ABSTRACT

Background: Adolescence is a transition period from childhood to adult life. It is characterized by pubertal development and sexual maturation, thus making physiological development a challenge for the adolescents. There is a substantial lacuna in the knowledge towards menstruation among adolescent girls. Menstrual hygiene and management is a serious issue, which is insufficiently acknowledged and has not received adequate attention. Most of the adolescent girls have experienced some problems associated with menstruation, which might indirectly have in their academic excellence, sports and their self-esteem.

Objective: This study aims to assess the knowledge and practices regarding menstruation among adolescent girls.

Methods: A mixed method study was carried out among 29 adolescents Girls of Balda village of Koraput district, Odisha.

Results: Out of total girls interviewed, 30% of the girls had some idea regarding menarche and associated precaution. 70% of girls came to know about it only after attaining menarche. Dysmenorrhea was the most common problem faced during menstruation. They were being restricted in all types of holy works. They were not allowed to touch male persons during menstruation. 31.6% girls used sanitary napkins. Adolescent girls and their family members were still sacrificing animals to prevent any health issues regarding menstruation. 20% respondents preferred to go to the hospital.

Conclusion: It was clear that the adolescent girls are not aware of menstruation and maintenance of proper health and hygiene. For the enhancement of the knowledge regarding menstruation and related health problems, regular awareness programmes should conducted with the help of ASHA worker, Anganwadi worker and others.

Key words: Knowledge, Menstrual Hygiene, Restrictions, Traditional Practices.

INTRODUCTION

The human body passes through different stages is called human life cycle. It passes through 12 stages. The major stages of human life cycle include pre-birth, birth, infancy, childhood, middle childhood, late childhood, adolescence, early adulthood, midlife, mature adulthood, late adulthood, death and dying life. Among all the 12 stages adolescence is the most vital stage of human life. Many changes occur during this time. According to WHO, the age of adolescent girls range from 10-19 years (WHO, 2013). Adolescence is a decisive age for girls around the world (UNFPA, 2012). Menstruation is the monthly discharge of blood and mucosal tissue from the interline of uterus to the vagina. The beginning of menstruation in a girl marked the start of reproductive life. The menstrual
period is a natural phenomenon that occurs throughout the reproductive life of every female (Busari, 2012).

The onset of menstruation cycle is called menarche. Menarche is the indicator of sexual maturation of a female. Menarche age is affected by genetic and environmental causes, including nutrition. Puberty is a natural developmental issue, common to nutrition and health (De, 2016). Menstruation is generally considered as polluted in the Indian society. There are many myths and beliefs behind the menstruation. In India, it has been a taboo in the past and even to this date. It is still considered dirty and impure or polluted. The origin of this myth has came from Vedic times and it is often been linked to Indira’s slaying of vritras. It has been declared in the Veda that guilt, of killing a Brahma-murder, appears every month as menstrual flow (Garg and Anand, 2015). There are many restrictions regarding to menstruation in Indian society. Menstruating girls and women are not allowed to kitchen and to cook the food. Women and girls are restricted to enter the worship room and temple during the menstruation. They are also restricted from offering prayers and touching holy books, trees, and flowers. It is also considered as the shameful and embarrassing moment in the society.

In some society, menstrual blood is believed to be dangerous. In some part of India, it is also believed that a woman can use her menstrual blood to impose her will on a man (Garg and Anand, 2015). In Indian society, some followed the restriction on some food taking during menstruation. Sour foods like curd, pickles, tamarind are restricted to eat. There is a belief that, such foods will disturb the menstrual flow. A menarche ceremony is organized in some places for the young woman who attains her menarche. A grand party is held where relatives and neighbours are invited. People acknowledge the menarche ceremony with gifts for the young woman/adolescent girl to welcome her to the new phase.

One of the most important health concerns among the adolescent girls in our country is undernutrition and anaemia. During the years of menstruation, iron needs are a special nutritional concern. Since iron travels through the blood, some of it is lost with the loss of blood. Therefore, it is common for the adolescents to become iron deficit or anaemic. Maintenance of good hygiene during menstruation is important. Poor menstrual hygiene and early sexual exposure can lead to reproductive tract infections. Tubal infection may lead to tubal breakage and infertility later.

Objective: This study aims to assess the knowledge, attitude, and practices regarding menstruation among adolescent girls.

Study Area and Sample Selection
The study was conducted in the village Balda of Koraput District. There were mainly two communities in this village. They are Paraja and Rana. The study was focused on the menstrual knowledge and health care behaviour of the adolescent girls. Randomly 29 adolescent girls were chosen for the study. The study includes girls within the age limit 10-19 years.

METHODOLOGY
It was a time bounded and cross sectional study. Observation method was used to study their hygienic condition, health issues and socio-cultural notion. Personal interview was conducted to collect information about the adolescent girls, menstruation, health problems, hygiene, and rituals. The parents of adolescent girls and relatives were also included in the personal interview. The case study was taken to know about special cases like the ritual, health problem, and first menarche.

Limitation during the Data Collection
Many hurdles occurred during the fieldwork. Because, there were limited numbers of samples and many of the adolescent girls were not present during the fieldwork. Because of the differences in languages, there were communication issues. There were difficulties in collection
of data because of their social practices. The girls were also embarrassed to discuss anything about menstruation. Apart from this, majority of the parents of the adolescent girls were either daily wage labourers or farmers. Therefore, it was difficult to know their views regarding the adolescent girls since they were already off to work during the fieldwork.

RESULTS

30% of the girls already have some idea regarding menarche. They have got some idea regarding menarche from their friends, grandmother, Anganwadi worker, and ASHA worker; while 70% of the girls are completely unaware of it. They come to know about it only after attaining menarche at puberty. The secondary sexual characteristics start developing during this time. Initially, the girls who are not aware of it may be frightened or repulsed by their own menstrual flow. Their stress level increases after the menarche.

Table-1: Current Age of the Adolescent Girl in Balda Village

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>4</td>
<td>13.8</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>6.9</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>17.2</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>13.8</td>
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<tr>
<td>18</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table-1 shows the current age wise frequency of the adolescent girls included in this study. The highest percentages of girls were having the age group 14 years, followed by 11 and 17 years of ages, while 12 and 19 years have the lowest frequency.

The above pie chart (fig. 1) shows the educational status of the adolescent girls in Balda Village. It reveals that 10% of girls have studied up to primary level, 21% girls have studied up to upper primary level, 38% of girls have studied up to secondary level, and 14% have studied up to higher secondary level, whereas 17% girls are illiterate.

Fig-1: Educational Status of Adolescent girls in Balda Village

The above figure-2 shows the age of menarche of the adolescent girls. It shows that a maximum number of girls (44.8%) had attained their menarche at the age of 12 years followed by 13 years of age i.e. 31%.

Table-2: Mean age at Menarche

<table>
<thead>
<tr>
<th>Mean Age at Menarche (In years)</th>
<th>N</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td></td>
<td>12.4</td>
</tr>
<tr>
<td>Mode age</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

The above table-2 shows the mean age and mode age of the menarche. Here the mean age is 12.4 years and the mode age is 12. A maximum number of girls had
attained their menarche at the age of 12 years. The age of menarche among the adolescent girls of this village was 12 to 13.

**Socio-Cultural Perspective about the Menstruation**

There are mainly two communities in this village, Paraja and Rana (Paika). Both the communities have some socio-cultural practices regarding the menstruation. In their local language menstruation is called “Dandi” or “Acchuari”. When a girl attains her menarche, it is called “Bartaman” and the girl is called “Bartaman Jhia or Ghata Mandia”. They observe a puberty ceremony on the attainment of menarche, which is called “Uthani” in their local language. When a girl attains menarche, the family members go to traditional healers known as “Dishari” and who looks into the religious calendar “Panji”, and tells them about the rituals of the puberty ceremony. Dishari tells them as to which animal should be sacrificed. The animal may be hen / fowl or male goat, but its colour should be black. During the ceremony, girls are supposed to stay indoors for 7 to 9 days. This period of 7 to 9 days is known as pollutant period. After this period of 7 days, the family members and relatives take the girl to the river bank for a bath to purify her. Then the Dishari conducts the rituals and sacrifices animal in the river bank. After the completion of all these rituals in the river bank they return home and “Dishari” performs other rituals there. Once all the rituals are done, relatives and the people of the village are invited for a feast. Relatives come with gifts such as dress, pot (Garia), plate, rice, and others. The girls use pieces of clothes instead of using sanitary napkins, because they considered it as a sin (Papa) to go out and buy sanitary napkin. In “Paraja” community, the feast is not compulsory for them; it is up to their economic status. In their community, they either organise a grand celebration when the girl attains menarche or they offer coconut to God at home. However, for the ‘Ranas’, the puberty ceremony and the feast are compulsory. They have some socio-cultural restrictions regarding menstruation, such as prohibition from entering in to the kitchen and cooking. They are not allowed to take food by themselves, rather family members are supposed to serve food to them. They have to maintain distance from male persons. Menstruating girls are also not allowed to enter in to the temple and holy places or they are not permitted to worship any god and goddess. They do not eat Prasad during this time. They also follow some food restrictions. According to their tradition, they do not eat sour food and spicy food, such as pickles, tamarind and others. They also avoid sweets because they have a belief that sweets cause excess bleeding. They prefer to eat rice, jaggery (Guda), leafy vegetables (saga) during the menstruations. They do not cross the “Dhinki” (traditional wooden rice meal); because they believe that crossing the Dhinki causes excessive bleeding.

**Health and Hygiene**

Health and hygiene is the main priority of the adolescent girls. Earlier, they did not go to the doctor, they preferred “Dishari” for treatment. Now the situation is changing, if they are facing problems, they prefer hospital for their treatment. However, still today, their first preference is “Dishari”. When they suffer from irregular menstruation or any menstrual issues first go to Dishari, if it cannot cure then they go to ASHA worker or Anganwadi worker and at last go to the doctor with the help up the ASHA worker or Anganwadi worker. When they feel itching during the period, they use mustard oil with turmeric to cure it. Sometimes they tell to ASHA and Anganwadi worker and take necessary medicine for it. They are taking iron and calcium tablet from the Anganwadi worker.

Earlier, they did not maintain cleanliness and suffered from many diseases. They used to dry the clothes rapping it around their thigh by binding in a lace and used to wash it in normal water. But now they wash it in river or tube well using detergent and soap. They use rags (small
pieces of clothes). They feel embarrassed to buy pad or sanitary napkins. Few girls use the sanitary napkin. Now the government is supplying sanitary napkin to girls in very nominal prices.

**Health problem due to Menstruation:**

Both physical and psychological problem of the females have occurred due to deficiency of water in the body. Adolescent girls become emotional during this period. Girls feel dizzy and weak. Even they not feel good to do work. According to the field survey, they face lot of health problems like; abdominal pain, headache, breast swelling, tiredness, emotional imbalance, vomiting, not willing to take food, not interested to talk with others etc. Even they do not like getting close with their friends.

![First Time Preference for Treatment](image)

The above figure-3 shows the first time preference for the treatment of the Adolescent girl during menstruation. In spite of being literate respondents, 20.8% prefer for home remedies, 29.2% prefer to go to traditional healer, 37.5% prefer Auxiliary Nurse Midwife (ANM) and 12.5% prefer to go the hospital. Whereas, in the case of illiterate adolescent girls, out of 5 numbers, 60% prefer traditional healer and rest 40% mostly prefer to home remedies for treatment.

![Status of Using of Sanitary Napkin](image)

The above pie chart (fig. 4) shows that 65.5% of the girls use the sanitary napkin while the rest 34.5% use rags during menstruation. It has noted in the studied area that girls are feeling awkward to purchase the sanitary pad in a shop, due to their shyness. Often, their mother directly talked with the ASHA about this matter, and asked to buy the sanitary napkin for her daughter.

![Use of Commercial Sanitary Napkins](image)
The above graph (fig. 5) shows that only 8, out of 24 literate girls use sanitary napkin while the rest prefer rags and 2 out of 5 illiterate girls use sanitary napkin during menstruation. It proves that in spite of being literate, the majority of the girls prefer using rags instead of using the sanitary napkin.

**DISCUSSION**

Nearly all women, irrespective of age, had knowledge about menstruation prior to their own personal experience and a very few women, however, were deprived of prior knowledge on menstruation primarily because of their class position and cultural practices (Mishra, 2014). But in the present study 30% of the girls already have some idea regarding menarche. They have got it from their friends, grandmother, Anganwadi worker, and ASHA worker; while 70% of the girls are completely unaware of it before attaining the menarche. Ramachandra et al. (2016), explored the knowledge, practices and source of information regarding menstruation and hygiene among adolescent girls in Bangalore. There are 69% of the adolescent girls were using the sanitary napkins as menstrual absorbent, while 6% were using both cloth and sanitary napkins. In the present studied village Balda, 34.5% adolescent girls are using sanitary napkins where as 65.5% are using rags as menstrual absorbent. Madhusudan et al. (2014) were studying the knowledge and practice of menstrual hygiene among the secondary school girls, the age ranging between 13-17 years old, in rural Bangalore. Earlier they used to dry the clothes rapping it around their thigh by binding in a lace and used to wash it in normal water. But now they wash it in river or tube well using detergent and soap. The adolescent girls of this studied village feel embarrassed to buy pad or sanitary napkins. Few girls use the sanitary napkin. Now the government is supplying sanitary napkin to girls in very nominal prices (6 rupees). In South India and in general, a woman in menstruation is often considered a pollutant (Arole, 1995). Still now this ongoing practice is followed by the adolescent girls of Balda village. Menstruating girls are restricted to enter into the temple and kitchen. Even they don’t serve food for themselves; other members of family serve them food. During the menstruation, the adolescent girl keeps a distance from her father and brother because it is considered as sin (papa). The adolescent girl sleeps alone during the menstruation. Some food restrictions are also followed by the adolescent girls during menstruation. According to their tradition, they do not eat sour food and spicy food, such as pickles, tamarind, and others. They also avoid sweets because they have a belief that sweets cause excessive bleeding. They prefer to eat rice, jaggery (Guda), and leafy vegetables (saga) during the menstruations. They do not cross the “Dhinki” (traditional wooden rice meal); because they believe that crossing the Dhinki causes excessive bleeding.

**CONCLUSION**

Being literate, they do not have altered their traditional methods. Awareness should be raised among girls, parents, and others to upgrade the knowledge of hygiene and sanitation, and health regarding menarche, and also safety of the adolescent girls. Being the future mothers the adolescent girls should be given instructions regarding healthy practices.

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