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Age at Menarche and Menstrual Characteristics among the Munda Tribe of Jajpur District of Odisha: A Case Study

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Abstract:

The present study aims to estimate the age at menarche and study the menstrual characteristics of Munda women of Jajpur district of Odisha. The sample of 308 ever married women were taken by face to face interviewing them by using semi structured questionnaire. Descriptive statistics and cross tab were used to analysis the data. The mean age at menarche is 13.2 years. Only 29.9 % women used sanitary napkins. Most common menstrual problems were waist (40.77%) and abdominal pain (23.30%). 60.4 % women have regular monthly cycle and only 8.8 % women have irregular cycle. 62.7 % women have less than five days of menstrual bleeding and 7.8 % women have more than five days of menstrual flow. Celebration at the time of puberty was found to be negligible (0.3%). The present study suggests there is a need of increasing awareness among the women regarding the menstrual hygiene practices, taboos and the different physiological phenomenon associated with menarche.

Keywords: Age At Menarche, Menstrual Characteristics, Munda

1. Introduction

The time of first menstruation is called menarche. It is the physiological process, which enables a girl to become conceivable mother. Although it is a natural phenomenon but all religions across the world show restrictions on menstruating women (Bhartiya, 2013; Jogd and Argrude, 2011; Deshpande et al., 2018). Many societies celebrate menarche as a ritual at the time of first attainment of puberty. According to (Samanta et al., 2019;) the most commonly faced problem during menstruation are fatigue, stomach pain, waist pain, leg pain, joint pain, vomiting etc. At the time of menstruation women experienced different menstrual problems like dysmenorrhea, haemorrhage, irregular menstruation etc (Thakre et al., 2012; Verma et al., 2011; Singh et al., 2019). It is very important to maintain hygiene during the menstrual cycle. Women are still using old clothes during these days. But these menstrual hygiene practices are not satisfactory across the country. It has not changed much in rural areas (Verma et al., 2011; Madhumita et al., 2019; Deshpande et al., 2018). Acceptance of sanitary napkin during this period is not satisfactory because of the hesitation and financial problem (Bhartiya, 2013; Verma et al., 2011). Poor personal hygiene and un safe sanitary condition creates gynaecological problem (Ahuja et al., 2018). The duration of menstrual flow ranges within 4-6 days (Madhumita et al., 2019;). The mean age at menarche among Indian women is 13.77 years. Different studies across India shows the mean age



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at menarche varies in different populations (Verma, 2014; Mane et al., 2016; Khatoon et al., 2011; Kanotra et al., 2013; Wasnik et al., 2015; Sachan et al., 2017). It depends on various factors like nutritional, environmental, (Gokhale, 2015; Satapathy et al., 2015; Prakash et al., 2010) and ultimately affect the fertility. According to (Tarannuam et al., 2018; Samanta et al., 2019) the age at menarche is also associated with socioeconomic status of family. In many societies early age at menarche also determines the early age at marriage (Raj et al., 2015; Aryal, 2011).

2. Methodology

The present study is based on both primary and secondary sources of data collection. The data was collected from three phases of field work. The 1st phase of field work was one month duration i.e. from June 2018 to July 2018. The 2nd phase is during four months of field work from September to December 2018 and the last phase of field work was conducted in the month of October 2019. An attempt has been made to collect data from every married women of Munda community of Kalinganagar area of both rehabilitated and native villages i.e. Gobarghati, Sansilo, Purunapani, Golakpur, Barpal, Haridabahali Upper, Haridabahali lower and Palaskhali villages of Sukinda block of Jajpur district of Odisha. The data were collected from 308 ever married Munda women of all ages. The study was done by interview technique, using pre-tested schedule questionnaire. The menstrual status such as age at first menstruation, duration of menstrual flow, nature of menstrual cycle, intervals between the menarcheal cycle, menstrual hygiene, different menstrual problems, celebrations and taboos among the Munda women were assessed through face to face interviewing all the Munda women. Besides that the sociodemographic profile regarding family type, income, educational background and occupational status of the respondents were also obtained. The raw data was coded then, the data was statistically analysed by using SPSS software. During analysis descriptive statistics and crosstab was applied for frequency calculation and for mean calculation descriptive statistics was applied. After analysis the resulted data are compared with other sources of secondary data.

3. Results and Discussion

Table 3.1 Family type of Munda women

Village		Total		
	Nuclear Joint Extended		N (%)	
	N (%)	N (%)	N (%)	
Native Village	130 (42.2)	22 (7.1)	3 (1.0)	155 (50.3)
Rehabilitated	93 (30.2)	53 (17.2)	7 (2.3)	153 (49.7)
Colony	93 (30.2)	33 (17.2)	1 (2.3)	133 (43.7)
Total	223 (72.4)	75 (24.4)	10 (3.2)	308 (100.0)

 $X^2=20.540$, df=2,p=.000

Table 3.1 revels different types of family observed among the Munda communities. In the above community 72.4 percent families are nuclear family. 24.4 percent families are joint and only 3.2 percent extended families are seen. But when we compare both native and rehabilitated Munda community it is observed that both joint and extended families percentage are high in rehabilitated colonies.



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Table 3.2: Educational status among the Munda women

Village		Education of female					
	Illiterate	Primary	Middle	High school	Higher	Graduation	
		$(1-5^{th})$	(6-7th)	(8-10th)	secondary		
					(+2)		
Native	138(44.8)	7(2.3)	1(0.3)	8(2.6)	1(0.3)	0(0,0)	155
village	130(44.0)	7(2.3)	1(0.5)	0(2.0)	1(0.3)	0(0.0)	(50.3)
Rehabilitated	107(34.7)	8(2.6)	5(1.6)	18(5.8)	13(4.2)	2(0.6)	153
colony	107(34.7)	0(2.0)	3(1.0)	16(3.6)	13(4.2)	2(0.0)	(49.7)
Total	245(79.5)	15(4.9)	6(1.9)	26(8.4)	14(4.5)	2(0.6)	308
Total	243(19.3)	13(4.9)	0(1.9)	20(0.4)	14(4.3)	2(0.0)	(100.0)

 $X^2=22.776$, df=5, p=.000

Table 3.2 shows educational status of women of Munda tribe. It is observed that 79.5 percent females are illiterate. Only 0.6 percent females have completed graduation, 4.5 percent women have completed higher secondary education, and 8.4 percent have completed high school. While 4.9 percent women have completed primary education. The educational status of rehabilitated colony is better than the native villages. The result found to be statistically significant ($X^2=22.776$, df=5, p=.000).

Table 3.3: Monthly income of Munda Tribe

-							
Village		Income					Total
	< 5000	5100-	10100-	20100-	30000-	>5000	
		10000	20000	30000	50000	0	
Native village	85(27.6)	50(16.2)	16(5.2)	2(0.6)	2(0.6)	0(0.0)	155
Nauve village	03(27.0)	30(10.2)	10(3.2)	2(0.0)	2(0.0)	0(0.0)	(50.3)
Rehabilitated colony	36(11.7)	23(7.5)	45(14.6)	29(9.4)	13(4.2)	7(2.3)	153
Kenabintated colony	30(11.7)	23(7.3)	43(14.0)	29(9.4)	13(4.2)	7(2.3)	(49.7)
Total	121(39.	73(23.7)	61(19.8)	31(10.1)	15(4.9)	7(2.3)	308
Total	3)	73(23.7)	01(19.8)	31(10.1)	13(4.9)	7(2.3)	(100.0)

 $X^2=82.192$, df=5, p=.000

Table 3.3 shows that the monthly earnings of 39.3 percent Munda women are found to be less than Rs 5000 rupees. 23.7 percent women are coming under the income category 5100-10,000. Whereas only 4.9 percent women are coming under high income category i.e., 30,000-50,000. Again it shows that only rehabilitated Munda have coming under the very high income category i.e. >50000. When compare both the community, it shows the rehabilitated Munda have better income status than native Munda. The difference in monthly income among the two areas are statistically significant (X^2 = 82.192, df=5, p=.00).



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Table 3.4 Occupational status among the Munda women

Village		Occupation					Total
	Agricultural	House	Service	Business	Cook	ASHA &	N (%)
	labourer & Daily	wife	N (%)	N (%)	N (%)	Anganwadi	
	wage labourer	N (%)				worker	
	N (%)					N (%)	
Native villege	93 (30.2)	48	1 (0.3)	9 (2.9)	2 (0.6)	2 (0.6)	155
Native village		(15.6)					(50.3)
Rehabilitated	20 (6.5)	126	2 (1 0)	4 (1.2)	0 (0.0)	0 (0.0)	153
colony	20 (0.3)	(40.9)	3 (1.0)	4 (1.3)	0 (0.0)	0 (0.0)	(49.7)
Total	112 (26.7)	174	4 (1.2)	12 (4.2)	2 (0.6)	2 (0.6)	308
Total	113 (36.7)	(56.5)	4 (1.3)	13 (4.2)	2 (0.6)	2 (0.6)	(100.0)

 $X^2=89.039$, df=5,p=.078

Table 3.4 reveals different type of occupation of Munda women. It is observed that half of the women (56.5%) engage in daily household activities like housewife. 36.7 percent women work as daily wage labour and agriculturalist. Only 1.3 percent women having services. Women with occupation like business and cook comprises 4.2 percent and 0.6 percent respectively.

Table 3.5 Age at menarche among the Munda women

Village		Age at menarche					
	10	11	12	13	14	15 and	N (%)
	N (%)	N (%)	N (%)	N (%)	N (%)	above	
						N (%)	
Native village	0.0)	6 (1.9)	58 (18.8)	61 (19.8)	22 (7.1)	8 (2.6)	155 (50.3)
Rehabilitated colony	1 (0.3)	9 (2.9)	32 (10.4)	66 (21.4)	41 (13.3)	4 (1.3)	153 (49.7)
Total	1 (0.3)	15 (4.9)	90 (29.2)	127 (41.2)	63 (20.5)	12 (3.9)	308 (100.0)
Mean age at menarche 13.02							

 $X^2=16.359$, df=5,p=.006

Table 3.5 shows the mean age at menarche among the Munda women is 13.02 years. It is observed that the early menarche is seen among the women of rehabilitated colonies i.e at 10 years of age. Most of the women have (41.2 %) experienced menarche at 13 years of age. Only 3.9 percent women have puberty in the age group of 15 years and above age. While in the age group of 11, 12 and 14 years the percentage are 4.9 %, 29.2% and 20.5 respectively.

Table 3.6 Mean age at menarche in different population of India with the present community

Different population of India	Mean age at menarche in	Sources	
	years. (%)		
Munda, Jajpur	13.2	Present study	
North Zone			
Ambala, Haryana	13.65	Choudhury and Talwar, 2016	



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Punjab	14.3	Pathak, Tripathy and
-		Subramaniam, 2014
Gaddi tribe, Himachal	15.23	Khan et al., 2017
Pradesh, North India		
Lucknow, Uttar Pradesh	12.43	Khatoon et al., 2011
Ghaziabad, Uttar Pradesh	12.24	Saxena,2014
Aligarh	12.52	Tarannum et al., 2018
South Zone	1	,
South India	13.1	Omidvar et al., 2018
Kanjarbhat women of Karnataka	13.05	Mane et al., 2012
Lamani women of Karnataka	13.19	Mane et al., 2012
Davangere	12.14	Mane et al., 2016
Iruliga women of Mysore,	13.93	Dakshayani et al ., 2007
Karnataka		
Udupi Taluk tribal community of	13.69	Kamath et al., 2013
Karnataka		
Rural Puducherry	15.52	Hema Priya et al., 2017
Rural Tamil Nadu	12.67	Priya et al., 2016
East Zone	•	
Khasi girls of Meghalaya	13.22	Deb, 2011
DibongiaDeoris of Assam	13.85	Borah & Sengupta, 2015
Sikkim	12.52	Pandey and Pradhan, 2017
DangriaKondh, Odisha	12.74	Nanda and Dhar, 2017
Mankidia, Odisha	12.6	Nayak and Das, 2014
Juang, Odisha	12.7	Kanrar and Goswami, 2020
Bhumij, Odisha	12.6	Satapathy et al., 2015
Bathudi, Odisha	13.5	Do
Sabara, Odisha	12.9	Do
Rajbanshi community,West	12.52	Sinha et al., 2020
Bengal		
Santal, West Bengal	12.80	Parvin and Kundu, 2018
Schedule tribe of Birsingha, West	11.81	Roy et al., 2021
Bengal		
Yerukula tribe, Andhra Pradesh	11.09	Prakash, 2020
North Bihar	12.33	Kiran et al., 2020
West Zone		
Saoner, Nagpur	12.85	Thakre etal., 2011
Maharashtra	13.7	Raj et al., 2015
Buldana, Maharashtra	13.44	Adhao et al., 2020
Gujarat	14.90	Mitra et al., 2015
Central Zone		



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Bhatra women, Bastar,	12.83	Verma and Verma, 2014
Chhattisgarh		
Dhur Gond tribal community,	13.84	Chandraker et al., 2009
Chhattisgarh		
Saharia tribe, Madhya Pradesh	13.5	Biswas and Kapoor, 2004
Baiga, Madhya Pradesh	13.27	Gautam et al., 2008

Table 3.6 shows a comparative analysis of mean age at menarche among the present community with the other communities of India. The mean age at menarche among Bhatra women of Bastar, Chhattisgarh is 12.83 years (Verma and Verma, 2014), in Punjab 14.3 years (Pathak, Tripathy and Subramaniam, 2014), in Ambala, Haryana, it is 13.65 years (Choudhury and Talwar, 2016), in Lucknow, Uttar Pradesh, it is 12.43 years (Khatoon et al., 2011), Aligarh 12.52 years (Tarannum et al., 2018), in Davangere, india12.14 years (Mane et al., 2016), among Iruliga women of Mysore, Karnataka is 13.93 years (Dakshayani et al., 2007), Kanjarbhat and Lamani women of Karnataka is 13.05 and 13.12 respectively (Mane et al., 2012). While among Dhur Gond tribe the mean age at menarche is 13.84 years (Chandraker et al., 2009), among Baiga community it is 13.27 years (Gautam et al., 2008). Like this the mean age menarche among the other tribes (Dangaria Kondha, Bhumij, Sabara, Juang, Mankidia etc) of Odisha are shows comparatively early, in comparison to the present tribe.

Table 3.7 Use of sanitary napkin among the women

Village	Sanitar	Total	
	Yes No		N (%)
	N (%)	N (%)	
Native village	6 (1.9)	149 (48.4)	155 (50.3)
Rehabilitated colony	86 (27.9)	67 (21.8)	153 (49.7)
Total	92 (29.9)	216 (70.1)	308 (100.0)

 $X^2=100.686,df=1,p=.000$

Table 3.7 shows use of sanitary napkin at the time of menstruation. It is observed that 70.1 percent women do not use sanitary napkin during menstruation and only 29.9 percent women use sanitary napkins. When we compare both communities it reveals that 27.9 percent women of rehabilitated colony use sanitary napkins whereas the percentage is very low in native villages i.e 1.9 percent only.

Table 3.8 Celebration at the time of puberty

Village	Celebration	Total	
	Yes No		N (%)
	N (%)	N (%)	
Native village	1 (0.3)	154 (50.0)	155 (50.3)
Rehabilitated colony	0 (0.0)	153 (49.7)	153 (49.7)
Total	1 (0.3)	307 (99.7)	308 (100.0)

 X^2 =.990, df=1, p=.320



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Table 3.8shows celebration at the time of 1st attainment of puberty among the Munda It is observed that puberty celebration is only seen in native village and the percent is 0.3 which is negligible.

Table 3.9 Nature of menstrual cycle among the Munda women

Nature of menstrual cycle	,	Village		
	Native village	Rehabilitated colony	N (%)	
	N (%)	N (%)		
Regular	88 (28.6)	98 (31.8)	186 (60.4)	
Irregular	13 (4.2)	14 (4.5)	27 (8.8)	
Amenorrhoea	1 (0.3)	1 (0.3)	2 (0.6)	
Lactate	22 (7.1)	14 (4.5)	36 (11.7)	
Pregnant	8 (2.6)	4 (1.3)	12 (3.9)	
Menopause	23 (7.5)	21 (6.8)	44 (14.3)	
Once in life	0 (0.0)	1 (0.3)	1 (0.3)	
Total	155 (50.3)	153 (49.7)	308 (100.0)	

 $X^2=4.764$, df=6, p=.574

Table 3.9 shows nature of menstrual cycle now among the Munda women. It is observed that 60.4 percent women have regular cycle, 8.8 percent women have irregular cycle, 11.7 percent women were lactate, 3.9 percent women are pregnant, 14.3 percent women get menopause. 11.7 percent women were lactate, 3.9 percent women are pregnant, 14.3 percent women get menopause. Only 0.6 percent women found amenorrhoea. Only one woman in rehabilitated colony has menstruation once in her life.

Table 3.10 Problem during menstrual cycle among the women

Problem during menstrual		Total	
cycle now	Native village Rehabilitated colony N (%)		N (%)
	N (%)		
Yes	56 (18.2)	47 (15.3)	103 (33.4)
No	99 (32.1)	106 (34.4)	205 (66.6)
Total	155 (50.3)	153 (49.7)	308 (100.0)

 $X^2=1.012$, df=1, p=.314

Table 3.10 shows problem during menstrual cycle among the women. It is observed that 33.4 percent women have menstrual problem and 66.6 women do not have any problem. The problems are slightly high among native women in comparison to rehabilitated women.

Table 3.11 Different type of problems during menstrual cycle suffer by the women

Common problems	Community	Source
Waist pain (40.77%), stomach pain (23.90%), leg pain	Munda	Present study
(1.94%)		
Tiredness (47.9%), back pain (38.3%), anger (34.5%)	Mysore, South India	Omidvar and
		Begum, 2011
Stomach pain (32.5%), nausea and vomiting (1%), excessive	Sultanpur, Uttar	Ghimire et



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bleeding (18.5%).	Pradesh	al.,2013
Stomach pain(62.6%), back pain (42.6%), leg pain (37.8%),	Chandigarh, Punjab	Kumar et al.,
head ache (42.6), nausea and vomiting (4.5%), weakness		2016
(22.9%)		
Stomach pain(81.3%),cramp (28.5),back pain (11%),	Amaravati,	Wasnik et al.,
headache (6.6%), depression(2.5%)	Maharashtra	2015
Head ache (11%), giddiness (9.2%), sleeplessness (2.5%),	Urban, Puducherry	Lakshman et
nausea and vomiting (2.5%)		al.,2019
Head ache /joint pain (13%),	Thiruvananthapuram	Beevi et al.,
weakness/breathlessness(21.4%), breast tenderness(3.8%) etc		2017
Head ache (12.2%), breast tenderness (7.9%), cramp	South India	Omidvar et
(8.0%),vomiting(8.1%), back pain(40.1%),tired ness (56.8%)		al.,2016
etc.		
Head ache (14.2%), breast tenderness (3.4%), cramp	Urban, South India	Omidvar et
(3.2%),vomiting(5.0%), back pain(27.6%),tired ness (50.1%)		al.,2018
etc.		
Stomach pain(35%), weakness (10%), backpain (6%),	Wardha, Maharashtra	Kanoje and
legpain(4%), hand pain (2%)etc.		Deshpande,
		2019
Stomachpain(44.8%),tiredness(40%),head ache	Ambala, Haryana	Choudhary and
(10.6%),vomiting(6.5%),body ache(7.7%) etc		Talwar
		, 2016
Stomach pain (63.5%), nausea (41.5%), leg pain (12%),	Gujjar, Jammu &	Dhingra et al.,
headache (7.5%) etc	Kashmir	2009

Table 3.1 shows different types of problems experienced by the Munda women of present community and the other women of different parts of India, during their monthly cycle.

Table 3.12 Duration of menstrual period among the women

Duration of menstrual period in days	Village		Total
	Native village	Rehabilitated colony	N (%)
	N (%)	N (%)	
<5	87 (28.2)	106 (34.4)	193 (62.7)
>5	17 (5.5)	7 (2.3)	24 (7.8)
Infertility	0 (0.0)	1 (0.3)	1 (0.3)
O(lactact)	20 (6.5)	14 (4.5)	34 (11.0)
0(pregnant)	8 (2.6)	4 (1.3)	12 (3.9)
0(menopause)	23 (7.5)	21 (6.8)	44 (14.3)
Total	155 (50.3)	153 (49.7)	308 (100.0)

 $X^2=9.508$, df=5, p=.090

Table 3.12 shows duration of menstrual period among the Munda women. It is observed that 62.7 percent women have less than 5 days of menstrual bleeding and 7.8 percent women have more than 5 days of menstrual bleeding. When we compare both communities 5.5 percent women of native village



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have more than 5 days of menstrual bleeding and 2.3 percent women of rehabilitated colonies have more than 5 days of menstrual bleeding.

Table 3.13 Duration of menstrual cycle among the women

Duration of menstruation	Village		Total
cycle	Native village	Rehabilitated colony N (%)	N (%)
	N (%)		
Infertility	0 (0.0)	1 (0.3)	1 (0.3)
28-35	92 (29.9)	95 (30.8)	187 (60.7)
35 above	13 (4.2)	18 (5.8)	31 (10.1)
<28	1 (0.3)	0 (0.0)	1 (0.0)
O(lactact)	18 (5.8)	14 (4.5)	32 (10.4)
0(pregnant)	8 (2.6)	4 (1.3)	12 (3.9)
0(meno)	23 (7.5)	21 (6.8)	44 (14.3)
Total	155 (50.3)	153 (49.7)	308 (100.0)

 $X^2=4.476$, df=6, p=.574

Table 3.13 shows duration of menstrual cycle among the women. It is observed that 60.7 percent women have regular menstrual cycle i.e 28-35 days. 10.1 percent women have irregular cycle i.e 35 and above days. Only one woman in native village having early menstrual cycle.

3.1 Discussion

Demographic profile

The time of first menstruation is called as menarche. In this Munda community, it is called *Chanduria*. In the present study, the average age at menarche is 13.2 years. In the rehabilitated colony, comparatively early menarche is seen in the age group of 10 years because of high income and better nutrition than native village. Hence, it is proved that the people of higher socio-economic condition show lower age of menarche and the people with lower socio-economic condition shows higher age of menarche (Khalid et al., 2015; Saxena, 2014). The age at menarche varies in different population of India as shown in the table 3.6. Geographic differences, environmental status, food habits as well as socio-economic status may be the reason for variation in the age at menarche of women of different parts of the Country.

Menstrual hygiene, celebration and restrictions

It is very crucial to maintain hygiene during the menstruation. In rural areas, most of the people, are still using old cloths instead of sanitary napkins (Madhumita et al., 2019; Deshpande et al., 2018; Santra, 2017). This is found to be true in the present study too. As shown in the table 3.7 that 70.1 percent women are not using sanitary napkins during menstruation. They use old clothes during these days. And after using it once, they clean the clothes with soap/ detergent and again use it. Only 29.9 percent women use sanitary napkins. Out of which the percentage is high (27.9) in rehabilitated colonies and very low (1.9) in native villages. Due to poor financial condition and lower awareness regarding menstrual hygiene and associated illness, native people don't want to spend money for buying sanitary napkins. The Government of Odisha have launched Khusi Scheme to improve menstrual hygiene of the state at ground level. At community level, usually the ASHA and at school level, generally, the female



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teacher should provide the information regarding menstrual hygiene. But in this community, illiteracy and negligence of ASHA is the reason of less acceptance of sanitary napkin in village level. On the other hand, the rehabilitated Munda have economically sound. So, some women afford sanitary napkins there. Another reason is after rehabilitation, the houses of the rehabilitated colony are very close to each other and they have no private space for drying clothes which they use during menstrual days. They are hesitated to dry their cloths openly. So, some women in the rehabilitated colony prefer to use sanitary napkins, as it is easy to use and dispose. Hence, the present study proves the studies done by Tarannuam et al., 2018; Samanta et al., 2019., Bhartiya, 2013; Verma et al., 2011, that socio-economic status plays important role for choice of absorbent material during periods by the women.

Many parts of India, like Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Telangana, Assam, West Bengal, Odisha etc, people celebrate menarche, as a ritual at the time of first attainment of puberty. They welcome puberty through a ceremony called 'Ritu Kala Samskaram'.In Tamil Nadu, the celebration is called 'ManjalVizha', in Andhra Pradesh and Telangana, the function is called 'PeddamanishiPadaga', in Karnataka, it is popularly known as 'half saree' function. Whereas, in Assam, this celebration is called 'Tuloni Biya' (Goled, 2019; Qasim, 2019; Das, 2017). The celebration and restrictions are rarely seen in tribes (Satpathy et al., 2015; Tudu & Mohapatra, 2020), which is found to be true in the present study. The puberty celebration (*Chanduria*) is found to be negligible i.e., 0.3 percent (Table3.8). But they obey restriction regarding religious activities as well as sexual activities till seven days. At the end of period, the girl take a birth applying turmeric paste and oil. Her family host small feast for the relatives (Tudu & Mohapatra, 2020).

Nature of Menstrual cycle and different problems associated with it

In the present study, the nature of menstrual cycle of the Munda women and its associated problems at the time of menstruation, is discussed. It is observed (table 3.9) that 60.4 percent women have regular cycle, 8.8 percent women have irregular cycle. Only one woman in rehabilitated colony has experienced menstruation once in her life. Irregular menstruation leads to infertility in this community. The problem during menstruation is common in women. The most common problems in the study area are waist pain, stomach pain, leg pain, joint pain etc. The problem arises due to low nutrition and anaemia. The present population group has low nutrition level because they do not take proper diet. They consume only rice, green leaf, potato, dry fish and rice-beer (handia). The consumption of milk and fruits are rare or negligible amount. The consumption of vegetables and pulses are less. It is observed (Table 3.11) that 33.4 percent women face problems during the cycle. Out of which, the waist pain is 40.77 percent and stomach pain is 23.30 percent. The result is significant. Different studies from the above table show the common menstrual problems suffered by the women during their menstrual period.

It is also observed that (Table 3.12) 62.7 percent women have less than 5 days of menstrual bleeding and 7.8 percent women have prolonged menses (>5days) during their period days. Similar study by Wasnik et al., 2015 shows the duration of blood flow within 5 days is 75.8 percent and more than 5 days is 24.2 percent. Again, it is observed that (Table 3.13) 60.7 percent women have regular menstrual cycle i.e., 28-35 days and 10.1 percent women have irregular cycle i.e., above 35 days. This study shows similarity of the study done by Kanotra et al., 2013, that 94.4 percent regular and 5.6 percent irregular cycle among adolescent girls of Bengal. Irregular menstrual cycle leads to different physical pain during menstrual days and it also one of the reasons of infertility of this community.



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4. Conclusion

It can be concluded from the above study that the mean age at menarche among the Munda women found to be 13.2 years. More than 60% women have regular menstrual cycle and less than 5days of menstrual flow. Most common menstrual problem was waist pain. Approximately 30% women used sanitary napkins during their menstrual cycle. Most of the women still using old cloths due to financial constraint and less awareness. So it is suggested that awareness and knowledge regarding menstruation and its management should be stretch in rural as well as semi-rural areas.

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