



Level and Differentials of Fertility among Karbis of Kamrup Metropolis, Assam

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ABSTRACT North-eastern states of India are the homeland of large number of ethnic groups, which have recorded very high fertility rates as compared to the national average. A very limited study has been undertaken on the fertility of these small ethnic groups. Therefore, the paper is an attempt to study the fertility behaviour of Karbi tribe, living in Kamrup metropolitan. A cross-sectional survey had been conducted using both quantitative and qualitative approaches in Kamrup city among 354 Karbi women aged 15-49 years who had at least one living child aged less than ten years. The findings of the study revealed that majority of the respondents were illiterate and belongs to very poor household. It was observed that the Karbi women got married at an early age and conceived within the first year of marriage. The contraceptive prevalence rate was also very low among them. These findings lead to the assumption that the higher fertility among Karbi women is because of poor socio-economic condition, illiteracy and lower knowledge about contraceptive methods.

INTRODUCTION

India, the second most populous country of the world, has inclined to reduce its population since its first five-year plan period. As a result, the fertility has started showing a declining trend since 1970s. However, due to varying pace in different regions and social groups, still India has not achieved replacement level fertility. The highest fertility rate is evident in the north-eastern states of India, especially among tribal communities of the region (IIPS and Macro International 2007). In India, several studies have been carried out to find the factors responsible for fertility variations by region, social groups, culture, and environmental conditions (Dyson and Moore 1983; Basu and Kshatriya 1989; Maharatna 2000; Bhagat and Praharaj 2005; Ramesh 2007; Ramachandran and Ramesh 2005; Kameih and Kshatriya 2016). Various scholars have identified association of higher fertility with alleviation of poverty, migration, poor living condition, communication, infrastructural facilities and se-

ries of 'Hierarchical social structure' (Nanda and Ram 2003; Bhagat and Chattopadyay 2004; Nanda 2005; Saha and Verma 2006). Similar fertility studies was also undertaken among the Santhals of Birbhum district and tribal women of Kashmir where it was observed that educational status, age and household size of the women, income and husband's educational status have significant association with fertility (Malakar and Roy 2017; Vaida and Hamid 2017). However, the literature on tribal fertility, demographic trends and characteristics of North-eastern India is conspicuously thin (Preston and Bhat 1984; Rele 1987; Visaria and Visaria 1994; Visaria 1999; Retherford and Mishra 2001; Guilmoto and Rajan 2001; Maharatna and Sinha 2011).

Objectives

The health condition and reproductive health behaviour of tribal communities living in urban areas is the most unexplored area of research. With this background the present paper tried to explore fertility differentials and level among Karbi women aged 15-49 years living in the urban areas of Kamrup Metropolis, Assam.

Setting

The tribal population of India constitutes 8.6 percent of the total country's population while

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ninety percent of them are living in rural areas. During 2001 to 2011, tribal population grew at the rate of 23.7 percent against 17.7 percent of the country population. In absolute numbers the tribal population in India grew 30.1 million in 1961 to 104.3 million in 2011 (Census of India 2011a). Broadly, the tribal communities inhabit two distinct geographical areas – the Central India (Madhya Pradesh, Chhattisgarh, Jharkhand, Andhra Pradesh, Maharashtra, Orissa, Gujarat and Rajasthan) and the North-Eastern Area (Assam, Nagaland, Mizoram, Manipur, Meghalaya, Tripura, Sikkim and Arunachal Pradesh) (Saikia et al. 2001; Saikia et al. 2012). North-east India is the homeland of a large number of ethnic groups belonging to Mongoloid race.

Hills and plain lands of Assam is the home of as many as 23 tribal communities which constitute 12.4 percent of the total state population. The largest tribal group in this state is Bodo Kacharis (35%) followed by Miri (17.5%), Karbi (11.1%), Rabha (7.6%), Kachari, Sonwal (6.5%), Lalung (4.7%), Generic Tribes etc. (4.6%), Garo (3.5%), Dimasa, Kachari (2.7%) and Deori (1.1%) (Census of India 2011b). In the districts of Kamrup, North Cachar Hills, Karimganj, Dibrugarh and Hailakandi, seven to twelve percent of tribal population lives in urban areas (Census of India 2011b; Primary Census Abstract, Scheduled Tribes of Assam 2001). The patriarchal tribe Karbi formerly known as the Mikirs till 1976 (vide Govt. of Assam Notification No. TAD/115/74/47 dated 14/10/1976) is the third largest tribal group in the state of Mongoloid racial group. Based on habitation, Karbis are divided into three groups: Chinthong, Ronghang and Amri. The plain Karbis are called Dumrali tribes. According to Cen-

sus of India (2011b), the total Karbi population in Assam is 430,452 and constitutes 11.1 percent of the total tribal population of the state. They inhabit both hills of Karbi Anglong district and plain areas of Kamrup, Nagaon, Morigaon districts and northern part of the Brahmaputra River in Darrang. However, a decreasing trend of Karbi population has been observed in the state that is during 1991 to 2011 which has decreased to 1.3 percent. While, the proportion of state tribal population is almost static during this period. Along with other tribes the sex ratio for the Karbis has increased to 977 per 1000 male in the state, which is higher than national average. From 2001 to 2011 the literacy rate among Karbi's and their female members has increased sharply (Table 1). The Karbi's strictly follow clan exogamy and monogamy is the mostly preferred form of marriage. Cross-cousin marriage is a preferential one. Divorce is rather rare in the Karbi society and they do not have the system of bride price. Though the Karbi women enjoy equal status in their society but they are not the vocal arbiters of the society (Thakur 1982). Their marriageable age is lower than the legal age of marriage which is further lower than state average for both boys and girls. However, almost half of the married Karbi women aged 15-19 years have at least one living child. This results to higher TFR (3.4) as compared to total tribes TFR (2.4), Kamrup district (TFR 2.4) and state average (TFR 1.9) (Table 2). The largest city of the Assam is Guwhati and the state capital Dispur is situated in the district Kamrup Metro. In 2011, Kamrup had population of 1.5 million, out of which only nine percent lives in urban areas. The sex ratio of the district is 949 female per 1000 male and the literacy rate is 72.8 percent and female literacy

Table 1: Trend of socio-economic and demographic characteristics of Karbi's and total tribes of Assam

	<i>Karbi's in Assam¹</i>			<i>All tribes in Assam^{2,3}</i>		
	<i>1991</i>	<i>2001</i>	<i>2011</i>	<i>1991</i>	<i>2001</i>	<i>2011</i>
Tribal population (%)	12.4	10.7	11.0	12.8	12.4	12.4
Sex ratio	954	960	977	967	972	985
Literate (%)	32.2	43.0	67.9	39.1	52.1	59.0
Female literate (%)	23.6	34.3	60.5	30.9	43.7	56.0
Total fertility rate	-	3.8	3.4	3.5	3.0	2.4

Note: The 1981 census could not be held in Assam. The population figures for Assam for 1981 have been worked out by interpolation. ¹Includes Mizoram *Source:* ¹Census abstract data for scheduled tribes (ST) (India and States/UTs – District level) 2011; ST-11 number of women and ever married women by present age, Parity and total children ever born by sex 2011; Census of India 1991, 2001; ²Government of India 2006; Census of India 2011; Provisional Population Totals, Paper-1 of 2011; ³Sample Registration System, Government of India.

Table 2: Socio-economic and demographic profile of Kamrup and Assam

<i>Socio-economic and demographic factors</i>	<i>Kamrup</i>	<i>Assam</i>	<i>India</i>
<i>Socio-economic</i>			
Total population (in million) ¹	1.5	31.2	12.1
Urban population (%)	9.4	14.1	31.2
Tribal population (in million) ²	0.2	3.9	8.2
Urban tribal population (%)	1.0	5.6	2.8
Scheduled tribe of total population ¹ (%)	12.0	12.4	8.6
Scheduled tribe of total population urban ¹ (%)	1.3	5.0	2.8
Sex ratio Total ¹	949	958	943
Sex ratio Tribal ²	977	985	990
Female literacy total ¹ (%)	60.2	56.4	64.6
Female literacy tribal ² (%)	60.6	56.0	8.8
Working female ¹ %	27.1	22.5	25.5
Working female tribal ² (%)	36.6	34.8	-
<i>Marriage and Fertility</i> ³			
Boys married below age 21years (%)	4.7	8.3	20.3
Girls married below age 18 years (%)	3.9	7.4	26.8
CBR (per 1,000 population)	17.8	21.2	21.8
CEB to women aged 15-49 years	2.2	2.7	7.9
Total fertility rate	1.9	2.4	2.2
Women age 20-24 reporting birth of order 2 and above (%)	46.0	44.8	48.4
Pregnancy to women aged 15-49 years resulting in abortion (%)	4.6	6.7	-
<i>Current Use and Unmet Need of Family Planning</i> ³			
Any method (%)	79.0	67.2	53.5
Any modern method (%)	40.8	38.1	47.8
Any traditional method (%)	38.2	29.1	5.7
Unmet need for spacing	3.7	6.6	5.7
Unmet need for limiting	2.1	6.5	7.2
Unmet need total	5.8	13.1	12.9

CBR = Crude birth rate; CEB = Children ever born

Note: ¹Office of Register General, Census 2011.²Primary census abstract data for scheduled tribes (ST) (India and States/UTs – District level).³AHS Bulletin, 2012-13, Assam. Ministry of Home Affairs, GOI.

rate is 67.7 percent. The State Primary Census Abstract (2011) shows that there are 38,84,371 scheduled tribe population. Thus, the urban population of Kamrup also consist of twelve percent Karbi's of the total tribal population (Census of India 2011b).

METHODOLOGY

The study used data from "Reproductive Health Status of the Karbi women in Guwahati City." The Karbi population in this city life lives in different clusters. Hence, a simple random sampling method was used to identify eligible women from Karbi community inhabiting seven different localities (Barbari, Birkuchi, Dhalbama, Japarigog, Kenduguri, Narikalbasti and Pillankata). Total 475 Karbi households were listed in these localities and 354 eligible women were identified for main interview. Eligible women were the Karbi women aged 15-49 years residing in Guwahati city and having at least one living children aged less than 10 years. The data was col-

lected in the year 2010-2011. Both quantitative and qualitative approaches were adopted to collect data. A semi-structured interview schedule and checklist for observation were developed to collect information on demographic and socio-economic characteristics of the household, fertility history (age of menarche, age at marriage, age at first conception, children ever born), maternal health care behaviour (antenatal and natal care, place of delivery, diet during pregnancy and postpartum period) and knowledge-practice of contraception. While, the qualitative approaches: observations, case study, group discussions, informal chats; were being adopted to collect information about Karbi social life, rituals during pregnancy and knowledge about safe motherhood. Prior to collection of data from the study area consent from community leader (*Gaon Bura*), household head and women were taken.

The quantitative data analyses were done using Statistical Package for Social Sciences (SPSS) and MS-Office Excel. The age specific

fertility rate (ASFR) was calculated as average number of children per women in specific age group and the total fertility rate as average number of children per women in the study population at their lifetime. The still birth rate was calculated as per SRS definition, as, still birth rate (SBR) is the ratio of the number of still births per one thousand live births (LB) and still births (SB) during the year. The induced abortion rate is calculated as 'the total number of induced abortions of total number of pregnancy*1000'. Similarly, the induced abortion ratio is calculated as 'the induced abortions of total live births*1000'.

RESULTS

Characteristics of Study Population

Table 3 presents the characteristics of 354 Karbi women aged 15-49 years and having at least one child aged less than 10 years. All the women interviewed were following Hinduism and more than two-third (69%) of them were living in nuclear family. The Karbis in the study population was found to be mostly illiterate with a gender gap of sixty-two and 33.2 percent for women and men respectively. Majority (92%) of the women were not working. The primary occupation of the Karbi men were daily labourers (29%), while some of them were petty businessman (25%), others were found working in Government and private sectors (21% and 11% respectively) and a mere five percent of the Karbi men were engaged in agriculture. Thus, fifty-eight percent of the women reported that per month household income was less than Rs. 4000. The average number of pregnancy was 2.7 and total 937 pregnancy episodes were observed among 354 Karbi women. Of the total pregnancy episodes, ninety-four percent ended as live births, followed by abortion and still births at 3.4 and 2.3 percent respectively. The mean children born to the 354 Karbi women was 2.5 and more than two-fifths (43%) of them had three or more children. Twenty-three percent of the women had only one child. The mean birth-to-birth interval of the study population was 2.1 years. Seventeen and thirteen percent of the women had three and more than four years birth-to-birth intervals.

Determinants of Fertility

Table 4 presents the differentials of fertility among Karbi women aged 15-49 years living in

Table 3: Socio-economic and demographic characteristics of Karbi women aged 15-49 years, Kamrup Metropolis, Assam

<i>Socio-economic and demographic characteristics</i>	<i>N</i>	<i>%</i>
<i>Type of Household</i>		
Nuclear	244	68.9
Joint	110	31.1
<i>Women's Level of Education</i>		
Illiterate	220	62.2
Primary	46	13.1
Secondary and above	87	24.7
<i>Level of Husband's Education</i>		
Illiterate	118	33.2
Primary	31	8.8
Secondary	158	44.6
High	47	13.3
<i>Occupation of Women</i>		
Housewife	324	91.5
Work for cash	30	8.5
<i>Occupation of Husband</i>		
Service at Government sector	76	21.4
Service at private sector	38	10.8
Business	88	24.9
Labour	102	28.9
Agriculture	18	5.1
Others	29	8.2
<i>Income in Rupees</i>		
3000-3999	174	58
4000-4999	100	33.3
5000+	26	8.6
Mean income (\pm SD)	300	3505.5 (\pm 649.7)
<i>Demographic Characteristics</i>		
Average number of pregnancies	354	2.7
<i>Pregnancy Outcome¹</i>		
Live births	883	94.2
Still births	22	2.3
Abortion	32	3.4
<i>Number of Children Ever Born</i>		
1	82	23.2
2	119	33.6
3+	153	43.2
Mean children ever born	354	2.5
<i>Birth Interval (years)²</i>		
One	83	29.6
Two	113	40.4
Three	48	17.1
Four and above	36	12.9
Mean birth interval (years)	354	2.1

Source: Primary data from Kamrup metropolis, Assam, India

Note: ¹Pregnancy outcome calculated based on actual number of pregnancies of each women.²Birth interval includes women who had at least two live births.

Kamrup city. It depicts the age at menarche among Karbi women which ranges from 10 to 15 years of age. Majority of the Karbi women attended menarche at the age of 13 years and the mean age of menarche was 12.6 years (\pm 0.83 years). More than half (52%) of the women were

Table 4: Percentage distribution of determinants of fertility among Karbi women aged 15-49 years, Kamrup Metropolis, Assam

	Num- ber	Per- centage
<i>Age at Menarche (in years)</i>		
<=11	27	7.6
12	137	38.7
13	153	43.2
14+	37	10.4
Mean age at menarche (\pm SD)	354	12.6 (\pm 0.8)
<i>Age at Marriage (in years)</i>		
10-14	41	11.6
15-19	183	51.7
20-24	84	23.7
25-29	42	11.9
30-34	4	1.1
Mean age at marriage (\pm SD)	354	17.0 (\pm 4.4)
<i>Age at First Conception (in years)</i>		
10-14	0	0.0
15-19	188	53.1
20-24	118	33.3
25-29	39	11.1
30-34	9	2.5
Mean age at first conception (\pm SD)	354	18.2 (\pm 3.9)
<i>Knowledge of Contraceptive Methods</i>		
Male sterilization	51	14.4
Female sterilization	198	55.9
IUD	95	26.8
Condom	156	44.0
Oral pills	211	59.6
Rhythm	20	5.6
Withdrawal	3	8.4
Any traditional methods	10	2.8
<i>Current Use of Any Contraceptive Methods</i>		
Yes	141	39.8
No	213	60.2
<i>Reasons for Not Using any Methods¹</i>		
Lack of knowledge	96	45.0
Fear of side effects	84	39.4
Opposed by family	10	4.6
Opposed by husband	14	6.5
Inconvenient to use	9	4.2
Total	354	100.0

Source: Primary data from Kamrup metropolis, Assam, India

Note: ¹Question administered to the women who were not using any contraceptive method at the time of survey.

married in the age group of 15-19 years. Even, twelve percent of the women were married prior to their 15 years of age followed by twenty-four percent women in 20-24 years and only thirteen percent of the women were married after their 25th birthday. The mean age at marriage was 17 years (\pm 4.4 years). Hence, fifty-three percent of the women conceived first time at the age of 15-19 years followed by thirty-three percent aged 20-24 years and three percent aged above 30

years. The mean age at first conception of the Karbi women was found to be 8.2 years (\pm 3.9 years).

The knowledge about contraception and its methods were universal in the study population. More than half of the women knew about female sterilization. In addition, women knew about modern contraceptives more than the traditional contraceptive methods. The main source of knowledge about contraceptives were electronic media, that is, radio or television followed by interpersonal communications with government front line workers of primary health centers or *Anganwadi* workers (23%) and relatives (10%). Neighbours or friends and *dai* also helped to generate awareness about contraceptives. About one-fifth of the women reported that their husbands informed them about contraceptives. Mr. and Mrs. Rongpi was one such couple in this community who were aware about contraceptive methods and have been using it since the birth of their first child. They even intend to use permanent method soon after birth of their second child. However, for that they have ample time, since their first girl child is yet to go to school. Still, sixty percent women who were not using any contraceptive method reported that lack of comprehensive knowledge and fear about modern methods (45% and 39% respectively) had restricted them to use any modern methods of contraception. They believe that use of modern method will cause side effects like irregularity in menstrual cycle and complications in future pregnancies. However, few women reported opposition from family (5%) and husband (7%) in the use of contraceptive methods and only four percent found it inconvenient to use. During inter-personal communications with one respondent, a Karbi women of 35 years having two sons and two daughters, narrated that earlier she was not aware and even showed disinterest to family planning methods. But her friends knowing their hardships suggested her to use any contraceptive method to limit their family size. Thereafter, she discussed with her husband and finally decided to adopt permanent method of family planning method.

Fertility Level and Pattern

Table 5 depicts the outcome of pregnancies according to the age of the women. There were total 937 episodes of pregnancies observed among 354 Karbi women. Majority of the preg-

Table 5: Distribution of pregnancy outcome, fertility rate and birth intervals among Karbi women aged 15-49 years, Kamrup Metropolis, Assam

	Age groups (in years)							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
<i>Pregnancy Outcomes¹</i>								
Live birth (%)	100.0	100.0	97.1	93.1	89.5	90.6	100.0	94.2
Still birth (%)	0.0	0.0	1.5	3.1	4.8	3.0	0.0	2.3
Abortion (%)	0.0	0.0	1.5	3.8	5.7	6.4	0.0	3.4
ASFR and TFR	1.0	1.6	1.7	2.3	2.8	3.3	3.4	3.2
Age specific pregnancy rate	1.0	1.6	1.7	2.5	3.1	3.6	3.4	3.4
Still birth rate (per 1,000)	0.0	0.0	14.9	32.0	50.8	31.7	0.0	24.3
Abortion rate (per 1,000)	0.0	0.0	14.7	38.5	57.4	64.4	0.0	34.2
Abortion ratio (per 1,000)	0.0	0.0	15.2	41.3	64.2	71.0	0.0	36.2
Total number of women	2	42	78	52	68	56	56	354
<i>Birth Intervals (in years)²</i>								
One	NA	0.0	8.7	22.2	31.7	40.8	51.9	29.6
Two	NA	87.5	56.5	42.6	28.6	32.7	30.8	40.4
Three	NA	12.5	28.3	20.4	12.7	14.3	13.5	17.1
Four and above	NA	0.0	6.5	14.8	27.0	12.2	3.8	12.9
Mean birth intervals	NA	2.1	2.3	2.3	2.4	2.0	1.7	2.1
Total number of women	NA	16	46	54	63	49	52	280

Source: Primary data from Kamrup metropolis, Assam, India

Note: ASFR = Age specific fertility rates; TFR = Total fertility rate; NA = Not applicable¹Pregnancy outcomes, rates and ratios calculated based on total number of pregnancy events for each age groups. ²Birth intervals calculated for the women who have at least two live births for each age groups.

nancies (94%) ended as live births, while other six percent (2.3% and 3.4%) pregnancies ended as still births and abortions. Number of live births was observed lowest (90%) among women aged 35-39 years. The average number of pregnancies to a woman by the time she ended childbearing observed for this population is 3.4. However, the average number of children born to a woman by the time she ended childbearing is 3.2. Pregnancy wastages (still birth and abortion) was observed mainly among women aged more than 25 years. The overall still birth rate was 24.3 per 1000 live births. The highest rate of still birth (4.8%) incidence was observed among women aged 35-39 years. On the other hand, the abortion rate and ratio in the study population is observed to be 34.2 per 1,000 pregnancy and 36.2 per 1,000 live births respectively. The highest rate of abortion (6.4%) incidence was observed among women aged 40-44 years followed by women in the age group 35-39 years (5.7%), 30-34 years (3.8%) and 25-29 years (1.5%).

The finding of pregnancy wastage can be also associated with the desired number of children of the Karbi women. Majority of the women stated that high cost of living in urban areas was the main reason for desire of few children since, more children means more household ex-

penditure, which does not fit with their monthly household income. However, very few of them desired for more than three or four children. The birth intervals among Karbi women were observed 2.13 years, which is lower than the Government of India recommendation. The birth interval was lowest (1.69 years) among women aged 45-49 years and highest (2.35 years) among women aged 35-39 years. However, none of the young adolescent mothers (aged 20-24 years) had children with birth interval less than two years, while only nine percent of women aged 25-29 years have children with one year birth interval.

DISCUSSION

The present paper is an attempt to explore the fertility differentials among Karbi tribe living in Kamrup city. The result of this study illustrates how the health status of Karbi women in a city becomes vulnerable due to higher number of pregnancies and its wastages. The poor economic status and low level of education further accelerate the vulnerability along with their traditional way of life. Since, all the social groups in India consider childbearing only after marriage, therefore, the age at menarche, the poten-

tial beginning of fertile period among women, is considered as an important phenomenon. Women who have early menarche are found to have higher average number of conception and live births (Chakravarti 1986; Singh 2006; Kameih and Kshatriya 2016). The mean age at menarche in the study population is observed to be 12.6 which is equivalent with other tribal Indian women whose menarcheal ages ranges from 12.8 years to 15 years (Pandey and Tiwari 2001). Similar menarcheal trend has also been reported by Maheo and Devi (2017) among the Rongmei women of Manipur and by Chakravatti (1986) among Kabui Naga.

Early menarcheal age is related with early marriage and pregnancy. The study population shows that more than half of the respondents were married between 15-19 years of age, even few of them were married prior to age 15 years. The average age at marriage was 17 years of the women in study population, which is lower than the minimum legal age at marriage in India. Consequently, the average age at first conception was 18.2 years. Similar studies were also reported by Das et al. (2015), where the average age of marriage and first child birth was 19.3 years (± 1.4) and 21 years (± 1.6) respectively among the tribal population of Purulia district of West Bengal. Pandey and Tiwary (2001) observed that among the primitive tribes of Madhya Pradesh namely, the Bharias, Hill Korwas and Kamars, a girl after attaining adolescence are considered to have attained the marriageable age. The mean age at marriage for girls in these communities has been found to be below 16 years. It was also observed that women who become pregnant in adolescence tend to have lower levels of educational attainment and socio-economic status. The children of adolescent mothers are more likely to have low birth weight, slow development and behavioral difficulties (Ganchimeg et al. 2014; Kawakita et al. 2016).

In the present paper, it was observed that Contraceptive Prevalence Rate is lower than the state-urban average which is found to be 2. The Karbi women are familiar to Family Planning programme however, there is a wide gap between the level of knowledge and practices of family planning. The reason behind low use of permanent contraceptive among the study population despite high amount of accessibility and availability maybe due to lack of comprehensive knowledge about modern contraceptives and

misconceptions relating to its side effects. Although there is a universal knowledge of female sterilisation but its utilisation is not significant. As in the paper, it was observed that fifty-six percent of the women have knowledge of female sterilisation but large scale survey such as NFHS-4 shows that only ten percent of the women are currently using female sterilisation as permanent method. It is found in various findings and survey reports that the permanent methods of family planning, especially the female sterilization is most popular than the temporary spacing methods among the tribal groups of India. However, in the present study prevalence of temporary spacing method is more prevalent than the permanent method of contraception. The utilisation of oral pills (60%) and condom (44%) as a method for temporary spacing were found to be widely prevalent contraceptives among the Karbi women. Similar findings where oral pills (42%) and condom (21.7%) were highly used contraceptives was also observed by Gogoi (2018) among another dominant tribes of Assam, viz. Bodo-Kachari tribe and also by Prachi et al. (2008) in Sikkim where 37.9 percent and thirty-one percent of women used oral pills and condom respectively.

CONCLUSION

The present paper illuminates on the fertility behaviour of the Karbi tribe living in Kamrup city of Assam. It was observed that illiteracy, poor socio-economic condition and utilisation of low contraceptives has led to high fertility among the study population. As women education is an important co-relate to improve fertility level, therefore, emphasis on educating them should be strongly encouraged. The low use of contraceptives was due to fear of side effects and lack of knowledge hence, effective counselling and adequate information should be provided to the couples for the well-being of the family.

RECOMMENDATIONS

The Government should take initiatives with urban local bodies for spreading maternal health care programmes to the Karbi women. Effort should also be taken to improve women's education and provide them opportunities to generate income so that they have the autonomy to take decision on their health.

LIMITATIONS

In this paper the researchers have strictly restricted their study to the Karbi population living in Kamrup metropolis. It has not included Karbi community living at hills and other areas of plain Assam. Therefore, from this micro study it is really impossible to generalise the fertility level and pattern of Karbi community. The study population is too much homogenous. All the respondents follow Hinduism. But among the Karbis there are some people who follow Christianity. Hence, through this micro study the researchers cannot again generalise the level and pattern of fertility of Hindu and Christian Karbi's fertility. The study would have been really exhaustive with the inclusion of them.

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