarche, a milestone in a woman's life, and denotes the beginning of her reproductive capacity as a woman. During this phase, she observes a spurt of growth and development, due to which significant changes occur in her body. Adolescence is a social concept. The adolescent period is a very difficult time for young people. Adolescence, the second decade of life, is a period of rapid growth and development when young people acquire new capacities and are faced with many new situations that create not only opportunities for progress but also a risk to health and well-being. It is the time when growth is accelerated, major physical changes take place, and the differences between boys and girls are accentuated. **The specific** objectives of the study were to study the socio-economic profile of the respondents, assess the menstrual knowledge of adolescent girls, and examine the attitude and practice of menstrual hygiene among adolescent girls. The present investigation was carried out in the Tirupati urban area of the Chittoor district of Andhra Pradesh. The sampling unit for the study was adolescent girls in the age group of 13 to 15 years. A total of 50 samples were selected for the study from Seven Hills High School. A simple random sampling procedure was followed in the selection of the respondents.

Keywords: - Knowledge, Attitude, Menstrual Hygiene

Introduction

Females have always been in a position to take a lead role in the health of a family. They play multiple roles, like a daughter, a sister, a wife, a mother, and a grandmother, in their lives. As a mother, being a pivot in the family, she is considered to be the best teacher of the offspring. Such an important person in society always needs to be stress-free and to have the right to enjoy a good state of health. In the life of a female, the transition from childhood to adulthood occurs during the period of adolescence, which, according to the WHO, extends from 10 to 19 years of age. It starts with the onset of menarche, a milestone in a woman's life, and denotes the beginning of her reproductive capacity as a woman. During this phase, she observes a spurt of growth and development, due to which significant changes occur in her body. The development of secondary sexual characters and the initiation of menstruation are the major events that led to her total transformation. Although it is all physiological, a feeling of anxiety and eagerness to know about this natural phenomenon develops among the girls. Further, hygiene-related practices of women during menstruation are of considerable importance. It has a health impact in terms of increased vulnerability to reproductive tract infections (RTIs). The interplay of socio-economic status, menstrual hygiene practices, and RTIs is noticeable.

1. Knowledge on Menstruation Among Adolescent Girls

Adolescence is a social concept. The adolescent period is a very difficult time for young people. Adolescence, the second decade of life, is a period of rapid growth and development when young people acquire new capacities and are faced with many new situations that create not only opportunities for progress but also a risk to health and well-being. It is the time when growth is accelerated, major physical changes take place, and the differences between boys and girls are accentuated.

According to the WHO in 2005, 50 percent of the world population were below the age of 25, i.e., one-fourth of the world population are adolescents, 160 million live in developing countries, and 91.3 million live in developed countries. Although menarche is widely considered an important landmark in sexual maturity and menstruation is a natural event, studies have shown that it is a subject that is least understood even by married women, let alone teenage girls. In a study carried out in Jammu, India, the results showed that the majority of the women from both rural and urban areas were unaware of the actual physiological process of menstruation.

2. Knowledge, Attitude, and Practices About Menstruation and Related Problems in Adolescent Girls

According to the United Nations Children's Fund (UNICEF), there are 243 million adolescents, comprising 20% of the total population of India, which clearly shows that India is truly "young." This sheer number itself is a big challenge in itself; 15–19 years constitute 10%, and the majority lives in rural areas. 1 Adolescence is a period of rapid physical, emotional, and psychological development and a period of knowledge about menstruation among

adolescent girls. Several traditional norms and beliefs influence the practices related to menstruation. It is a common observation that girls are rarely informed about menstruation unless they experience it for the first time.

Many studies have revealed that most of the adolescent girls had incomplete and inaccurate information about menstrual physiology and hygiene. It also revealed that mothers, television, friends, teachers, and relatives were the main sources that provided information on menstruation to the adolescent girls. 3,4 Hygiene-related practices of women during menstruation are of considerable importance, as they have a health impact in terms of increased vulnerability to reproductive tract infections (RTI).

The interplay of socio-economic status, menstrual hygiene practices, and RTI is noticeable. Today, millions of women suffer from RTI and its complications, and often the infection is transmitted to the offspring of the pregnant mother.

Women with better knowledge regarding menstrual hygiene and safe practices are less vulnerable to RTI and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women.

Good hygienic practices, such as the use of sanitary pads and adequate washing of the genital area, are essential during menstruation. Women and girls of reproductive age need access to clean, soft, absorbent sanitary products that can, in the long run, protect their health. Menstrual hygiene and management will directly contribute to MDG-2 on universal education and MDG-3 on gender equality and women's empowerment.

Therefore, this study is done in four sections:

1. Knowledge and attitude
2. Problems during menstruation
3. Seclusion and absenteeism
4. Hygiene-related practices

The objectives of the present study were to study the knowledge and attitude of menstruation, to study the practices followed about menstrual hygiene, and to study the various problems related to menstruation.

3. Menstrual hygiene management among adolescent schoolgirls

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 for the duration of a menstrual period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials.

Menstruation is a naturally occurring physiological phenomenon in adolescent girls and pre-menopausal women. Menstrual Hygiene Management (MHM) is defined as ‘Women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials’. Menstruation necessitates the availability of material resources to absorb or collect menstrual blood, facilitate personal hygiene, and dispose of waste, ideally with adequate privacy.

Women and girls in low-income settings have low awareness of hygienic practices and lack culturally appropriate materials for menstrual hygiene management (MHM) practices. Menstruation and associated activities are surrounded by silence, shame, and social taboos that are further manifested in social practices that restrict mobility, freedom, and access to normal activities in India and Nepal. For instance, drinking milk, preparing food, interacting with people, or refraining from performing religious rituals are restrictions found in many cultures. The materials used as adsorbents during menstruation in low-income countries, including Nepal, vary from reusable towels (cloth torn from dresses of women and cotton fabric) to commercially available disposable sanitary pads. Practical, sustainable, and culturally acceptable methods are recommended for addressing the menstrual hygiene needs of women in low-income countries. Types of adsorbents used, hygienic practices, and cultural restrictions during menstruation are associated with negative clinical and psychosocial outcomes, including reproductive and urinary tract infections, anemia, school absenteeism, and social isolation.

Young adolescent girls tend to be less prepared for MHM and suffer from anxiety, apprehensions, fear, and shame during their menses. In addition, pre-existing social taboos and cultural restraints during menstruation mean that managing menstruation is a greater challenge during disasters. Further, there is limited access to reproductive health services and safe menstrual hygiene materials during disasters. Menstrual hygiene needs are not only specific and pressing for women and girls of reproductive age but also require access to the same management of the menstrual period, a basic reproductive health right. In emergencies, the usual lifestyles of affected individuals change, and they are confronted with additional stress that could worsen their physical and psychological well-being. Provision of fundamental human requirements such as shelter, food, clean water, and medicines is prioritized; however, other needs such as safe menstrual hygiene management that can have profound psychosocial impact if unmet are often neglected.

Need for the study

Adolescence is a period of rapid physical, emotional, and psychological development and a period of knowledge about menstruation among adolescent girls. Several traditional norms and beliefs influence the practices related to menstruation. Menstruation and menstrual practices are still clouded by taboos and socio-cultural restrictions, resulting in adolescent girls remaining ignorant of scientific facts and hygienic health practices, which sometimes result in adverse health outcomes. Menstruation is still regarded as something unclean or dirty in Indian society.

Methodology

The methodology gives an outline of the procedure adopted for the execution of the present research. The major aim of the survey is to understand the determinants of the menstrual knowledge, attitude, and hygiene of adolescent girls in the Tirupati urban mandala of Chittoor district.

The main objectives of the study are to examine a study on “knowledge and attitude about menstruation and menstrual hygiene among secondary school girls.”.

Specific objectives of the study

- To study the socio-economic profile of the respondents
- To assess the menstrual knowledge of adolescent girls
- To examine the attitude and practice of menstrual hygiene among adolescent girls.

Area of the study

The study was carried out in the Tirupati urban areas of the Chittoor district of Andhra Pradesh. Tirupati was known by its ancient name, Tiruvengadam, and the hill on the northern bank of the Swarnamukhi River in Chittoor district.

Sampling Procedure

The present investigation was carried out in the Tirupati urban area of the Chittoor district of Andhra Pradesh. The sampling unit for the study was adolescent girls in the age group of 13 to 15 years. A total of 50 samples were selected for the study from Seven Hills High School.

A simple random sampling procedure was followed in the selection of the respondents.

3.5 Data collection

In the month of January 2019, prior permission was obtained from the principle of the respective school to collect the data from the students. The purpose of the study was explained to the students, and their cooperation was requested. After establishing a good rapport, the investigation began collecting data from respondents.

The study covers the following comments:

The primary data was collected using an interview schedule specifically developed for the purpose.

1. Socio-demographic profile of the respondents.
2. Menstrual knowledge, attitude, and hygiene of adolescent girls.
3. Knowledge on the menstrual awareness of adolescent girls.

The primary method

The researcher has collected data through verbal interaction, observation, and the interview method schedule.

The Secondary Method

The secondary method followed by the researcher was books, journals, articles, records, etc. to get more inspiring knowledge and details about menstruation.

Analysis of the data

After completing the data collection, the schedule was decoded and analyzed using simple statistical techniques like frequencies and percentages, which were presented in the form of tables. The next chapter deals with the analysis and interpretation of the data.

RESULTS AND DISCUSSION

After the collection of data it is important to process the data in an order. The data so collected were carefully interpreted and presented in the results and discussion. After the data collection the researcher on the basis of tally method tabulates the data according to different variables and responses were classified on the basis of common traits as, age, educational status, income of the family, occupation etc. Both open-ended and close-ended questions have been calculated. The data were calculated and presented in the tables by using frequencies and percentages.

Socio-demographic profile of the respondents

1. Age:

Age may have its advantages. It gives or should give stability and equilibrium to the mind, a sense of poise, an appearance of wisdom and a keener appreciation of beauty in all its forms. But age is stiff and crabbed and unimpressionable and reacts slowly to outside stimulate. It cannot be molded easily; its emotional reactions are limited. It looks to comfort and security more than to the fine frenzy of enthusiasm

Table: 1 Percentage distribution of the respondents by age group

Age in years	Respondents	Percentage
13	16	32
14	24	48
15	10	20
Total	50	100

Source: Primary Data

Discussion:

The above table reveals that the mean age of the study subjects was adolescents while their age group was ranged between 13-16 years. From the table majority (48%) of the respondents were in the group of 14 years. Nearly one third (32%) of the respondents were in the age group of 13 years. And one fifth (20%) of the respondents were in the age group of 15 years.

Table: 2 Percentage distributions of the respondents by the Educational status

Class	Respondents	percentage
8 th	25	50
9 th	25	50
Total	50	100

Source: Primary Data

Discussion:

The above reveals that the educational status of the respondents. From this table half of the respondents (50%) were 8th class and remaining half of the respondents (50%) were 9th class students.

Table: 3 Percentage distributions of the respondents by the Religion

Religion	Respondents	percentage
Christian	6	12
Muslim	7	14
Hindu	37	74
Total	50	100

Source: Primary Data

Discussion:

This table reveals that the religious status of the respondents. From the table majority (74%) of the respondents were Hindu, above one tenth (12%) of the respondents were Muslim and very few (12%) percent of the respondents belonging to Christianity.

Table: 4 Percentage distributions of the respondents by their family

Family	Respondents	Percentage
Nuclear Family	39	78
Joint Family	11	22
Total	50	100

Source: Primary Data

Discussion:

From the table majority (78%) of the respondents were belonging to nuclear families, and more than one fifth (22%) of the respondents were belonging to joint families.

Conclusion: It was concluded that majority (78%) of the respondents were belonging to nuclear families.

Table: 5 Percentage distributions of the respondent's father's educational status

Education level	Respondents	Percentage
None	20	40
Primary	20	40
Secondary	9	18
Higher education	1	2
Total	50	100

Source: Primary data

Discussion:

From the table majority (40%) of the respondents father level education were none and primary school education, above one tenth (18%) of the respondent's father level education were secondary school education. And very few percent (2%) of the respondents' father level education were higher education.

Table: 6 Percentage distributions of the respondents mother level education

Educational status	Respondents	Percentage
Illiterate	26	52
Primary	14	28
Secondary	10	20
Total	50	100

Source: Primary Data

Discussion:

From the table majority (52%) of the respondent's mother's education level is illiterates. One fourth (28%) mothers of girls had Primary Education. One fifth (20%) mothers of girls had Secondary Education.

SECTION-II KNOWLEDGE ABOUT THE MENSTRUATION**Table: 7 Percentage distributions of the respondent's knowledge on menstruation**

Knowledge	Respondents	Percentage
Physiological	44	88
Pathological	6	12
Total	50	100

Source: Primary Data

Discussion:

From the table majority (88%) of the respondents said that menstruation is a physiological process and a very few percentage (22%) of the said that the menstruation is pathological disorder.

Table: 8 Percentage distributions of the respondent's knowledge on the menstrual causes

Causes	Respondents	percentage
Harmones	48	96
Curse of god	2	4
Total	50	100

Source: Primary Data

Discussion:

From the table majority (96%) of the respondents said that the menstruation is caused by the harmones of our body. and very few (4%) percentage of the responds said that menstruation is caused by the curse of god.

Table: 9 Percentage distributions of the respondents knowledge on the source of blood

Source of blood	Respondents	percentage
Uterus	49	98
Bladder	1	2
Total	50	100

Source: Primary Data

Discussion:

This table shows that the majority (98%) of the respondents were said that the source of menstruation blood is uterus. Very few percent (2%) of the respondents said that bladder is the source of menstrual blood.

Table: 10 Percentage distributions of the respondents normal cycle length

Normal cycle length	Respondents	Percentage
21-35 days	48	96
>35 days	2	4
Total	50	100

Source: Primary Data**Discussion:**

This table shows that the majority (96%) of the respondents were said that their normal cycle length is 21-30 days. Very few percent (4%) of the respondents said that their normal cycle length is above 35 days.

Table: 11 Percentage distributions of the respondents age menarche

Age menarche	Respondents	Percentage
10-13 yrs	7	14
13-15 yrs	43	86
Total	50	100

Source: Primary data

Discussion:

This table shows that the majority (86%) percentage of the respondents said that their age of menarche is 13-15 years. More than one tenth of the respondents said that their age of menarche is 10-13 years.

Table: 12 Percentage distributions of the respondents awareness on menstruation before menarche

Awareness	Respondents	Percentage
Yes	27	54
No	23	46
Total	50	100

Source: Primary Data

Discussion:

This table reveals that the awareness of the respondents about the menstruation before menarche. From the table majority (54%) of the respondents were said the they have awareness on the menstruation before the menarche. Nearly half of the respondents said that they have no awareness on menstruation before the menarche.

Table: 13 Percentage distributions of the respondents source information about menstruation

Sources	Respondents	Percentage
Mother	49	98
Teacher	1	2
Friends	0	0
Books	0	0
Total	50	100

Source: Primary data

Discussion:

From the table majority (98%) of the respondents said that their mothers are the source of information about the menstruation. A very few (2%) percentage of the respondents were said that their source of information were their teachers.

Section- III ATTITUDE ON MENSTRUATION

Table: 14 Percentage distributions of the respondent's reaction at their first menses

Reactions	Respondents	Percentage
Happy	2	4
Scared	12	24
Discomfort	33	66
Emotional disturbance	3	6
Total	50	100

Source: Primary Data

Discussion:

This table represents that the majority of the (66%) respondents said that they felt discomfort, nearly one fourth (24%) of the respondents said that they were scared and very small (6%) percentage of the respondents said that they were emotionally disturbed, and least percentage (4%) of the respondents were happy.

Table: 15 Percentage distributions of the respondents menstrual symptoms

Menstrual symptoms	Respondents	Percentage
Yes	50	100
No	-	-
Total	50	100

Source: Primary data

Discussion:

From this table we observed that the cent percentage (100%) of the respondents was said that they have menstrual symptoms during their menstrual period.

Table: 16 Percentage distributions of the respondent's regularity to school

Regularity to school	Respondents	Percentage
Yes	45	90
No	5	10
Total	50	100

Source: Primary Data

Discussion:

This table shows that the regularity of students to the school during their menstrual time. From the table majority (90%) of the respondents said that they maintain regularity to school. one tenth of the respondents (10%) said that they didn't attend school during their menstrual time.

Table: 17 Percentage distributions of the respondents why they don't maintain the regularity to school

Problems to attend School	Respondents	Percentage
Lack of toilets	13	26
Fear of unexpected bleeding	37	74
Total	50	100

Source: Primary Data

Discussion:

From the table majority (74%) of the respondents said that they were not attending the school because of the fear of unexpected bleeding. More than one fourth (26%) of the respondents said that the lack of toilets is the cause of respondents who are not attending the school during their menses time.

Table: 18 Percentage distributions of the respondents attitude facing the restrictions they were facing during menses time

Restrictions	Respondents	Percentage
Yes	46	92
No	4	8
Total	50	100

Source: Primary Data

Discussion:

From the table majority (92%) of the respondents were facing the restrictions during their menstrual time. Very small (8%) percentage of the respondents was said that they are not facing any restrictions.

Table: 19 Percentage distributions of the respondents which type of restrictions were facing

Types of restrictions	Respondents	Percentage
Avoiding festivals	17	34
Avoiding certain food	-	-
Avoiding housework	-	-
All the above	33	66
Total	50	100

Source: Primary Data

Discussion:

From the table majority (66%) of the respondents was facing given all types of restrictions that mean avoiding festivals and celebrations, avoiding certain food and house works. More than one third (34%) of the respondents said that they only avoid festivals and celebrations.

SECTION – IV PRACTICE ON MENSTRUAL HYGIENE**Table: 20 Percentage distributions of the respondents using which type of absorbent materials**

Absorbent materials	Respondents	Percentages
Sanitary pads	50	100
Cloth	-	-
Toilet roll	-	-
Total	50	100

Source: Primary Data

Discussion: This table reveals that which type of absorbent materials are used by the respondents to absorb the menstrual blood. From the table the cent (100%) percentage of respondents was using sanitary pads as the absorbent material to absorb the menstrual blood.

Table: 21 Percentage distributions of the respondents frequency of changing absorbent materials

Frequency of Absorbent materials	Respondents	Percentages
Once	5	10
Twice	34	68
Thrice or more	11	22
Total	50	100

Source: Primary Data

Discussion: From the table majority (68%) of the respondents were changing their absorbent materials twice per Day. More than one fifth (22%) of the respondents changing their absorbent materials thrice per day. One tenth (10%) of the respondents changes only once in a day.

Table: 22 Percentage distributions of the respondents practice for disposing the used pads

Material for disposing	Respondents	Percentages
Papers	30	60
Plastic cover	20	40
Total	50	100

Source: Primary Data

Discussion: This table represents that which type of material is used by the respondents for the disposing the absorbing material. From the table majority (60%) of the respondents were using papers to wrap the used pads. Two fifth of the respondents were using plastic covers for disposing.

Table: 23 Percentage distributions of the respondents where did they dump

Dumping of the used	Respondents	Percentage
Toilets	7	14
Dust bins	43	86
Total	50	100

Source: Primary Data

Discussion: From the table majority (86%) of the respondents were using dustbins for dumping. More than one tenth (14%) of respondents dumping their absorbent material in toilet.

Table: 24 Percentage distributions of the respondents' opinion personal hygiene during menstruation

Personal hygiene	Respondents	Percentage
Yes	50	100
No	-	-
Total	50	100%

Source: Primary Data

Discussion:

From the table cent (100%) of the respondents said that they clean their genitalia during their menstrual period.

Table: 25 Percentage distributions of the respondents using agents to clean their genital area

Cleaning agents	Respondents	Percentage
Water	5	10%
Soap	39	78%
Liquids	6	12%
Total	50	100%

Source: Primary Data

Discussion: From the table majority (78%) of the respondents were said that they were using soap to clean their genitalia, above one tenth of (12%) respondents using liquids and one tenth (10%) of the respondents using only water to clean their genitalia area during their menstrual time.

Major findings of the study

I. Socioeconomic and Demographic Profile

- The majority (48%) of the respondents were in the age group of 14 years.
- Half of the respondents (50%) were in the in the 8th grade, and the remaining half (50%) were in the in the 9th grade.
- The majority (74%) of the respondents belonged to the Hindu religion.
- The majority (78%) of the respondents were from nuclear families.
- The majority (40%) of the respondents father-level education was none or primary school education.
- The majority (52%) of the respondent's mother's education level is illiterate.

Section-II Knowledge about menstruation

- The majority (88%) of the respondents said that menstruation is a physiological process.
- The majority (96%) of the respondents said that menstruation is caused by the hormones in our body.
- The majority (98%) of the respondents said that the source of menstrual blood is the uterus.
- The majority (96%) of the respondents said that their normal cycle length is 21–30 days.
- The majority (86%) of the respondents said that their age for menarche is 13–15 years.
- The majority (54%) of the respondents said that they were aware of the menstruation before the menarche.
- The majority (98%) of the respondents said that their mothers are the source of information about menstruation.

SECTION-III Attitude toward menstruation

- The majority of the respondents (66%) said that they felt discomfort at their first menses.
- A hundred percent (100%) of the respondents said that they had menstrual symptoms during their menstrual period.
- The majority (90%) of the respondents said that they maintain regularity at school at their menstrual time.
- The majority (74%) of the respondents said that they were not attending school because of the fear of unexpected bleeding.
- The majority (92%) of the respondents were facing restrictions during their menstrual time.

- The majority (66%) of the respondents were given all types of restrictions, including avoiding festivals and celebrations, certain foods, and housework.

SECTION – IV Practice menstrual hygiene.

- 100 percent of respondents were using sanitary pads as the absorbent material to absorb the menstrual blood.
- The majority (68%) of the respondents were changing their absorbent materials twice per day.
- The majority (60%) of the respondents used paper to wrap the pads.
- The majority (86%) of the respondents were using dustbins to dump the used pads.
- 100 percent of the respondents said that they clean their genitalia during their menstrual period.
- The majority (78%) of the respondents said that they were using soap to clean their genitalia.

Suggestions for further studies

- A similar study has to be conducted with a large sample.
- A comparative study on the menstrual knowledge, attitude, and practices of adolescent girls in rural and urban areas should be done.
- A study on the menstrual knowledge, attitude, and practices of girls and adult women with a larger sample size will provide more information.

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