



## HEALTH STATUS OF RURAL AND URBAN ADOLESCENT GIRLS: A COMPARATIVE STUDY

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### Abstract

In general though the overall reproductive health status of many rural and urban slum adolescent girls are satisfactory still continuous monitoring should be carried out by the parents and health care providers to include the rest few.

**Key Words: Reproductive Health Status, Adolescents, Monitoring, Health Care Providers.**

### 1. Introduction

According to WHO, individual between 10-19 years are considered as adolescents. The period of transition from childhood to adulthood is called adolescence with accelerated physical, biological and emotional development. This transition phase makes them vulnerable to a number of problems such as general and reproductive health problems, psychological problems and sex-related problems. Growth spurt occurs during this period. The growth spurt of boys is slower than that of girls. Growth velocity is maximum for boys between 12-15 years and for girls between 10-13 years. The period of adolescence for a girl is a period of physical and psychological preparation for safe motherhood.

Adolescents constitute about 22.8% of India's population. The present study aim at comparing the reproductive health status of rural and urban slum adolescent girls in Odisha.

### 2. Objectives of the Study

1. To study the onset of menstruation and their reactions thereafter.
2. To assess the level of awareness and related indices.
3. To analyze their pre-menstrual syndromes and menstrual cycle.

### 3. Methodology

**3.1 Sample size:** Primary data is collected through questionnaires distributed to 75 rural and 75 urban slum adolescent girls belonging to 12-19 year of age group from 4 villages ( Tauntara, Sasanda, Dhia sahi and Arei) of Jajpur district and 4 slums( Haripur, Ambedkar Nagar, Malgodam and Railway Colony) of Rourkela city. The entire questionnaires were screened for errors, incomplete and missing responses.

**3.2 Sampling Method:** Purposive sampling method is used for collecting information with the help of questionnaires.

### 4. Analysis and Interpretation

**Table – 1: Respondents profile**

Particulars	Rural		Urban slums		Total Respondent
	Number	Percentage	Number	Percentage	
<b>Age</b>					
12-13 years	2	2.67	20	26.67	22
14-15 years	12	16	22	29.33	34
16-17 years	17	22.67	15	20	32
18-19 years	44	58.66	18	24	62
<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>
<b>Education</b> Illiterate	00	00	06	8	06
Below 5 <sup>th</sup> standard	00	00	14	18.67	14
Below 10 <sup>th</sup> standard	12	16	41	54.66	53
10 <sup>th</sup>	14	18.67	09	12	23
+2	13	17.33	03	4	16
Degree	36	48	02	2.67	38
<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>
<b>Marital status</b> -Married	07	9.33	10	13.33	17
Unmarried	68	90.67	65	86.67	133
<b>Total</b>	<b>75</b>	<b>100.00</b>	<b>75</b>	<b>100.00</b>	<b>150</b>

Source: Primary data



**Table – 2: Menarche and Reaction**

Variables	Rural		Urban slums		Total respondent
	Number	Percentage	Number	Percentage	
Age of menarche					
12 yr	33	44.59	29	38.67	62
13 yr	12	16.22	25	33.33	37
14 yr	23	31.08	16	21.33	39
15 yr	4	5.41	4	5.33	8
16 yr	0	00	1	1.33	1
17 yr	2	2.70	0	0	2
<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>
<b>Reaction about 1<sup>st</sup> menstruation</b>	<b>Number</b>	<b>Percentage</b>	<b>Number</b>	<b>Percentage</b>	<b>Total respondent</b>
Normal	10	13.51	11	14.67	21
Scared	37	50.00	50	66.66	87
Discomfort	27	36.49	14	18.67	41
<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>

\*(Only 1 rural girl of Sasanda village didn't have menarche)

It can be inferred that same proportionate of rural and urban adolescent girls about 92 per cent had their menarche by 14 years which indicate that their reproductive health status is satisfactory. Rest of them in both the settings had late onset of menarche which may be due to late growth spurt, inadequate hemoglobin level, hormonal imbalance or due to some other metabolic disorders. About 15 per cent girls in both the cases reacted normally at their first incidence of menstruation as they had full idea about menstruation beforehand or they were convinced by their family members to accept it as a natural and normal process. It is observed that more proportionate of urban girls (about 67 per cent) were scared in comparison to rural girls (about 50 per cent) but rural girls felt more discomfort in comparison to urban girls at the time of first menstruation.

**Table – 3: Awareness Level on Menarche and Physical Changes**

SL.No	Particular	Rural		Urban slum		Total respondent
		Number	Percentage	Number	Percentage	
a.	<b>Awareness on menarche and physical changes</b>					
	Fully aware	06	08	06	08	12
	Partially aware	64	85.33	53	70.67	117
	Not aware at all	05	6.67	16	21.33	21
	<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>
b.	<b>Sources of information on adolescent physical changes and menarche</b>	<b>Number</b>	<b>Percentage</b>	<b>Number</b>	<b>Percentage</b>	<b>Total respondent</b>
	Family	67	89.33	64	85.33	131
c.	Friends	06	8	6	8	12
	Book/Magazine	02	2.67	2	2.67	4
	Social media	00	0	3	4	3
	<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>
	<b>Concept about menstruation</b>	<b>Number</b>	<b>Percentage</b>	<b>Number</b>	<b>Percentage</b>	<b>Total respondent</b>
Natural process	29	38.66	40	53.34	69	
Diseases/Physical problem	00	00	13	17.33	13	
Internal bleeding for blood purification	46	61.34	22	29.33	67	
<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>	



It is noted from the above table that about 8 per cent of both rural and urban slum respondents are fully aware about menarche and the bodily changes which will occur thereafter. About 85 per cent of the rural and 71 per cent of urban slum respondents are partially aware whereas 7 per cent of rural and 21 per cent of urban slum girls are not aware at all. The level of awareness is more in adolescent girls living in rural areas in comparison to urban slum girls. They get the information mostly from the family members. More than 85 per cent of adolescent girls in both rural and urban slum expressed their view in affirmation to the above statement. The role of friends comes next and accounts for 8 per cent affirmation in both the areas.

About 39 per cent in rural area and 53 per cent in urban slum had the concept that menstruation is a natural process. Surprisingly more than 60 per cent of the rural adolescent girls had a notion that it is a process of internal bleeding for the purification of blood but is 30 per cent in case of urban slum girls. It means their knowledge regarding the physiology of women's reproductive system need to be strengthened.

**Table – 4: Pre-menstrual Distress**

SL.No	Particulars	Rural		Urban slum		Total respondent
		Number	Percentage	Number	Percentage	
a.	<b>Pre-menstrual suffering syndrome</b>					
	Yes	58	78.38	70	93.33	128
	No	16	21.62	5	6.67	21
	<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>
b.	<b>Level of pain</b>					<b>Total respondent</b>
	Mild	10	17.24	10	14.28	20
	Moderate	35	60.34	45	64.29	80
	Severe	13	22.42	15	21.43	28
	<b>Total</b>	<b>58</b>	<b>100</b>	<b>70</b>	<b>100</b>	<b>128</b>
c.	<b>Tolerance of pain</b>					<b>Total respondent</b>
	Neglect	2	3.45	11	15.70	13
	Tolerate	50	86.20	51	72.90	101
	Can't tolerate	6	10.35	8	11.40	14
	<b>Total</b>	<b>58</b>	<b>100</b>	<b>70</b>	<b>100</b>	<b>128</b>

\* (Only 1 rural girl of Sasanda village didn't have menarche)

The above table shows that 78 per cent of rural respondents expressed positive response to pre-menstrual suffering syndrome whereas in case of urban slum girls it is 93 per cent. The pre-menstrual syndrome includes backache, stomach pain, headache, irritability etc. When enquired about the level of pain, around 60 per cent of rural and 65 per cent urban slum girls expressed that they experience moderate level of pain. Severe pain is experienced by about 22 per cent of the respondents in both rural and urban set up. It is observed that 11 per cent of the total adolescent girls cannot tolerate the menstrual pain but 86 per cent of rural and 73 per cent of urban slum respondent are able to tolerate the menstrual pain

**Table – 5: Response on the basis of Menstrual Cycle**

SL.No	Variables	Rural		Urban slum		Total respondent
		Number	Percentage	Number	Percentage	
a.	<b>Menstrual cycle</b>					
	Regular	63	85.14	56	74.67	119
	Irregular	11	14.86	19	25.33	30
	<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>
b.	<b>Interval between two menstrual cycle</b>					<b>Total respondent</b>
	15-25 days	1	1.35	0	0	
	25-28 days	63	85.13	56	74.66	119
	More than once in a month	0	0	3	4	3
	Once in 2 month	5	6.76	14	18.67	19
	Once in more than 2 month	4	5.41	2	2.67	6
	Once in 6 month to 1 year	1	1.35	0	0	1
	<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>



c	Duration of menstrual cycle	Number	Percentage	Number	Percentage	Total respondent
	2-4 days	32	43.24	32	42.67	64
	5-7 days	36	48.65	38	50.67	74
	>7 days	6	8.11	05	6.66	11
	<b>Total</b>	<b>74</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>149</b>

It is observed that 85 per cent of rural girls have regular menstrual cycle against 75 per cent in urban slums. 25 per cent of urban slum girls were having irregular cycle against 15 per cent rural girls. It can be inferred that as the rural girls are physically active and laborious than urban girls, hence approximately a gap of 10 per cent more regularity in occurrence of menstruation cycle is visible in case of rural girls in comparison to urban girls. The interval between two menstrual cycle ranges between 25 to 28 days and 85 per cent rural and 75 per cent urban girls fall under this group. 6.7 per cent rural and 18.6 per cent slum girls are having their period once in two months which is not a healthy symptom. The duration of menstrual cycle ranges between 5 to 7 days in 48 per cent rural and 50 per cent slum girls. Approximately 43 per cent teen age girls in both rural and slum area stated that their cycle continue up to 4 days. Only 7 per cent girls were continuing their cycle for more than 7 days.

### Conclusion

This clearly brings to the fore that in general the adolescents age of menarche, duration of menstrual cycle and regularity in occurrence of menstruation etc. are satisfactory. Though the level of awareness of menarche and physical changes associated with it is more in adolescent girls living in rural areas in comparison to urban slum girls, still 3/5<sup>th</sup> of the rural girls had a notion that it is a process of internal bleeding which occurs to purify blood. Hence it can be inferred that their existing knowledge regarding functioning of women's reproductive system need to be strengthened. Initiatives should be taken to develop adolescent friendly health services by which a pro-active and well-knit society can be dreamt off.

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