Problems Of Menstruation Among Adolescent Girls in Urban and Rural Community of Kamrup District, Assam

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Abstract
Introduction
India has the largest population of adolescents in the world being home to 243 million individuals aged 10-19 years, A cross sectional community based study was conducted to assess the prevalence of menstrual problems among adolescent girls & to compare the prevalence of menstrual problems among adolescent girls . sample size was 700 adolescent girls.Multistage Stratified random sampling (probability sampling technique), Convenient and Purposive sampling technique (non probability sampling technique) were used to collect the data. Data was collected from Urban and Rural community of Kamrup district, Assam. The study was conducted in the year 2013- 2016 dat a were collected by using Interview schedule.Result: Data were analyzed and interpreted by using descriptive and inferential statistics. From the collected data it was found the following result, among Rural adolescent girls, the majority of adolescent girls 223 (63.7%) were found in the age group of 13-16 years Result on premenstrual problem among Rural and Urban adolescent girls, it was found that 78(22%) Rural adolescent girls and 78(22%) & Urban adolescent girls experience bloating and breast tenderness, 39 (11.1%) ,309(88.3%) rural adolescent girls experience dysmennorhea as compared to 324(92.6%) urban adolescent girls . Dysmenorrhoea and PMS were significantly more in urban than the rural girls (P=0.01). . It was found that demographic characteristics caste is found to be significant * Significant at (P<.05).It shows the association of pre menstrual problem with caste.The present study concluded that adolescent's girls experience many premenstrual and menstrual problems. This affects their daily life.

Keywords: Menstruation, menses, menarche, adolescent and menstrual hygiene.

Introduction

According to WHO, adolescence is defined as a person between 10 -19 years age. There is about 1.2 billion adolescence worldwide and one in every five people in the world is an adolescent[1]

India has the largest population of adolescents in the world being home to 243 million individuals aged 10-19 years, according to the UNICEF's flagship `The State of the World's Children' report 2011 the country's adolescents constituted 20 per cent of the world's 1.2 billion adolescents. According to the 2011 census Kamrup Metropolitan district has a population of 1,260,419. In 2011, Kamrup had population of 1,517,202 of which male and female was 779,608 and 737,594 respectively.[2]

Adolescence is a phase of rapid growth and development during which physical, sexual and emotional changes occur. One of the important changes occur during adolescence period in girls is menarche. Menarche typically occurs around age 12, although some youngsters start puberty when they are only eight or nine, others when they are well into their teens. The median age of menarche is 12.9 years. Normal menstrual cycles are characterized by a cycle length of 28 days (± 7 days), a duration of flow of 4 days (± 2 days), and a blood loss of 40 mL (± 20 mL). The mean volume of menstrual blood loss is 43 mL, with a normal range of 20-80 mL.[3]

Menstrual problems are generally perceived as only minor health concerns and thus irrelevant to the public health agenda, particularly for women in developing countries who may face life-threatening conditions .Various aspects such as physiology, pathology and psychology of menstruation have been found to associate with health and wellbeing of women; hence it is an important issue concerning morbidity and mortality of female population. On the other hand, hygiene-related practices during menstruation are of considerable importance for reproductive health, poor practices increase vulnerability to reproductive tract infections.

NEED FOR THE STUDY:

Today, every fifth person in India is an adolescent. The total estimated population of the world in 2010 is 6.91 billion. The number of persons in the age group 10-19 years is 1.19 billion. in India as per census 2011 , adolescent population is 253.2 million constituting 20.9 % of the total population .The absolute number of adolescents aged 10-19 years in India is 25,31,60473 as per census 2011.[4]

As per 2011 census India constitute 25, 32, 35,661 adolescent population. Of these 133.4 million boys and 119.8 are girls, constituting 52.7% and 47.3% of the adolescent population respectively Assam constitute 65,60308 total adolescent population , Of these 33,84,870 is male and 31,75,438 if female. Out of the total population 5,764 (21.5%) lives in Rural areas and 796 (18%) lives in Urban Community. [4]

OBJECTIVES OF THE STUDY

- To assess the prevalence of menstrual problems among adolescent girls in the urban community and rural community of Kamrup District, Assam.,
- To compare the prevalence of menstrual problems among adolescent girls between the urban and rural community of Kamrup District, Assam..
- To find out the association between menstrual problem with selected demographic variables

RESEARCH HYPOTHESIS:

1] There will be significance difference in menstrual problem score between the adolescent girls of urban and rural community of Kamrup district Assam. .

2] There may be significant association between menstrual problem with selected demographic variables

DELIMITATIONS:

The study is delimited to

- Assessment of Problems of menstruation in urban and rural community of Kamrup District, Assam
- Rural and Urban community of Kamrup District, Assam only.
- The study consisted of only 350 adolescent girls from rural Community and only 350 adolescent girls from Urban community of Kamrup District Assam.

MATERIALS AND METHODS

Research Approach

A quantitative descriptive approach was used.

Research design

The research design selected for this study was cross sectional design.

Population

The target populations in this study were all the adolescent girls in Urban and Rural Community of Kamrup District Assam.

The Accessible population in this study was adolescent girls between the age group 10-19 years who fulfilled the other designated criteria as a sample.

Sample and sample size: In this study the below mentioned formula was used to determine the sample size.

Calculating proportion

$$N = 4PQ/d2$$

Where,

- P = prevalence (from previous study)
- Q = 100-P
- d= allowable error (5-20% of P)

In the present study 700 adolescent girls (350 from urban community and 350 from rural community).

SAMPLING TECHNIQUE:

Multistage Stratified random sampling (probability sampling technique), Convenient and Purposive sampling technique (non probability sampling technique) were used to collect the data.

SETTING: Urban and Rural community of Kamrup district, Assam.

Urban community: Dhirenapara Maternal and Child Welfare Hospital.

Rural community: Boko Block Primary Health Centre, Hajo Block Primary Health Centre and Bezera Community Health Centre.

TIME : The study was conducted in the year 2013-2016

DATA COLLECTION INSTRUMENT

The following tool were developed to collect data

- Interview schedule

DATA ANALYSIS:

The data obtained were analyzed in terms of objectives of the study by using descriptive and inferential statistics. The data were analyzed as follows:

- Organized data in master sheet or computer.
- Personal data were analyzed in terms of frequencies and percentage.
- The prevalence of menstrual problems among adolescent girls in the urban community and rural community of Kamrup District, Assam were analyzed by frequencies and Percentage and presented in the forms table and diagram.

- Comparison of menstrual problems among adolescent girls between the urban and rural community of Kamrup District, Assam were analyzed by χ^2
- 'χ^2' test is used to determine the association

Result:

The analysis and interpretation of the data of the study are based on data collected through Interview schedule on problems of menstruation among adolescent girls (N =350 adolecsent girls from urban community, N=350 Adolescent girls from Rural community) Data were analyzed and interpreted by using descriptive and inferential statistics. The aim of the analysis was to organize and give meaning to the data. The data collected were tabulated on master sheet and analysed by using descriptive and inferential statistics .The data were analysed according to the objectives of the study.

The findings were presented under the following sections.

Section- I: Analysis of the demographic characteristics of Adolescent girls of Urban and Rural community, of Kamrup District Assam.

Section-II: Assessment of prevalence of menstrual problems among adolescent girls in the Urban community and rural community of Kamrup District, Assam

Section –III: Comparison of prevalence of menstrual problems among adolescent girls between the urban and rural community of Kamrup District, Assam.

Section- IV Association between menstrual problems with selected demographic variables

Section- I: Analysis of the demographic characteristics of Adolescent girls of Urban and rural community, of Kamrup District Assam

Table-1: Frequency and Percentage distribution of Demographic Characteristics

| Demography	Sub Group	Location		Total
		Rural	Urban	
		(N=350)	(N=350)	
Age (Yrs)	10-13 Yrs	32(9.1%)	71(20.3%)	103(14.7%)
	13-16 Yrs	223(63.7%)	200(57.1%)	423(60.4%)
	16-19 Yrs	95(27.1%)	79(22.6%)	174(24.9%)
Religion	Hindu	336(96%)	271(77.4%)	607(86.7%)
	Muslim	14(4%)	79(22.6%)	93(13.3%)
Caste	GEN	101(28.9%)	169(48.3%)	270(38.6%)
	OBC	127(36.3%)	140(40%)	267(38.1%)
	SC	26(7.4%)	26(7.4%)	52(7.4%)
	ST	96(27.4%)	15(4.3%)	111(15.9%)
Age of menstrual bleeding	8-10 Yrs	2(0.6%)	1(0.3%)	3(0.4%)
	10-12 Yrs	90(25.7%)	46(13.1%)	136(19.4%)
	12-14 Yrs	224(64%)	263(75.1%)	487(69.6%)
	14-15 Yrs	34(9.7%)	28(8%)	62(8.9%)
	16-17 Yrs	0(0%)	12(3.4%)	12(1.7%)
Know about	No	27(7.7%)	53(15.1%)	80(11.4%)

menstruation before menarche	Yes	323(92.3%)	297(84.9%)	620(88.6%)
Source of menstrual information	Friend	115(32.9%)	128(36.6%)	243(34.7%)
	Mother	93(26.6%)	66(18.9%)	159(22.7%)
	Sister	115(32.9%)	103(29.4%)	218(31.1%)
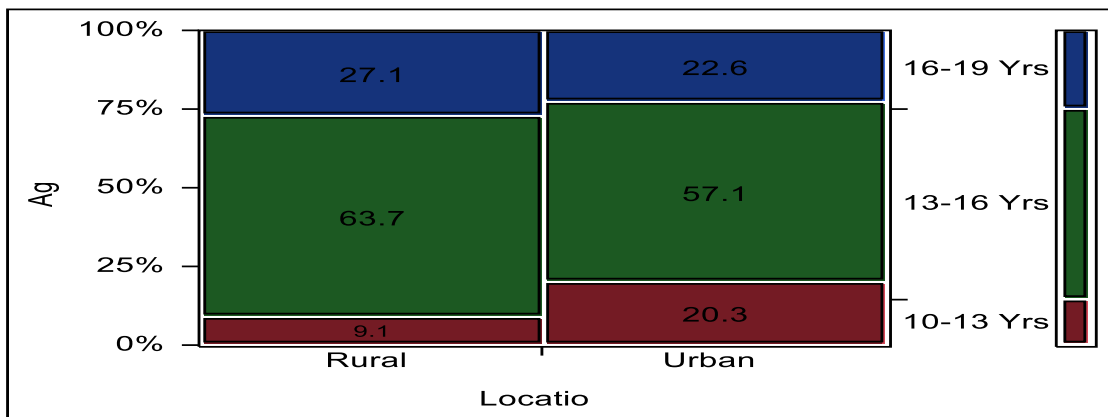
Fig: 1 showing the percentage of age of adolescent girls among urban and rural community

Table no 1 and Fig no. 1 shows the following result among Rural adolescent girls, the majority of adolescent girls 223 (63.7%) were found in the age group of 13-16 years, 95 (27.1%) were found in the age group of 16-19 years and 32(9.1%) were found in the age group of 10-13 years.

Among Urban adolescent girls , the majority of the children 200(57.1%%) were found in the age group of 13-16 years ,79(22.1%) were found to be in the age group of 16-19 years followed by 71(20.3%) were in the age group of 10-13 years.
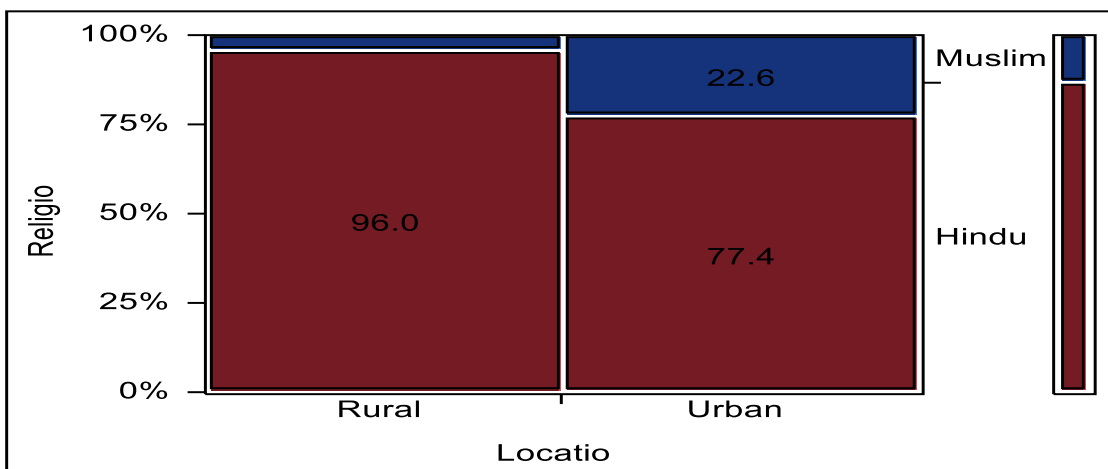
**Fig 2 - Showing religion of adolescent girls among rural and urban community**

Table no 1 and fig 2 depicts the result on Religion that among Rural adolescent girls, majority 336(96%) were Hindu and 14 (4%) were Muslim. Among Urban adolescent girls majority 271(77.6%) were belongs to Hindu and 79(22.6%) were belongs to Muslim.
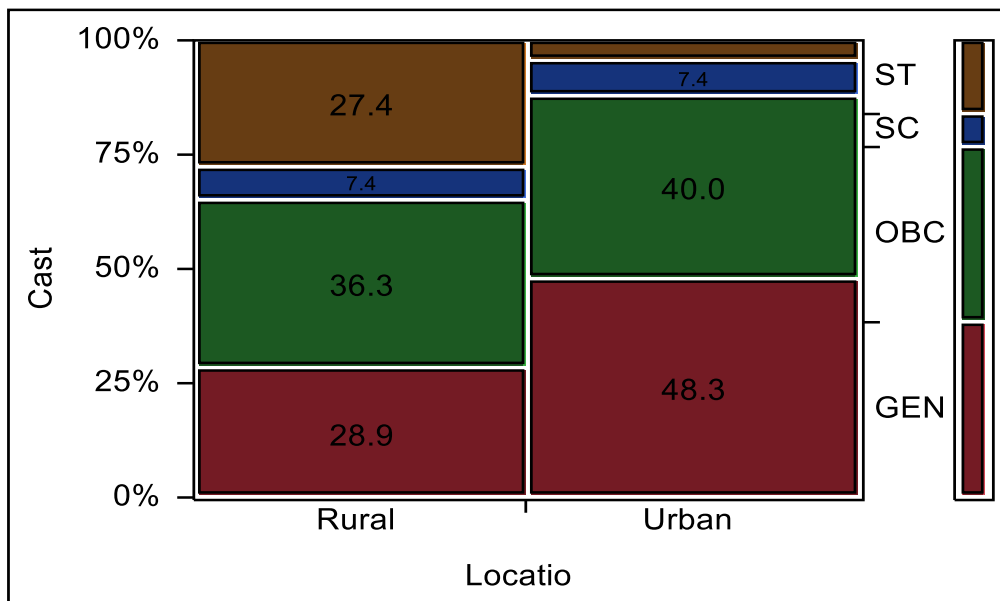
Fig 3 - Showing Contingency Analysis of Caste by Location

Table 1 and fig 3 showing the result on Caste, Regarding caste among rural adolescent girls the majority of the girls 127(36.3%) were belongs to OBC, 101(28.9%) were belongs General caste ,96 (27.4%) were belongs to S.T and 26 (7.4%) were belongs to SC caste .
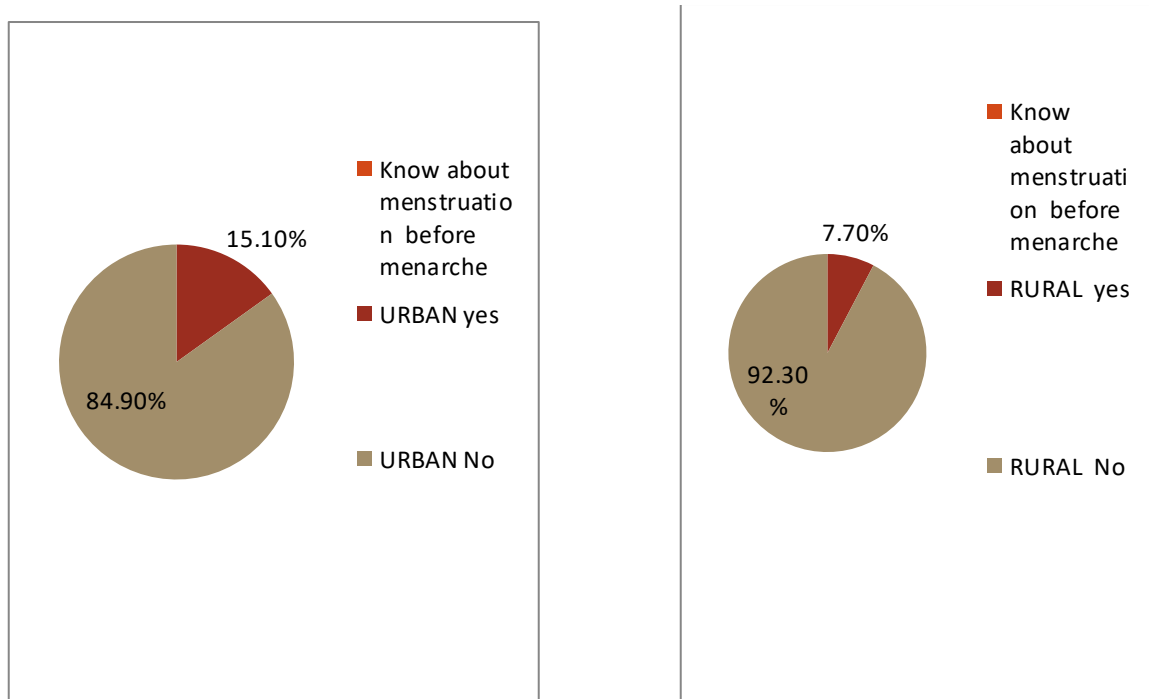
Among Urban adolescent girls the majority of the girls 169(48.3%) were belongs to General caste, 140 (40%) were belongs OBC, 26 (7.4%) were belongs to SC and 15 (4.3%) were belongs to ST caste .
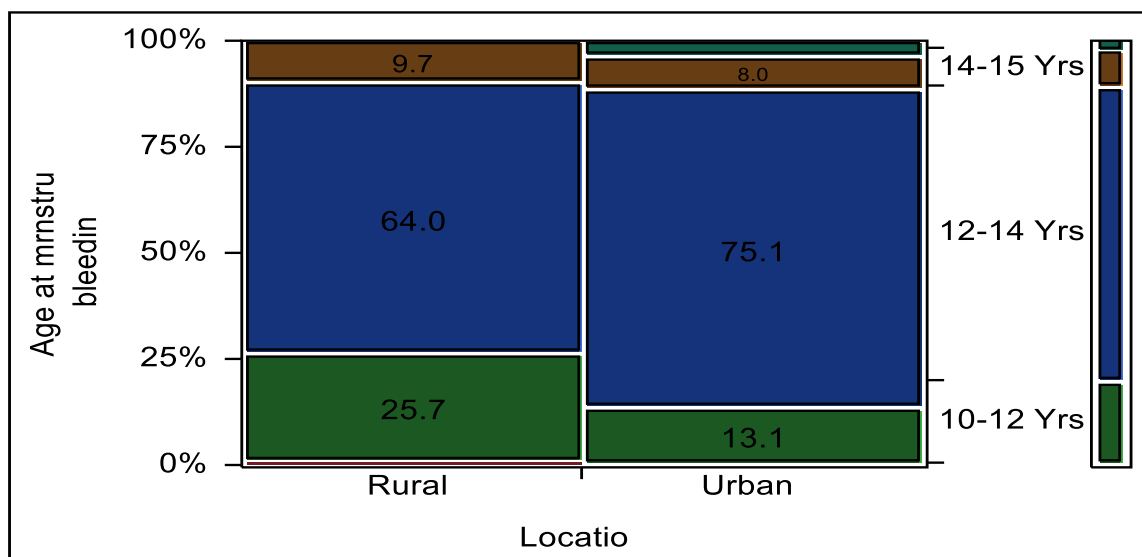
Fig 4: showing the Age of first menstrual bleeding of adolescent girls among Urban and rural community

Table 1 and fig 4 represents the age of First menstrual bleeding, among rural adolescent girls the majority 224(64%) girls started menstruation bleeding at the age of 12-14 years, 90(25%) girls started menstruation bleeding at the age of 10-12 years ,34 (9.7%) girls started menstruation at the age of 14-15 years and 2(0.6%) girls started menstruation at the age of 8-10 years and among Urban adolescent girls the majority 263(75.1%) girls started menstruation bleeding at the age of 12-14 years, 46(13.1%) girls started menstruation bleeding at the age of 10-12 years ,28 (8%) girls started menstruation at the

age of 14-15 years 12(3.4%) girls started menstruation at the age of 16-17 years ,and 1(0.3%) girls started menstruation at the age of 8-10 years.

Fig. 4: shows the percentage of knowledge of menstruation before menarche

Table no 1 and fig.4 shows the result regarding knowledge of menstruation before menarche, it is seen that rural adolescent girls 323(92.3%) girls had prior knowledge regarding menstruation and among Urban adolescent girls 297 (84.9%) girls had prior knowledge regarding menstruation.
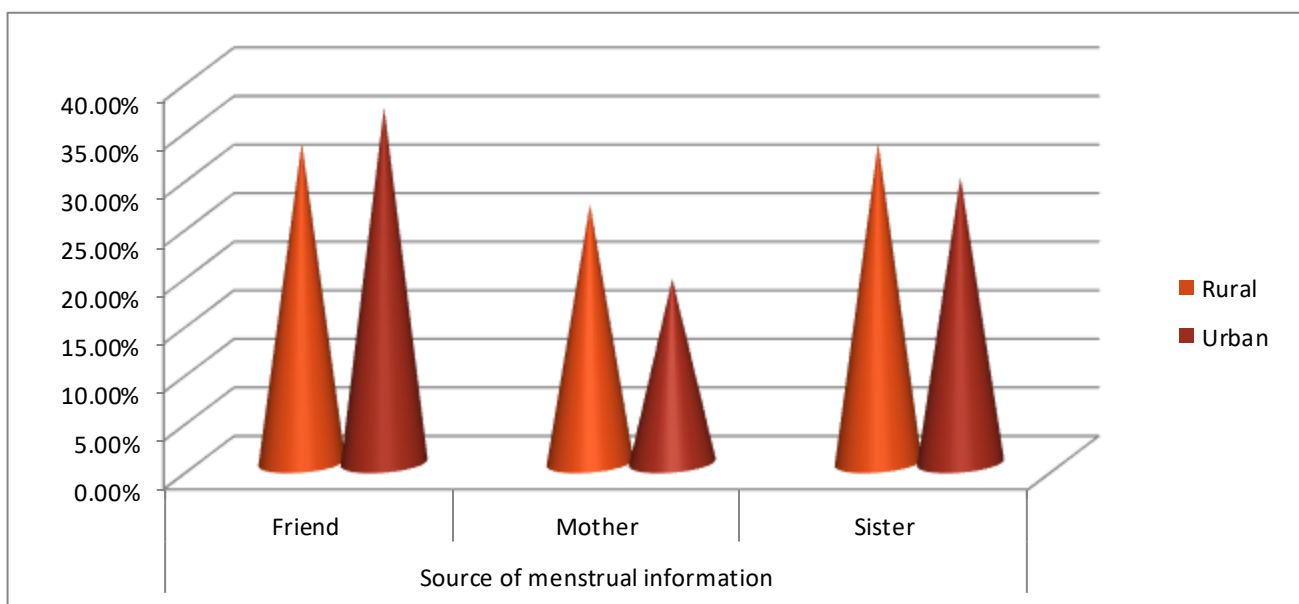

Fig : 5 showing the percentage regarding source of menstrual information among Rural and Urban adolescent girls

Table no 1 and fig 5 shows the result regarding source of menstrual information, it was found that among rural adolescent girls majority 115 (32.5%) girls received information from friend, 115(32.5%) girls received information from sister, 93(26.6%) girls received information from mother . Among Urban adolescent girls majority 128 (336.6%) girls received information from friend, 103 (29.4%) girls received information from sister and 66(18.9%) girls received information from mother.

Table 1(a): Frequency and percentage distribution of Demographic characteristics of adolescent girls in Urban and Rural Community of Kamrup District Assam
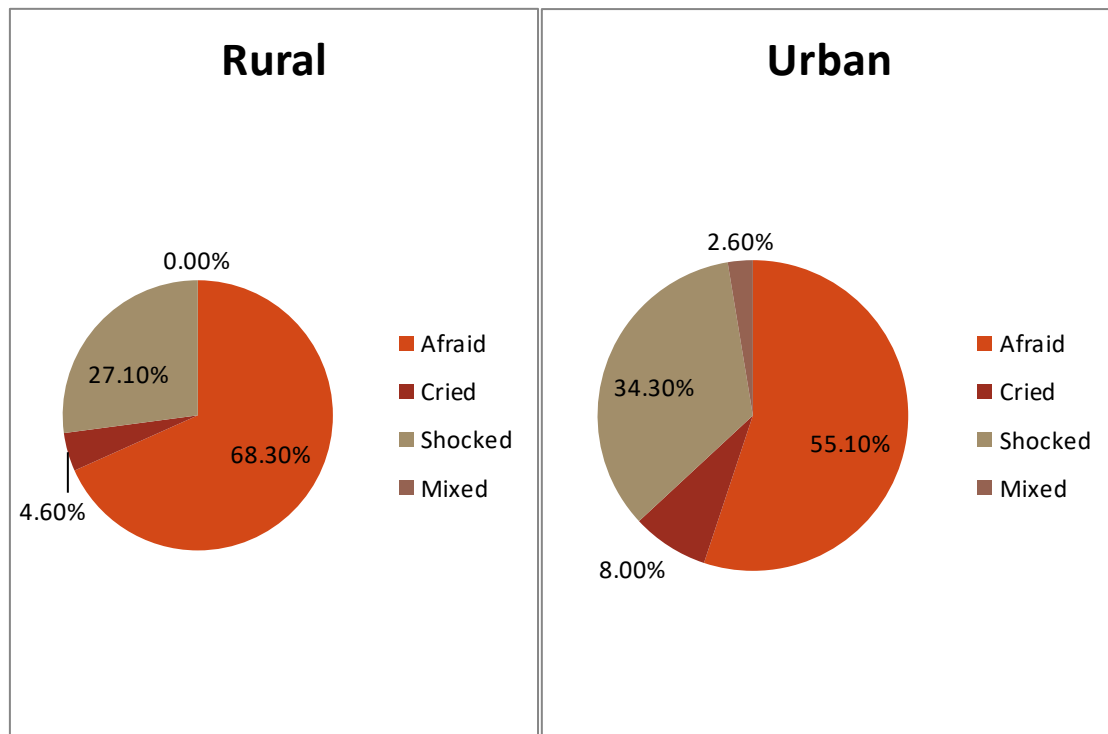
| Demography	Sub Group	Location		Total(700)
		Rural(N=350)	Urban(N=350)	
First menstruation is managed by Informed	Mother	284(81.1%)	271(77.4%)	555(79.3%)
	Friend	24(6.9%)	30(8.6%)	54(7.7%)
	Sister	25(7.1%)	49(14.0%)	74(10.6%)
	Other	17(4.9%)	0(0.0%)	17(2.4%)
Reaction towards first menstruation	Afraid	239(68.3%)	193(55.1%)	432(61.7%)
	Cried	16(4.6%)	28(8.0%)	44(6.3%)
	Shocked	95(27.1%)	120(34.3%)	215(30.7%)
	Mixed	0(0.0%)	9(2.6%)	9(1.3%)
Menstrual cycle interval	Irregular	32(9.1%)	152(43.4%)	184(26.3%)
	Regular	318(90.9%)	198(56.6%)	516(73.7%)
Duration of menstrual bleeding	3 days	22(6.3%)	68(19.4%)	90(12.9%)
	4days	235(67.1%)	208(59.4%)	442(63.1%)
	5 days	72(20.6%)	56(16.0%)	128(18.3%)
	> 5 days	21(6.0%)	18(5.1%)	39(5.6%)
Material used during menstruation	Cloth	214(61.1%)	78(22.3%)	292(41.7%)
	Pad	136(38.9%)	272(77.7%)	408(58.3%)
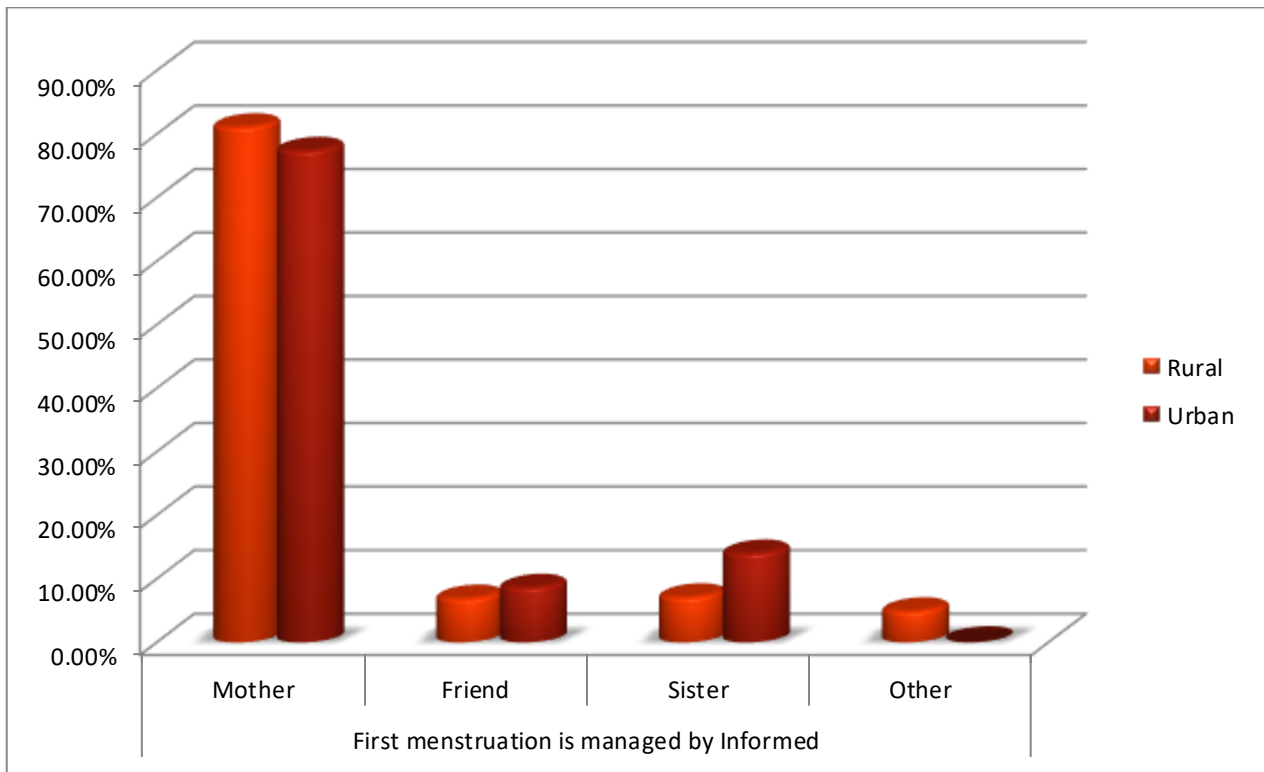
Fig: 6 show the percentage of management of first menstruation among rural and urban adolescent girls

Table no 1 (a) and fig. 6 reveals the following result , Regarding management of first menstruation among rural adolescent girls majority 284(81.1%) girls were managed by informing mother , 25(7.1%) girls were managed by informing sister, 24(6.9%) girls were managed by informing friend and 17(4.9%) girls were managed by informing other member . Among Urban adolescent girls majority 271(77.4%) girls were managed by informing mother, 49(14%) girls were managed by informing sister and 30(8.6%) girls were managed by informing friend.

Fig: 7 Shows the percentage regarding reaction towards first menstruation among Rural and Urban adolescent girls

Table no 1 (a) and fig 7 shows the percentage regarding Reaction towards first menstruation, it was found that among rural adolescent girls majority 239(68.3%) girl were afraid, 95(27.1%) were shocked and 16 (4.6%) girls were cried towards first menstruation and among urban adolescent girls majority 193(55.1) girls were afraid, 120(34.3%) were shocked, 28 (8%) girls were cried and 9(2.6%) towards first menstruation.
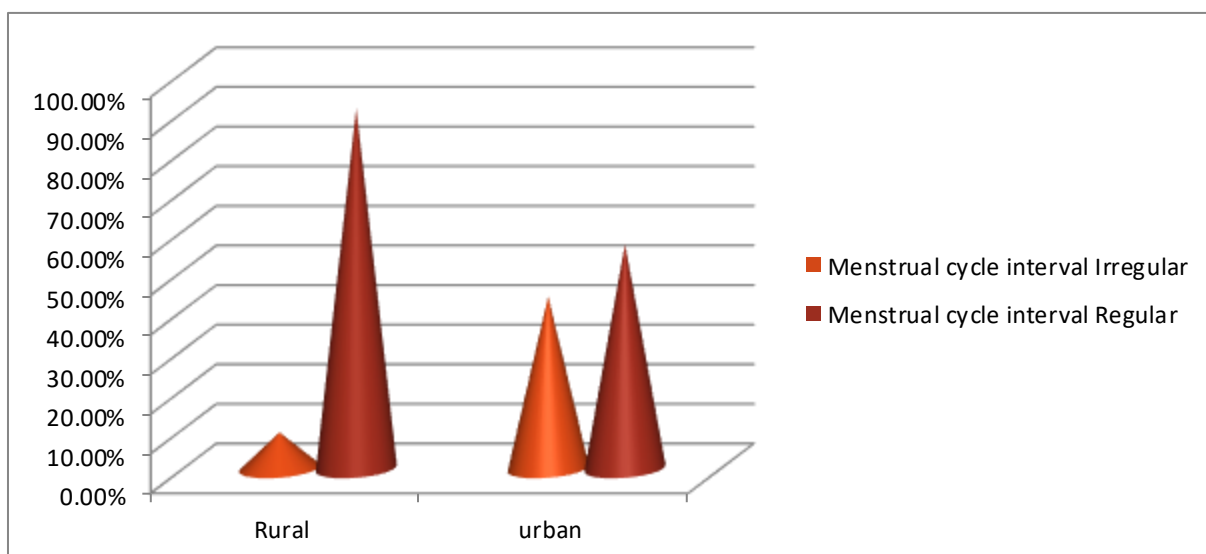

Fig: 8 shows the percentage of menstrual cycle interval among Rural and Urban adolescent girls

Table 1 (a) and fig: 8 depict the result on menstrual cycle, it was found that among rural adolescent girls 318(90.9%) have regular menstrual cycle and among Urban adolescent girls 198 (56.4%) girls have regular menstruation cycle.
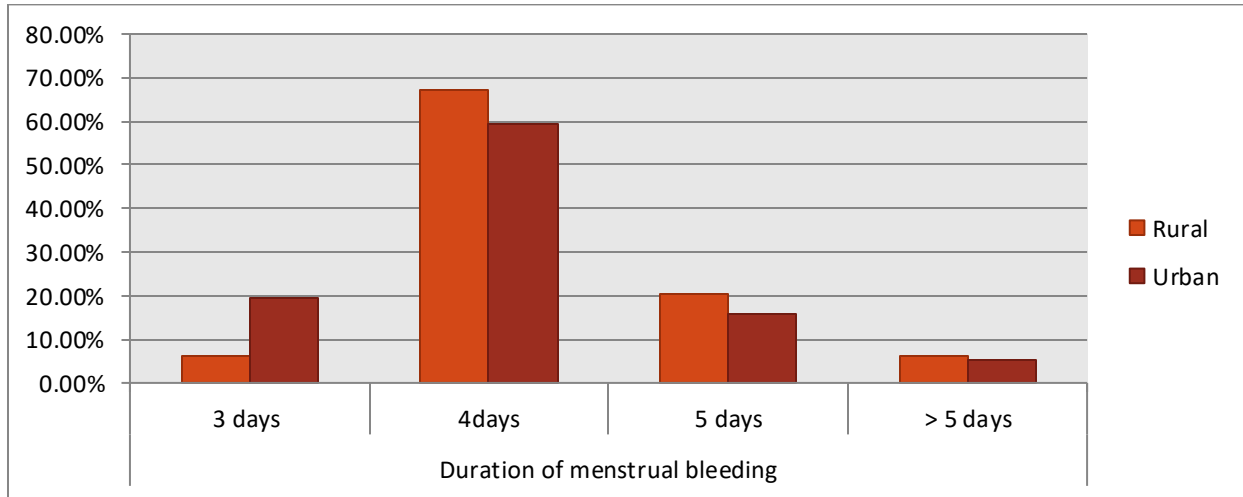
Fig: 9 shows the percentage of duration of menstrual bleeding among Rural and Urban adolescent girls

Table 1 (a) and Fig . 9   represent the percentage of Duration of menstrual bleeding, It was found that among rural adolescent girls majority 235 (67.1%) girls have 4 days bleeding, 72(20.6%) girls have 5 days bleeding, 22(6.3%) girls have 3 days bleeding and 21 (6%) girls have more than 5 days bleeding and among rural adolescent girls majority 208(59.4%) girls have 4 days bleeding, 68(19.4%) girls have 3 days bleeding, 56(16%) girls have 5 days bleeding, and 18 (5.1%) girls have more than 5 days bleeding.
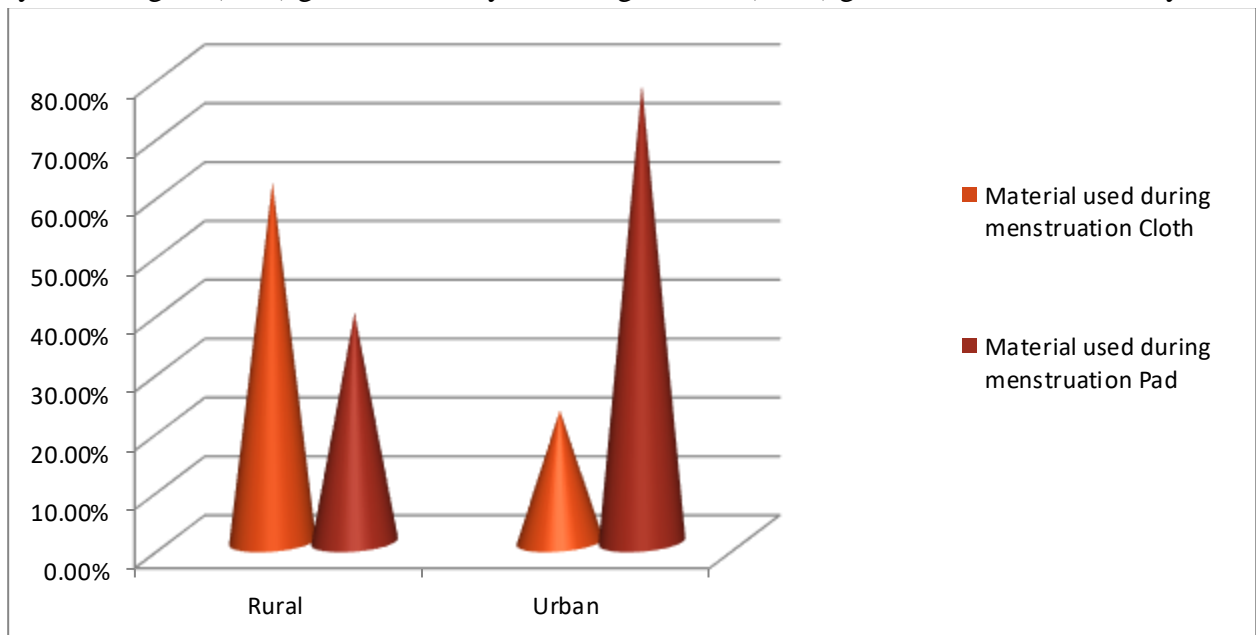

Fig:
10 shows the percentage on material Used during menstruation among rural and urban adolescent girls

Table 1(a) and fig: 10 represent the result on Material used during menstruation: On aspect of material used during menstruation among rural adolescent girls majority 214 (61.1%) girls used cloth whereas 136(38.9%) girls used pad. Among urban adolescent girls majority 272 (77.7%) girls used cloth whereas 78(22.3%)) girls used pad.

Table 1(b): Frequency and percentage distribution of Demographic characteristics of adolescent girls in Urban and Rural Community of Kamrup District Assam.   (Rural N=350   Urban N=350)

| Demography	Sub Group	Location		Total(700)
		Rural (N=350)	Urban(N=350	
Frequency of changing Material(Pad /Cloth)	Once daily	117(33.4%)	0(0.0%)	117(16.7%)
	Thrice daily	39(11.1%)	70(20.0%)	109(15.6%)
	Twice daily	78(22.3%)	210(60.0%)	288(41.1%)
	when it is wet	116(33.1%)	70(20.0%)	186(26.6%)
If pad is not used what is the reason	Do not Like	12(3.4%)	4(1.1%)	16(2.3%)
	Unable to Buy	202(57.7%)	74(21.1%)	276(39.4%)
Disposable sanitary pad	Burning	2(0.6%)	0(0.0%)	2(0.3%)
	Burying	3(0.9%)	0(0.0%)	3(0.5%)
	Open	131(38.3%)	18(5.7%)	149(22.7%)
	open (wrap with paper)	0(0.0%)	218(69.2%)	218(33.2%)
Management of Cloth	THROW OPEN	12(3.4%)	7(2.0%)	19(2.7%)
	WASH ,DRIED &REUSE	202(57.7%)	69(19.7%)	271(38.7%)
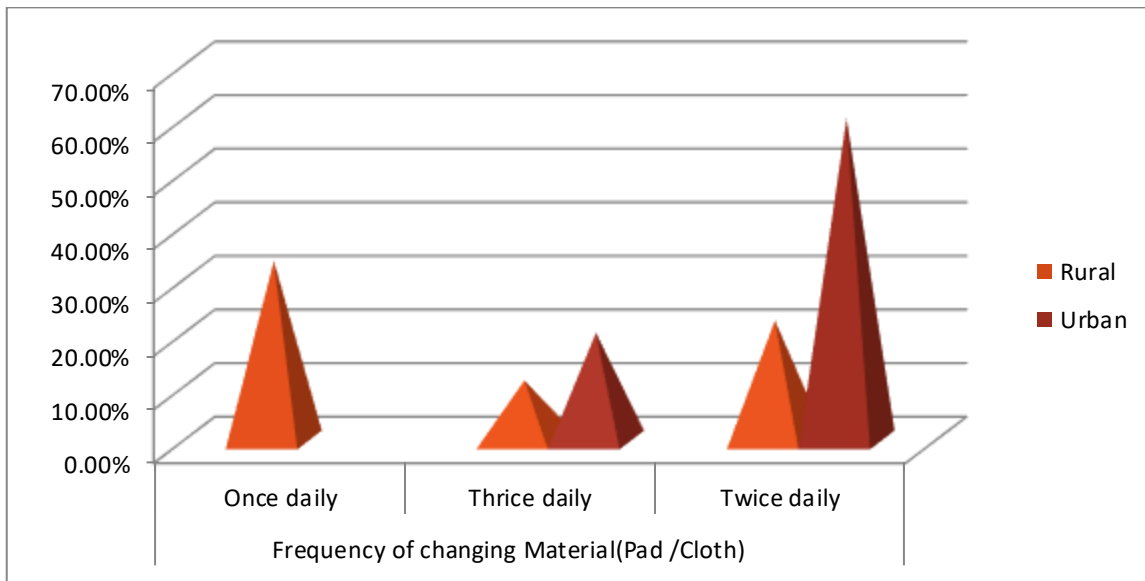
Fig   : 11 Represent the percentage on Frequency of changing pad among Rural and Urban adolescent girls

Table no 1 (b) and Fig. 11 revels the Frequency of changing Material (Pad/Cloth) , it is seen that among rural adolescent girls majority 117(33.4%) change material once daily, 116 (33.9%0 changed material when it is wet ,78(222.3%) changed material when it is wet and 39(11.1%) changed material trice daily and among Urban adolescent girls majority 210(60%) change material twice daily, 70 (20%) changed material when it is wet, and 70(20%) changed material trice daily.
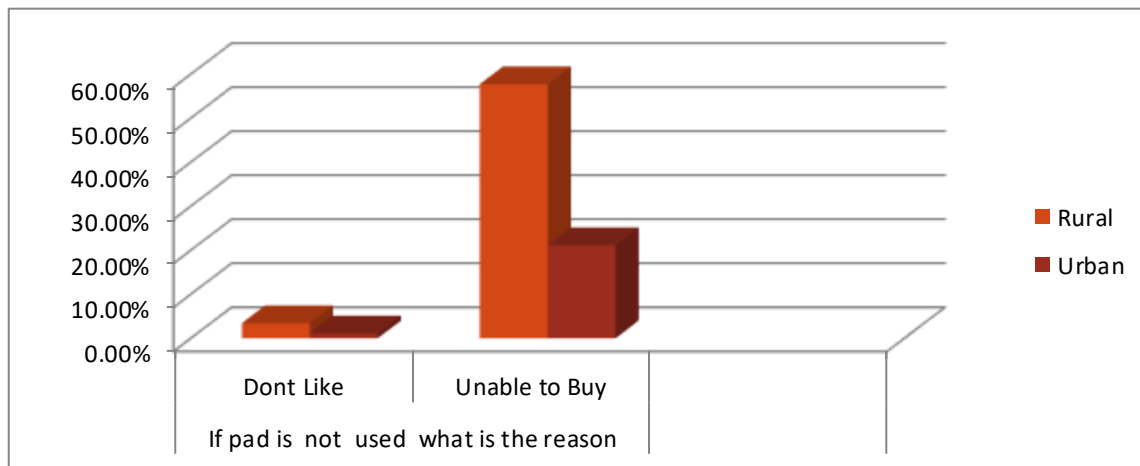
Fig : 12 showing the reason of not using pad among Rural and Urban adolescent girls

Table no 1(b) and Fig 12 shows the reason of not using pad it was seen that 212(61.1%) rural adolescent girls do not used pad, among these girls majority 202(57.7%)   girls unable to buy pad and 12(3.4%) girls don't like to use pad. Among Urban adolescent girls 78 girls (22.2%) girls do not used pad, among these girls majority 72(21.1%) girls unable to buy pad and 4 (1.1%) girls don't like to use pad.
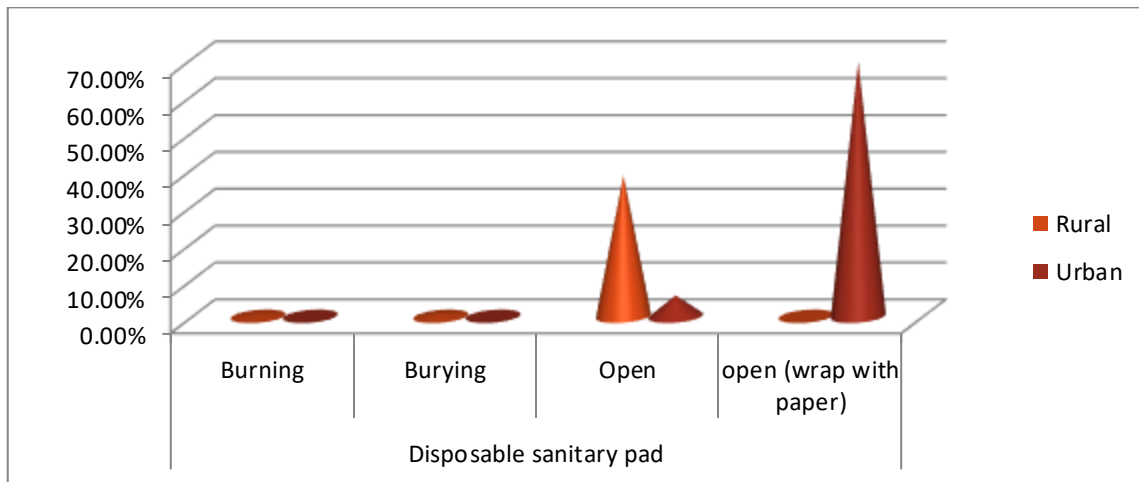
Fig: 12 showing the result on Disposable of sanitary pad among rural and urban adolescent girls

Table 1(b) and Fig.12   shows result on Disposable of sanitary pad, it was found that among rural adolescent girls   136 (38.9%) used pad, out of these 131 (37.4%) girls throw pad openly and 5 girls (1.8%) did not response to the question. Among urban adolescent girls 272 (77%) girls used pad among these 218(62.3%) girls thrown the pad by wrapping with paper.
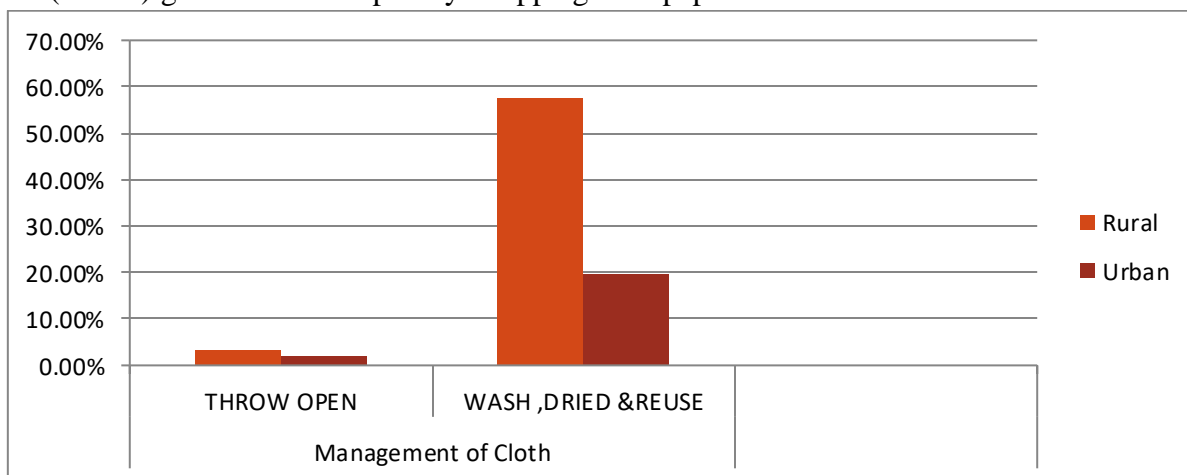
Fig: 13 Show the management of cloth used by adolescent girls in urban and rural community

Table 1(b) and fig 13 revels the result on Management of Cloth, it was seen that among rural adolescent girls majority 214(61 .1%) girls used cloth rather than pad. Among these girls 202(57.7%) girls wash, dried and reuse the cloth

Section –II

Based on Objective 1

To assess the prevalence of menstrual problems among adolescent girls in the urban community and rural community of Kamrup District, Assam.

Table 2: Frequency and percentage distribution on Prevalence of Problem face prior to and during menstruation by Adolescent Girls.

Rural   N= 350, Urban N=350

Area	Menstrual problem	Response	Count	%	95%CI
Rural (N=350)	Prior to	Yes	283	80.86%	76.41-84.64%
		No	67	19.14%	15.36-23.59%
	During	Yes	329	94.00%	91.00-96.04%
		No	21	6.00%	3.96-9.00%
Urban (N=350)	Prior to	Yes	285	81.43%	77.02-85.15%
		No	65	18.57%	14.85-22.98%
	During	Yes	332	95.13%	92.34-96.94%
		No	17	4.87%	3.06-7.66%
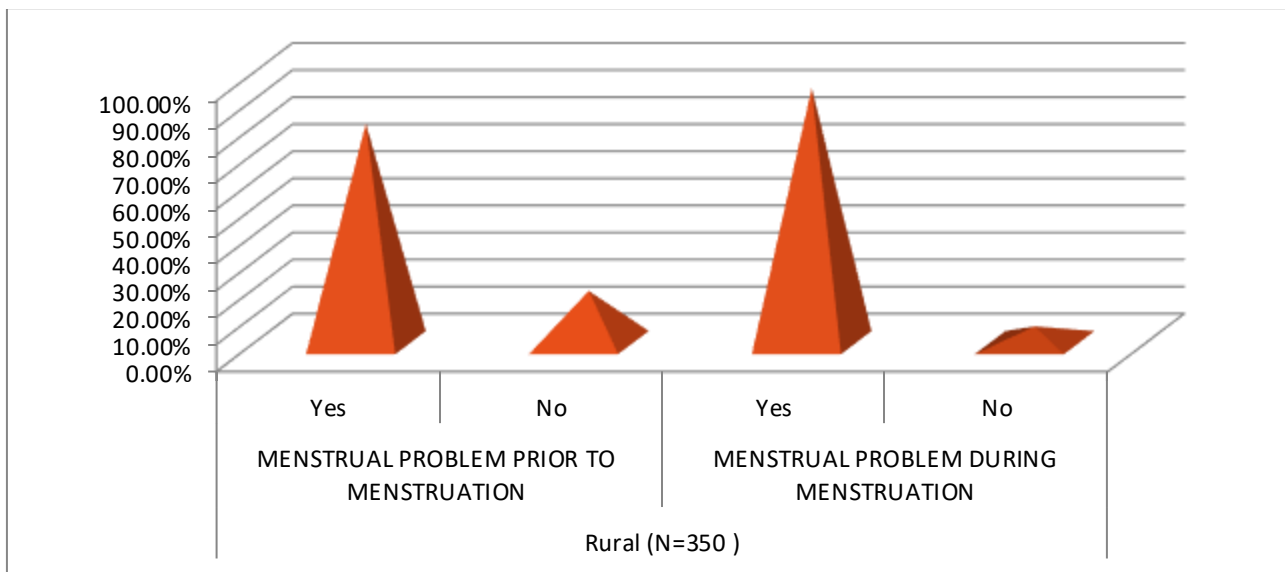
Fig: 14 Problem face prior to menstruation and during menstruation among Rural adolescent Girls
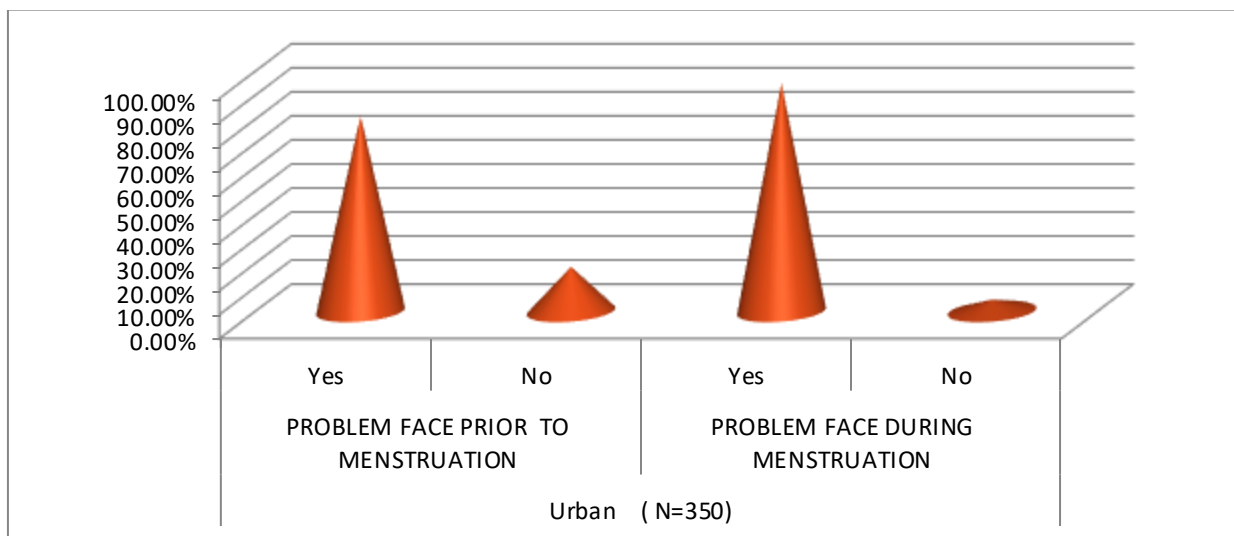
Fig 15: Problem face prior to menstruation and during menstruation among urban adolescent Girl

Table 2 and fig: 14 and fig : 15 shown the results on menstrual problem ,it was revealed that 283 (80.86%) rural adolescent girls suffers from premenstrual problem as compared to 285(81.43%) urban adolescent girls and 329(94%) rural adolescent girls face problem during menstruation as compared to 332 (95.13%) urban

Table 2 (a): Frequency and percentage distribution on Problem face prior to Menstruation by the Rural and Urban adolescent girls

Rural N= 350, Urban N=350

Problem	Response	Rural (N=350)	Urban (N=350)	Total(700)
problem face prior to menstruation	N	67(19.1%)	65(18.6%)	132(18.9%)
	Y	283(80.9%)	285(81.4%)	568(81.1%)
Experience bloating & breast tender	N	205(58.6%)	65918.6%)	132(18.9%)
	Y	78(22.3%)	78(22.3%)	156(22.3%)
Experience dysphoria(unhappiness	N	242(69.1%)	250(71.4%)	492(70.3%)
	Y	39(11.1%)	34(9.7%)	73(10.4%)
Experience stress and anxiety prior to menstruation	N	241(68.9%)	254(72.6%)	495(70.7%)
	Y	40(11.4%)	30(8.6%)	70(10.0%)
Experience headache	N	255(72.9%)	265(75.7%)	520(74.3%)
	Y	26(7.4%)	19(5.4%)	45(6.4%)
Experience fatigue prior to menstruation	N	244(69.7%)	245(70.0%)	489(69.9%)
	Y	37(10.6%)	39(11.1%)	76(10.9%)

Table 2 (a) reveals the result on premenstrual problem among Rural and Urban adolescent girls, it was found that 78(22%) Rural adolescent girls and 78(22%) Urban adolescent girls experience bloating and breast tenderness, 39 (11.1%) Rural adolescent girls experience dysphoria (unhappiness) as compared to 34 (9.7%) urban adolescent girls, 242(69.1%) rural adolescent girls experience stress and anxiety prior to menstruation as compared to 254(72.6%) urban adolescent girls .26(7.4%) rural adolescent girls experience headache where as 19(5.4%) urban adolescent girls experience headache , 37(10.6%) rural adolescent experience fatigue prior to menstruation as compared to 39(11.1%) urban adolescent girls.

Table 2 (b): Frequency and percentage distribution on Problem face prior to Menstruation by the Rural and Urban adolescent girls

Rural N= 350, Urban N=350

Experience mood swing	N	273(78.0%)	253(72.3%)	526(75.1%)
	Y	9(2.6%)	29(8.3%)	38(5.4%)
Experience abdominal cramps prior to menstruation	N	25(7.1%)	51(14.6%)	76(10.9%)
	Y	257(73.4%)	195(55.7%)	452(64.6%)
Experience waist pain	N	105(30.0%)	105(30.0%)	210(30.0%)

|				
	Y	178(50.9%)	175(50.0%)	353(50.4%)
Experience constipation prior to menstruation	N	295(84.3%)	289(82.6%)	584(83.4%)
	Y	0(0.0%)	2(.6%)	2(.3%)
Experience acne prior to menstruation	N	85(24.3%)	93(26.6%)	178(25.4%)
	Y	207(59.1%)	160(45.7%)	367(52.4%)

Table : 2(b) show that 9 (2.6%) rural adolescent girls Experience mood swing where as 29 (8.3%) urban adolescent girls Experience mood swing, 275(73.4%) rural adolescent girls experience abdominal cramps prior to menstruation as compared to 195 (55.7%) urban adolescent girls experience abdominal cramps prior to menstruation , 178 (50.9%) rural adolescent girls experience waist pain where as 175(50.0%) urban adolescent girls experience waist pain ,207 (59.1%) rural adolescent girls experience acne prior to menstruation as compared to 160 (45.7%) urban adolescent girls experience acne prior to menstruation . only 2(6%) urban adolescent girls experience constipation prior to menstruation which is not seen among urban rural adolescent girls.

Table: 3 Frequency and percentage distribution of Problem faced during Menstruation and its Management by Urban and Rural adolescent girls of kamrup district.
Rural N= 350, Urban N=350

PROBLEM	RESPONSE	Rural(N=350)	Urban(N=350)	Total(N=700)
Problem face during menstruation	N	21(6.0%)	17(4.9%)	38(5.4p)
	Y	329(94.0%)	332(94.9%)	661(94.4p)
Experience heavy bleeding	N	259(74.0%)	268(76.6%)	527(75.3p)
	Y	70(20.0%)	65(18.6%)	135(19.3p)
Heavy bleeding affects in	Absence from school	59(16.9%)	47(13.4%)	106(15.1p)
	Affect relationship with other	2(.6%)	4(1.1%)	6(.9p)
	Feel depressed	8(2.3%)	6(1.7%)	14(2.0p)
	Feel weak	0(0.0%)	3(.9%)	3(.4p)
	Not able to do daily activities	2(.6%)	2(.6%)	4(.6p)

Table 2 (c) indicates the following Result, 329 (94.0%) rural adolescent girls face problem during menstruation as compared to 332 (94.9%) urban adolescent girls face problem during menstruation.
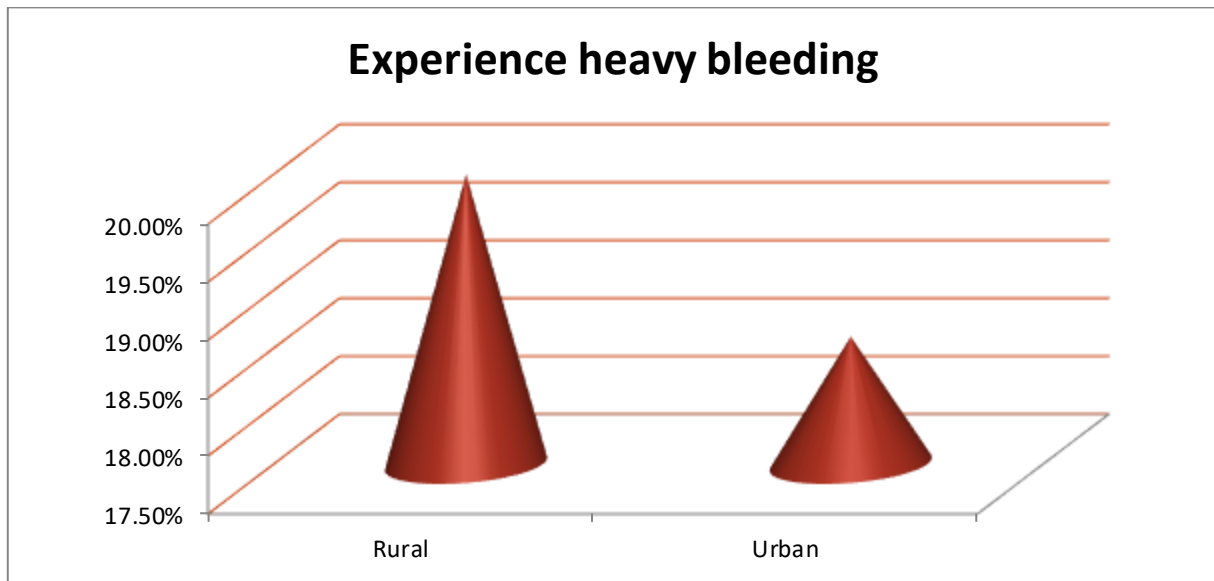
Fig: 16 shows the percentage of heavy bleeding among rural and urban adolescent girls

Fig: 16 showed that (20%) rural adolescent girl suffers from heavy bleeding where as 65 (18.6%) urban girls suffers from heavy bleeding.

Table no: 3 depicts the affects of heavy bleeding ; 59(16.9%) rural adolescent girls absence from school where as 244(69.7%) urban adolescent girls absence from school, 64(18.3%) rural adolescent girls affect relationship with others where as 13(3.7%) urban adolescent girls affect relationship with others. 8(2.3%) rural adolescent girls feel depressed as compared to 16(4.6%) urban adolescent girls, 38(10.9%) urban adolescent girls feel weak due to heavy bleeding , 23 (6. 6%) rural adolescent girls does not able to do daily activities as compared to 12(3.4%) urban adolescent girls.

Table 3 (a): Frequency and percentage distribution of Problem faced during Menstruation and its Management by Urban and Rural adolescent girls of kamrup district.

Rural   N= 350, Urban N=350

PROBLEM	RESPONSE	Rural(N=350)	Urban(N=350)	Total(N=700)
Experience dysmennorhoea	N	15(4.3%)	11(3.1%)	26(3.7p)
	Y	309(88.3%)	324(92.6%)	633(90.4p)
Experience dysmennorhoea in each cycle	N	59(16.9%)	16(4.6%)	75(10.7p)
	Y	255(72.9%)	313(89.4%)	568(81.1p)
Type of dysmennorhoea	Mild	49(14.0%)	109(31.1%)	158(22.6p)
	Moderate	201(57.4%)	152(43.4%)	353(50.4p)
	Severe	30(8.6%)	68(19.4%)	98(14.0p)
Headache, dizziness and disorientation during dysmennorhoea	N	280(80.0%)	287(82.0%)	567(81.0p)
	Y	27(7.7%)	42(12.0%)	69(9.9p)
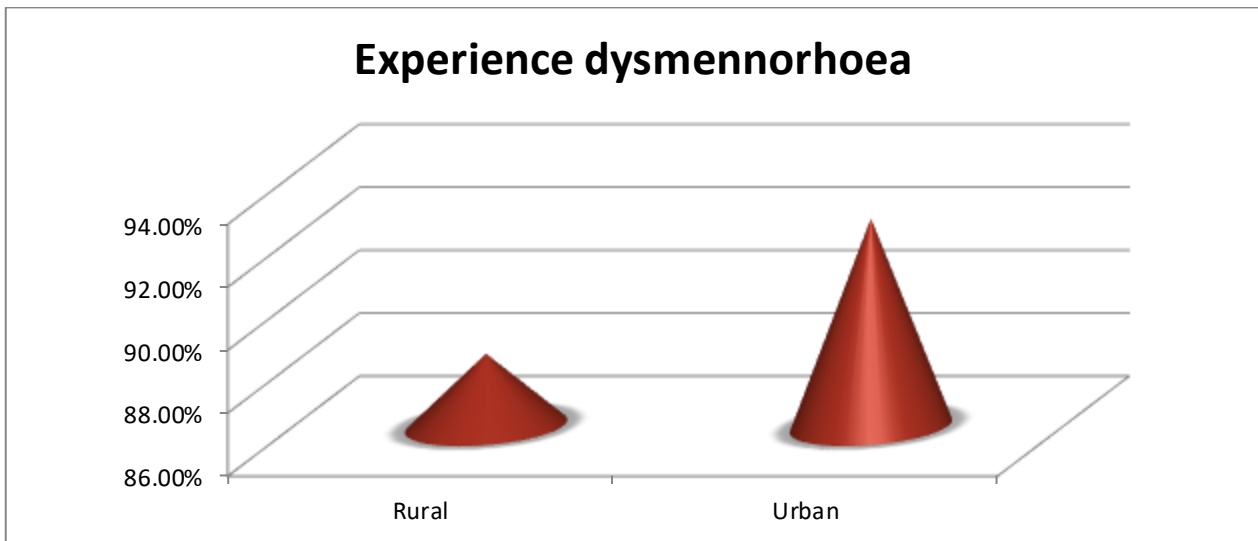
Fig: 17 shows the percentage of dysmennorhoea among Rural and Urban adolescent girls

 Table 3 (a) shown that 309 (88.3%) rural adolescent girls experience dysmennorhoea as compared to 32 (92.6%) urban adolescent girls . 309(88.3%) rural adolescent girls experience dysmennorhea as compared to 324(92.6%) urban adolescent girls . 255 (72.9%) rural adolescent girls experience dysmennorhoea in each cycle whereas 313(89.4%) urban adolescent girls experience dysmennorhoea in each cycle . In Rural community 201 (57.4%) adolescent girls experience moderate dysemennorea as compared to 152 (43.4%) urban adolescent girls,49 (14 %) rural adolescent girls experience mild as compared to 109(31.1%) girls experience mild and 30(8.6%) rural adolescent girls experience severe dysmenneorhoea where as 68(19.4%) girls experience severe dysmenneorhoea . 27 (7.7%) rural adolescent girls experience Headache, dizziness, and during dysmennorhoea as compared to urban 18 (5.1%) urban adolescent girls .

Fig: 18 Shows the percentage of dysmennorhoea in each cycle among Rural and Urban adolescent girls.

Table 3 (b): Frequency and percentage distribution of Problem faced during Menstruation and its Management by Urban and Rural adolescent girls of kamrup district.
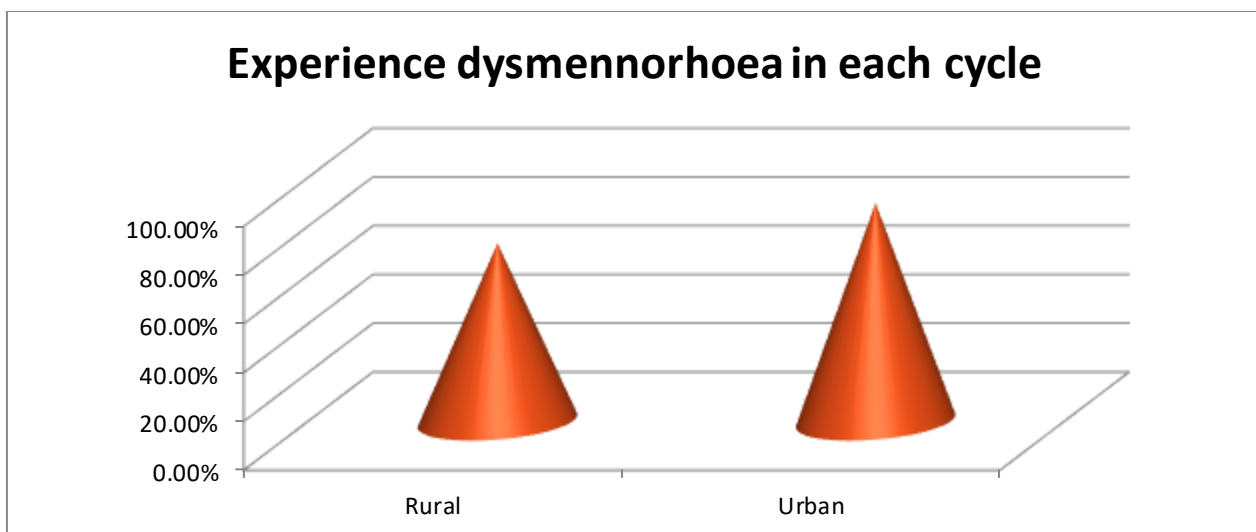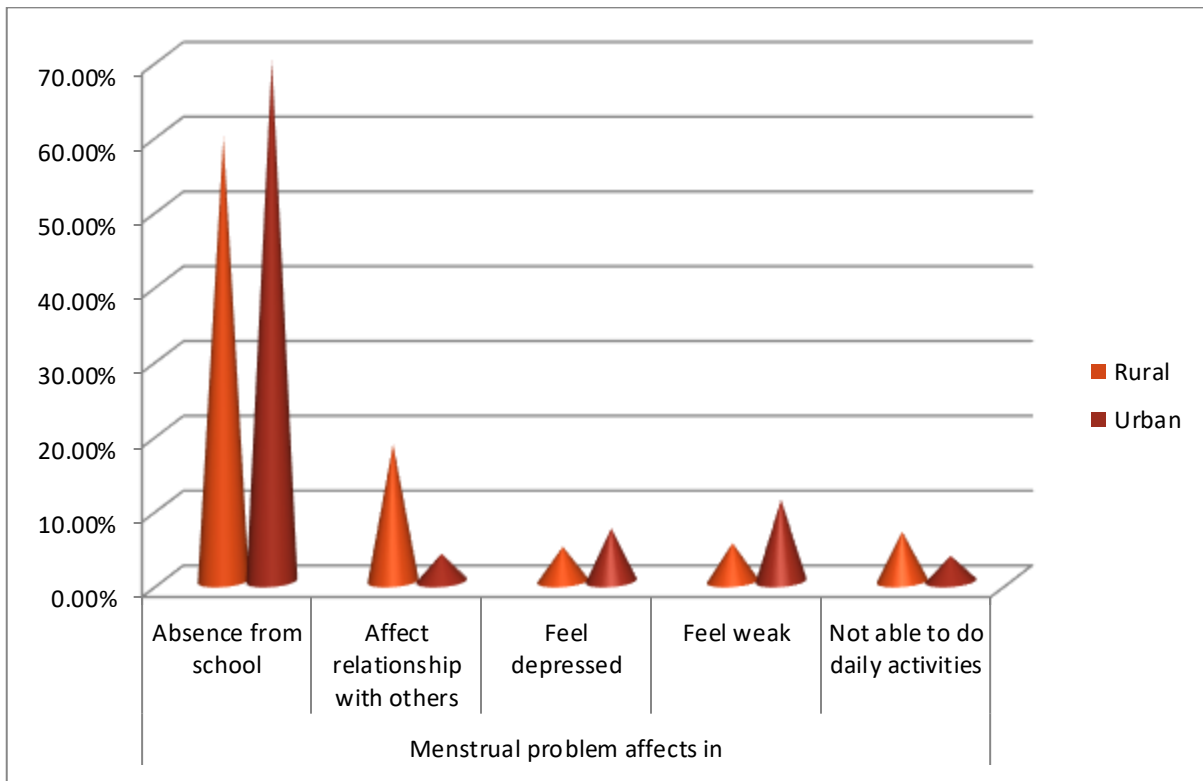**Rural N= 350, Urban N=350**

PROBLEM	RESPONSE	Rural(N=350)	Urban(N=350)	Total(N=700)
Menstrual problem affects in	Absence from school	208(59.4%)	244(69.7%)	452(64.6p)
	Affect relationship with others	64(18.3%)	13(3.7%)	77(11.0p)
	Feel depressed	16(4.6%)	25(7.1%)	41(5.9p)
	Feel weak	18(5.1%)	38(10.9%)	56(8.0p)
	Not able to do daily activities	23(6.6%)	12(3.4%)	35(5.0p)
Management of menstrual problem	Consult doctor	15(4.3%)	60(17.1%)	75(10.7p)
	Doing Nothing	15(4.3%)	82(23.4%)	97(13.9p)
	Home Remedies	215(61.4%)	36(10.3%)	251(35.9p)
	put hot water bottle on abdomen	0(0.0%)	38(10.9%)	38(5.4p)

Table : 3 (b) depicts the result that due to menstrual problem 208 (59.4%) rural adolescent girls absence from school as compared to 244(69.7%) urban adolescent girls .64(18.3%) affect relationship with others as compared to 13(3.7%) urban adolescent girls, 16 (4.6%) rural adolescent girls feel depressed as compared to 25 (7.1%) urban adolescent girls. 18 (5.1% feel weak as compared to 38 (10.9%) urban adolescent girls. 23 (6.6%) rural adolescent girls do not able to do daily activities as compared to 12(3.4%) girls in urban community. 215 (61.4%) rural adolescent girls manage the problem by using home remedies whereas 36(10.36%) urban adolescent girls use home remedies. 15(4.3%) rural adolescent girls consult doctor as compared to 60 (17.1%) urban adolescent girls. 15(4.3%) rural adolescent girls Doing Nothing as compare to 82(23.4%) urban adolescent girl. 15 (4.3 %) rural adolescent girls doing nothing as compared to 82 (23.4%) urban adolescent girls to get rid of dysmennorhoea . 38 (10.9%) urban adolescent girls put hot water bottle on abdomen to relieve pain which is not done by the rural adolescent girls .

Fig : 19 Showing Affects of menstrual problem among rural and urban adolescent girls
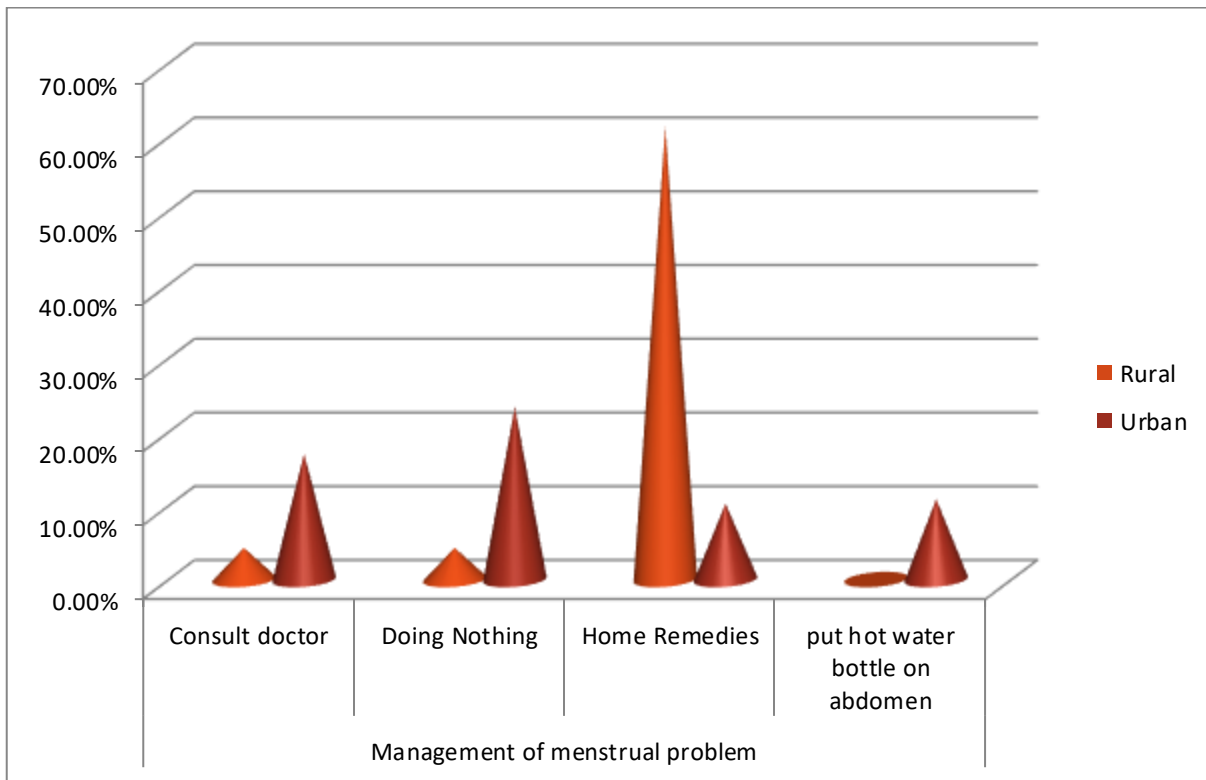
Fig: 20 showing the percentage of management of Menstrual Problem among Rural and urban adolescent girls

SECTION –III

Objective 3 : To find out the association between menstrual problem with selected demographic variables

Table 4 : Chi Square Test for association of pre menstrual problem with demography

Demography	Sub Group	Pre menstrual problem		Total	Chi Sq	Df	P-value
		No	Yes				
Caste	GEN	39(29.5%)	231(40.7%)	270(38.6%)	10.596	3	.014*
	OBC	59(44.7%)	208(36.6%)	267(38.1%)			
	SC	16(12.1%)	36(6.3%)	52(7.4%)			
	ST	18(13.6%)	93(16.4%)	111(15.9%)			

* Significant at (P<.05)

Table 4: reveals the result based on the objective 3, it was found that demographic characteristics caste is found to be significant * Significant at (P<.05).It shows the association of pre menstrual problem with caste.

Table 4(a): Chi Square Test for association of menstrual problem with demography

Demography	Sub Group	Problem faced during menstruation		Total	Chi Sq	df	P-value
		No	Yes				
Caste	GEN	8(21.1%)	262(39.6%)	270(38.6%)	10.191	3	.017*
	OBC	17(44.7%)	250(37.8%)	267(38.1%)			
	SC	7(18.4%)	45(6.8%)	52(7.4%)			
	ST	6(15.8%)	105(15.9%)	111(15.9%)			
First menstruation is managed by Informed	Friend	1(2.6%)	53(8.0%)	54(7.7%)	8.231	3	.041*
	Mother	27(71.1%)	528(79.8%)	555(79.3%)			
	Other	1(2.6%)	16(2.4%)	17(2.4%)			
	Sister	9(23.7%)	65(9.8%)	74(10.6%)			
Reaction towards first menstruation	Afraid	23(60.5%)	409(61.8%)	432(61.7%)	11.161	3	.011*

Table 4(a) reveals the result based on the objective 3 , it was found that demographic characteristics Caste (X^2 value -8.231 df-3 p value <.041) Reaction towards first menstruation (X^2 value -11.161 df-3 p value 011*).It shows the association of menstrual problem with caste, first menstruation is manage by and reaction towards first menstruation. *). Based on the above data the 2nd and 3rd hypothesis of the study is partially accepted.

Discussion, Conclusion Recommendation:

The present study was conducted to assess the problems of menstruation among adolescent girls in urban and rural community of Kamrup District, Assam. A quantitative descriptive approach was used to conduct the study. Cross Sectional research design was used to conduct the study.

The findings of the present study have been discussed in relation with the objectives and other supportive study under the following:

1. Discussion of the demographic characteristics
2. Discussion on analysis of prevalence of menstrual problems among adolescent girls in the urban community and rural community of Kamrup District, Assam.
3. Discussion on analysis of comparison of prevalence of menstrual problems among adolescent girls between the urban and rural community of Kamrup District, Assam.
4. Discussion on Association between menstrual problems with selected demographic variables.
   1. Discussion of The Demographic Characteristics

From the collected data it was found the following result, among Rural adolescent girls, the majority of adolescent girls 223 (63.7%) were found in the age group of 13-16 years, 95 (27.1%) were found in the age group of 16-19 years and 32(9.1%) were found in the age group of 10-13 years.

Among Urban adolescent girls , the majority of the children 200(57.1%%) were found in the age group of 13-16 years ,79(22.1%) were found to be in the age group of 16-19 years followed by 71(20.3%) were in the age group of 10-13 years.

Regarding Religion it was found that among Rural adolescent girls, majority 336(96%) were Hindu and 14 (4%) were Muslim. Among Urban adolescent girls majority 271(77.6%) were belongs to Hindu and 79(22.6%) were belongs to Muslim.

Regarding caste it was found that among rural adolescent girls the majority of the girls 127(36.3%) were belongs to OBC, 101(28.9%) were belongs General caste ,96 (27.4%) were belongs to S.T and 26 (7.4%) were belongs to SC caste .

Among Urban adolescent girls the majority of the girls 169(48.3%) were belongs to General caste, 140 (40%) were belongs OBC,26 (7.4%) were belongs to SC and 15 (4.3%) were belongs to ST caste .

Regarding First menstrual bleeding, it was revealed that among rural adolescent girls the majority 224(64%) girls started menstruation bleeding at the age of 12-14 years, 90(25%) girls started menstruation bleeding at the age of 10-12 years ,34 (9.7%) girls started menstruation at the age of 14-15 years and 2(0.6%) girls started menstruation at the age of 8-10 years and among Urban adolescent girls the majority 263(75.1%) girls started menstruation bleeding at the age of 12-14 years, 46(13.1%) girls started menstruation bleeding at the age of 10-12 years ,28 (8%) girls started menstruation at the age of 14-15 years 12(3.4%) girls started menstruation at the age of 16-17 years ,and 1(0.3%) girls started menstruation at the age of 8-10 years. result

Regarding knowledge of menstruation before menarche, it was seen that rural adolescent girls 323(92.3%) girls had prior knowledge regarding menstruation and among urban adolescent girls 297 (84.9%) girls had prior knowledge regarding menstruation.

Result regarding source of menstrual information, it was found that among rural adolescent girls majority 115 (32.5%) girls received information from friend, 115(32.5%) girls received information from sister, and 93 (26.6%) girls received information from mother. Among Urban adolescent girls majority 128 (336.6%) girls received information from friend, 103 (29.4%) girls received information from sister and 66(18.9%) girls received information from mother.

Regarding management of first menstruation it was revealed that among rural adolescent girls majority 284(81.1%) girls were managed by informing mother , 25(7.1%) girls were managed by informing sister, 24(6.9%) girls were managed by informing friend and 17(4.9%) girls were managed by informing other member . Among Urban adolescent girls majority 271(77.4%) girls were managed by informing mother, 49(14%) girls were managed by informing sister and 30(8.6%) girls were managed by informing friend.

Regarding Reaction towards first menstruation it was found that among rural adolescent girls majority 239(68.3%) girl were afraid, 95(27.1%) were shocked and 16 (4.6%) girls were cried towards first menstruation and among urban adolescent girls majority 193(55.1) girls were afraid, 120(34.3%) were shocked, 28 (8%) girls were cried and 9(2.6%) towards first menstruation.

result on menstrual cycle, it was found that among rural adolescent girls 318(90.9%) have regular menstrual cycle and among Urban adolescent girls 198 (56.4%) girls have regular menstruation cycle.

Duration of menstrual bleeding, It was found that among rural adolescent girls majority 235 (67.1%) girls have 4 days bleeding, 72(20.6%) girls have 5 days bleeding, 22(6.3%) girls have 3 days bleeding and 21 (6%) girls have more than 5 days bleeding and among rural adolescent girls majority 208(59.4%) girls have 4 days bleeding, 68(19.4%) girls have 3 days bleeding, 56(16%) girls have 5 days bleeding, and 18 (5.1%) girls have more than 5 days bleeding.

Result on Material used during menstruation, on aspect of material used during menstruation among rural adolescent girl's majority 214 (61.1%) girls used cloth whereas 136(38.9%) girls used pad. Among urban adolescent girls majority 272 (77.7%) girls used cloth whereas 78(22.3%)) girls used pad.

Frequency of changing Material (Pad/Cloth) , it is seen that among rural adolescent girls majority 117(33.4%) change material once daily, 116 (33.9%0 changed material when it is wet ,78(222.3%) changed material when it is wet and 39(11.1%) changed material trice daily and among Urban adolescent girls majority 210(60%) change material twice daily, 70 (20%) changed material when it is wet, and 70(20%) changed material trice daily.

Reason of not using pad it was seen that 212(61.1%) rural adolescent girls do not used pad, among these girls majority 202(57.7%) girls unable to buy pad and 12(3.4%) girls don't like to use pad. Among Urban adolescent girls 78 girls (22.2%) girls do not used pad, among these girls majority 72(21.1%) girls unable to buy pad and 4 (1.1%) girls don't like to use pad.

Result on Disposable of sanitary pad, it was found that among rural adolescent girls 136 (38.9%) used pad, out of these 131 (37.4%) girls throw pad openly and 5 girls (1.8%) did not response to the question. Among urban adolescent girls 272 (77%) girls used pad among these 218(62.3%) girls thrown the pad by wrapping with paper.

Result on Management of Cloth: it was seen that among rural adolescent girls majority 214(61 .1%) girls used cloth rather than pad. Among these girls 202(57.7%) girls wash, dried and reuse the cloth,

Omidvar Shabnam et al [27] (2016) conducted a supported study to assess menstruation of Indian adolescent girls in an urban area of south India . The sample were consisting of 536 healthy menstruating female aged 10-19 years .The study found that the mean age of menarche was 13±1.1 years with wide variation i.e. 10-17 years .73.1% had cycle duration of 21-35 days. More than half of them reported 5-6 days duration of menstrual blood flow and 12 % the participants had > 7 days of flow.30.1% reported abundant blood loss.66.7% had dysmennorhoea

Discussion on analysis of prevalence of menstrual problems among adolescent girls in the urban community and rural community of Kamrup District, Assam.

Results on menstrual problem ,it was revealed that 283 (80.86%) rural adolescent girls suffers from premenstrual problem as compared to 285(81.43%) urban adolescent girls and 329(94%) rural adolescent girls face problem during menstruation as compared to 332 (95.13%) urban adolescent girls . result on premenstrual problem among Rural and Urban adolescent girls, it was found that 78(22%) Rural adolescent girls and 78(22%) Urban adolescent girls experience bloating and breast tenderness, 39 (11.1%) Rural adolescent girls experience dysphoria (unhappyness) as compared to 34 (9.7%) urban adolescent girls, 242(69.1%) rural adolescent girls experience stress and anxiety prior to menstruation as compared to 254(72.6%) urban adolescent girls .26(7.4%) rural adolescent girls experience headache where as 19(5.4%) urban adolescent girls experience headache , 37(10.6%) rural adolescent experience fatigue prior to menstruation as compared to 39(11.1%) urban adolescent girls . 9 (2.6%) rural adolescent girls Experience mood swing where as 29 (8.3%) urban adolescent girls Experience mood swing, 275(73.4%) rural adolescent girls experience abdominal cramps prior to menstruation as compared to 195 (55.7%) urban adolescent girls experience abdominal cramps prior to menstruation , 178 (50.9%) rural adolescent girls experience waist pain where as 175(50.0%) urban adolescent girls experience waist pain ,207 (59.1%) rural adolescent girls experience acne prior to menstruation as compared to 160 (45.7%) urban adolescent girls experience acne prior to menstruation . only 2(6%) urban adolescent girls experience constipation prior to menstruation which is not seen among urban rural adolescent girls. 329 (94.0%) rural adolescent girls face problem during menstruation as compared to 332 (94.9%) urban adolescent girls face problem during menstruation. that (20%) rural adolescent girl suffers from heavy bleeding where as 65 (18.6%) urban girls suffers from heavy bleeding. Regarding affects of heavy bleeding ; 59(16.9%) rural adolescent girls absence from school where as 244(69.7%) urban adolescent girls absence from school, 64(18.3%) rural adolescent girls affect relationship with others where as 13(3.7%) urban adolescent girls affect relationship with others. 8(2.3%) rural adolescent girls feel depressed as compared to 16(4.6%) urban adolescent girls, 38(10.9%) urban adolescent girls feel weak due to heavy bleeding , 23 (6. 6%) rural adolescent girls does not able to do daily activities as compared to 12(3.4%) urban adolescent girls. 309 (88.3%) rural adolescent girls experience dysmennorhoea as compared to 32(92.6%) urban adolescent girls . 309(88.3%) rural adolescent girls experience dysmennorhea as compared to 324(92.6%) urban adolescent girls . 255 (72.9%) rural adolescent girls experience dysmennorhoea in each cycle whereas 313(89.4%) urban adolescent girls experience dysmennorhoea in each cycle . In Rural community 201 (57.4%) adolescent girls experience moderate dysemennorea as compared to 152 (43.4%) urban adolescent girls,49 (14 %) rural adolescent girls experience mild as compared to 109(31.1%) girls experience mild and 30(8.6%) rural adolescent girls experience severe dysmenneorhoea where as 68(19.4%) girls experience severe dysmenneorhoea . 27 (7.7%) rural adolescent girls experience Headache, dizziness, and during dysmennorhoea as compared to urban 18 (5.1%) urban adolescent girls .

Study depicts the result that due to menstrual problem 208 (59.4%) rural adolescent girls absence from school as compared to 244(69.7%) urban adolescent girls .64(18.3%) affect relationship with others as compared to 13(3.7%) urban adolescent girls, 16 (4.6%) rural adolescent girls feel depressed as compared to 25 (7.1%) urban adolescent girls. 18 (5.1% feel weak as compared to 38 (10.9%) urban adolescent girls. 23 (6.6%) rural adolescent girls do not able to do daily activities as compared to 12(3.4%) girls in urban community. 215 (61.4%) rural adolescent girls manage the problem by using home remedies whereas 36(10.36%) urban adolescent girls use home remedies. 15(4.3%)

rural adolescent girls consult doctor as compared to 60 (17.1%) urban adolescent girls. 15(4.3%) rural adolescent girls Doing Nothing as compare to 82(23.4%) urban adolescent girl. 15 (4.3 %) rural adolescent girls doing nothing as compared to 82 (23.4%) urban adolescent girls to get rid of dysmennorhoea . 38 (10.9%) urban adolescent girls put hot water bottle on abdomen to relieve pain which is not done by the rural adolescent girls .

A supported study was conducted by Agarwal AK et al [7](2009) on dysmenorrhea during menstruation in adolescent girls in Gwalior. Result showed that the prevalence of dysmenorrhea in adolescent girls was found to be 79.67%. Most of them, 37.96%, suffered regularly from dysmenorrhea severity. The three most common symptoms present on both days, that is, day before and first day of menstruation were lethargy and tiredness (first), depression (second) and inability to concentrate in work (third), whereas the ranking of these symptoms on the day after the stoppage of menstruation showed depression as the first common symptoms. Negative correlation had found between dysmenorrhea and the General Health Status as measured by the Body surface area.

A supported study was conducted by Narring F et al [6] (2011) on dysmenorrhoea in Switzerland. Result showed that among 3340 girls, 86.6% suffered from dysmenorrhea-related symptoms: 12.4% described having severe dysmenorrhea and 74.2% moderate dysmenorrhea. Girls with severe dysmenorrhea described heavier consequences on daily activities compared with girls without dysmenorrhea: 47.8% of girls with severe dysmenorrhea reported staying at home and 66.5% declared reducing their sportive activities. Yet, fewer than half have consulted a physician for this complaint and even fewer were treated properly. Treatment of dysmenorrhea is discussed and recommendations for clinical practice are given.

Discussion on analysis of comparison of prevalence of menstrual problems among adolescent girls between the urban and rural community of Kamrup District, Assam

Result regarding comparison of menstrual problem among urban and rural adolescent girls some of the problems are found to be significant like Experience mood swing (X^2 value 11.287 df-1 p value 001), Experience adnominal cramps prior to menstruation(X^2 value 15.014 df-1 p value <.001) Expeience dysmennorhoea in each cycle swing (X^2 value 31.405 df-1 p value <.001), result is also significant on affects of Menstrusal problem in various activities (X^2 value179.622 df-6 p value <.001), Management of menstrual problem (X^2 value 247.812 df- p value <.001.

Thakre Subhash B, Thakre Sushama S, Ughade Suresh and Thakre Amol D [8] (2012) conducted a supported community-based, cross sectional study which was undertaken among school-going adolescent girls in the field practice area of the Rural Health Unit and Training Centre, Saoner, District Nagpur. A pre-designed, pretested , structured schedule was used for the data collection. Out of 407 girls, information on 387 participants was collected on topics relating to menstrual problems experienced by study participants and hygienic practice during menstruation. Majority of the girls (71.8%) had one or the other problem related to menstrual cycles. Dysmenorrhoea in (61%), PMS in (55.8%) and other problems pertaining to menstruation were reported in (55.3%) of the study participants. Three (1%) girls had menstrual period for less than two days whereas the bleeding of 27 (7%) subjects lasted for more than six days. Abnormal bleeding was reported in 35 (9%) of the subjects. About 15% had irregular cycles and a few had missed their cycles.

The comparison of menstruation related issues among rural and urban girls. Dysmenorrhoea and PMS were significantly more in urban than the rural girls (*P*=0.01). Substantial proportion (22.3%) of girls never discussed their menstrual problem with anybody.

Discussion on Association between menstrual problems with selected demographic variables.

Regarding association of premenstrual problem, It was found that demographic characteristics caste is found to be significant * Significant at (P<.05).It shows the association of pre menstrual problem with caste.

Regarding association of menstrual problem , it was found that demographic characteristics Caste (X^2 value -8.231 df-3 p value <.041) Reaction towards first menstruation (X^2 value -11.161 df-3 p value 011*).It shows the association of menstrual problem with caste, first menstruation is manage by and reaction towards first menstruation.*).

Samanta Aditi, Thakur Joyeeta, Goswami Monali [9] (2019) conducted a supportive study on Menstrual characteristics and its association with socio-demographic factors and nutritional status: a study among the urban slum adolescent girls of West Bengal, India. The present study aims to focus on the menstrual characteristics and its association with socio-demographic factors and nutritional status among the urban slum adolescent girls This community-based study was conducted among a group of 90 Bengali speaking Hindu adolescent girls aged between 16 to 18 years. A pre-tested structured schedule was used to collect detailed information about the socio-economic conditions and menstrual characteristics. Results of the study revealed that underweight girls attained menarche comparatively in later age (12.67±1.23) than that of healthy and overweight girls. Mean length of the menstrual cycle, mean duration of menstrual bleeding and mean number of days of peak discharge were maximum among the girls whose BMI was below 5th percentile, i.e. underweight. Majority of the underweight (75%) and healthy (50%) girls experienced heavy discharge during their menstrual days. Disorders like premenstrual syndrome (PMS) (78.8%) and dysmenorrhea (85.5%) were the major prevalent menstrual problems among these girls and occurrence of the symptoms of these disorders significantly varied based on their BMI

Conclusion:

The present study concluded that adolescent's girls experience many premenstrual and menstrual problems. This affects their daily life. A quantitative descriptive approach was used to conduct the study. Cross Sectional research design was used to conduct the study. The study can conclude that that The adolescence girls experience many problems during menstruation. The findings of the study can be conclude that 283 (80.86%) rural adolescent girls suffers from premenstrual problem as compared to 285(81.43%) urban adolescent girls and 329(94%) rural adolescent girls face problem during menstruation as compared to 332 (95.13%) urban adolescent girls.9 (2.6%) rural adolescent girls Experience mood swing where as 29 (8.3%) urban adolescent girls Experience mood swing, 275(73.4%) rural adolescent girls experience abdominal cramps prior to menstruation as compared to 195 (55.7%) urban adolescent girls experience abdominal cramps prior to menstruation , 178 (50.9%) rural adolescent girls experience waist pain where as 175(50.0%) urban adolescent girls experience waist pain ,207 (59.1%) rural adolescent girls experience acne prior to menstruation as compared to 160 (45.7%) urban adolescent girls experience acne prior to menstruation . only 2(6%) urban adolescent girls experience constipation prior to menstruation which is not seen among urban rural adolescent girls. 329 (94.0%) rural adolescent girls face problem during menstruation as compared to 332 (94.9%) urban adolescent girls face problem during menstruation.309 (88.3%) rural adolescent girls experience dysmennorhoea as compared to 32 (92.6%) urban adolescent girls . 255 (72.9%) rural adolescent girls experience dysmennorhoea in each cycle whereas 313(89.4%) urban adolescent girls experience

dysmennorhoea in each cycle . In Rural community 201 (57.4%) adolescent girls experience moderate dysemennorea as compared to 152 (43.4%) urban adolescent girls,49 (14 %) rural adolescent girls experience mild as compared to 109(31.1%) girls experience mild and 30(8.6%) rural adolescent girls experience severe dysmenneorhoea where as 68(19.4%) girls experience severe dysmenneorhoea . 27 (7.7%) rural adolescent girls experience Headache, dizziness, and during dysmennorhoea as compared to urban 18 (5.1%) urban adolescent girls Result on cultural practice related to menarche, the result reveals that 250 (100.0%) rural Mother Consider menarche as dirty things as compared to 202(80.8%) urban mother. According to 163(65.2%) rural mother as soon as the menarche starts the girls are kept isolation where as 128(51.2%) urban mother replied the same. According to 152 (60.8%) rural mother the menarche girl should not touch other as compared to 128(51.2%) urban mother.

Recommendations:

- Adolescent should be taught premenstrual signs and how to adequately prepare them for menstruation to minimize the effect of menstrual disorders through information, education and communication (IEC) materials.

- Teaching programmed should be organized periodically by the community health nurse and school health nurses on the various management strategies for menstrual disorders and how to use them effectively.

- Students should be educated on the use of non-prescriptive analgesics and the effects they could have on them. For example, NSAIDS has been reported to have increased risk for gastrointestinal bleeding and ulcers. Nurses should also caution the students and adolescent girls on the use of contraceptives without prescription. This is important due to association between long-term use of hormones and possible risk of developing cancer in the future.

- Adequate counseling should be provided by the community health nurse and school health nurses to the adolescent girls who experience dysmenorreoa and to reduce the rate of school absenteeism among them.

- The community health nurse and school health nurse should encourage family members and the adolescent girls to seek prompt medical attention to rule out or treat any menstrual problem which may be responsible for menstrual disorders or that can interfere with the reproductive health of the undergraduates in later years.

- Nurses as health educators should consistently provide information on the benefits of non-pharmacological self help measures through the use of appropriate teaching aids such as postal, leaflet and school bulleting and personal contact with the students and adolescent girl.

- Scientific studies similar to this study can be undertaken in different set up of Assam.

- A study to assess structured teaching programme regarding menstruation can be conducted among female of different age group in different parts of Assam. A study can be carried out to assess the knowledge and attitude on menstruation among health professional, adolescent girls and mothers of different parts of Assam.

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