

## **A Study on Status of Family Planning Practices and its Association with Socio-economic and Demographic Factors in Manipur, India**

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### **Abstract**

All living organism reproduces in order to continue its kind on earth. However, food chains and food webs control uncontrolled growth in the population of living organisms. But, the uncontrolled growth of human population can't be controlled by nature alone. For this, couples adopt family planning measures. These measures/methods are adopted by couples in order to control the numbers of children they desire to have and also the gap (in years) between two children. In this paper, how the family planning practices are affected by different demographic and socio-economic variables and desire for future birth in Manipur has been studied and it reveals that family planning methods are adopted by couples irrespective of their socio-economic and demographic factors.

**Keywords:** Family planning, Chi- square, NFHS-4

### **INTRODUCTION**

The most important problem of India is facing the uncontrolled growth of population. The idea of birth control is of special importance to the Indian situation. Now-a-days in India more attention is being given to the problem of family planning. The objective of resisting the family size and processing a stationary population is one of the most widely discussed topic today. The idea of family planning is an age old concept. This was prevalent 4000 years ago in India, Egypt, China and Greece. In the

earlier time, the studies included those by Kishore and his colleague (1952), Morrison (1957) have worked on the attitude of males and females both with different aspects towards family limitation.

The Government of India launched a family welfare programme in the early 1950s. The aim of the programme was to accelerate the country's economic and social development by controlling the fertility and hence reducing the rate of population growth. The aim of family planning through conception tries to achieve two main objectives: at first to have only the desired number of children and secondly to have these children by proper spacing of pregnancies. Mass media also played an important role in promotion of acceptability of contraception. In 1968-69, the Mass Education Media (MEM) division was created in the Department of Family Welfare. Channels of communication such as the Television, Radio, Song and Drama Division, Directorate of Field Publicity, and the print media promote reproductive health and population issues. Exposure to family planning messages is seen as widening the horizon of understanding on issues related to contraceptive use and helping to achieve desired family size. However, the acceptance of family planning is influenced by many socio-cultural and demographic factors at levels of individuals, family and society (Parek *et al.*, 1984 ; Bhujan 1991). Among these different factors, education is considered to give a great effect on family planning acceptances and fertility. Education is the most dynamic and influential tool for incorporating positive attitude among couples towards the methods and measures of family planning (Shukla, 2006). Besides these factors, the successful limitation of family size by couples depends not only on their usual family ideas but also on their psychological acceptance of family limitations, knowledge of birth control methods, availability of contraceptives, psychological and economic cost and environment favourable to the practice of birth control. Knowledge of contraceptive is nearly universal. 99 percent of women and 98 percent of men of the age-group know one or more methods of contraception (NFHS-3). The rate of contraceptive prevalence for currently married women in India up in NFHS-3 to 56 percent from 48 percent in NFHS-2. Contraceptive use among currently married women varies markedly by education, religion, caste and wealth. Most of the male person in India believes that women don't alone bear the responsibility for family planning (78%) and reject the idea that women using contraceptive may become promiscuous (84%) (NFHS-3).

Palamuleni (2014) studied a number of socio-economic factors associated with the use of modern contraception in Malawi. Malawi has one of the highest Contraceptive Prevalence Rates (CPR) in sub-Saharan Africa (United Nations 2011). But its fertility remains high and fertility decline is slow giving minimal impact of contraception on fertility of Malawi; thus arises many questions as women are actually using effective methods. A number of studies have been carried out in Malawi to investigate the correlates of contraceptive use in Malawi (Cohen 2000; Kalipini *et al.*, 1993;

Kishindo, 1995; Madise *et al.*, 1993). Different studies have identified demographic factors as of woman, number of living children, desired family size and experience of child death etc. as major factors that influence contraceptive use (Robey *et al.*, 1992). Contraceptive use is lowest among young women, reaches a peak among women in their thirties and declines among older women. This indicates a higher desire for child bearing among young woman, and a high growing interest of spacing births among woman in their thirties. Percentages of users decline at old ages of reproduction because they are not in the risk of pregnancy. Ram (2016) studied the contraceptive use dynamics among married young women aged 15- 24 years in India over time to understand spatial variation. The study is based on the data from three rounds of National Family Health Surveys conducted by the International Institute for Population Sciences, Mumbai. The findings indicate that the progress of family planning programme in the country is very limited as far as concerned among the young woman aged (15–24) years. Considerable proportion of women depends on female sterilization and condom use is very limited and has only changed very slowly over the past 15 years. The study shows great deal of variations in the contraceptive use among married young adolescents across different states in the country. It is found in the study that contraceptive use is higher in socio-economically and demographically developed states (States like Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Gujarat, Maharashtra and so on). Conversely, it is lower in the states such as Rajasthan, Bihar, Madhya Pradesh and Utter Pradesh etc. Further findings shows that the contraceptive use to delay first pregnancy is extremely poor among the young women and has not really improved over the past 15 years. Singh *et al.* (2004) made a longitudinal study based on the data during the period 1989-2000 to analyse the extent of acceptance of contraceptive methods by eligible couples in Manipur. According to the study, the rate of acceptance of family planning methods by couples has increased from 1989-90 to 1999-2000 except a slight downfall during 1992-93. The permanent methods as well as temporary methods of contraceptive also increased during the years except some downfall in the year 1995-96 for the former and in 1992-93 for the latter respectively. A study of Mao (2006) made an effort to assess the knowledge, attitude and practice of family planning (KAP) among the Meetei Women of Manipur (India). The study was conducted in Teju village which is at a distance of 10 km from Imphal city. In his study, it is found that the maximum educational level of the respondent is 10<sup>th</sup> standard. Agriculture is the primary occupation of the place. And 50 percent of them are farmers. Most of the families are of low income group Rs. (2000/- – 3000/-). 48 percent of the respondents had the knowledge of tubectomy. Among the family planning method they are using, 60 percent are satisfied. 44 percent of the respondents got their knowledge of contraceptive methods through friends. The percentage regarding the attitudes towards approval of abortion is high. 56 percent of the respondents had the intention to use a method to delay or avoid pregnancy. This study necessitates further reference

to assess the present scenario after a decade.

In this research work an attempt has been made to study how the family planning practices are affected by the socio- economic and demographic variables and desire for future birth in the study area.

## MATERIALS AND METHOD

The present study is based on primary data collected during 2013-2016 from 530 married women in the reproductive period from four districts of Manipur. The selected districts are Chandal, Imphal East, Imphal West and Ukhrul. The sampling technique adopted here is multistage cluster sampling, considering its suitability. The basic statistics and test of significance based on association of attributes have been applied here. Although the researcher has target for statistical modelling considering all the predictors together, investigations based on associations involving binary outcomes using contingency tables do not justify the necessity of multiple/multivariate analysis.

## RESULTS AND DISCUSSION

The study includes the 530 married women of the reproductive span from four districts of Manipur. The socio-economic and demographic informations are give below in table 1.

**Table 1:** Distribution of Respondents by Different Socio-economic and Demographic Characteristics

Socio-economic and demographic characteristic	Frequency (Percentage)	Socio-economic and demographic Characteristic	Frequency (Percentage)
<b>Religion</b>		<b>Caste/Tribe</b>	
Hindu	231 (43.60)	SC	15 (2.80)
Muslim	34 (6.40)	ST	229 (43.20)
Christian	216 (40.8)	OBC	6 (1.10)
Others	49 (9.20)	Others	280 (52.80)
<b>Family Structure</b>		<b>Geographic location</b>	
Joint	229 (43.20)	Hills	201 (37.90)
Nuclear	301 (56.80)	Plain	329 (62.10)

<b>Education</b>		<b>District</b>	
Illiterate	31 (5.80)	Chandel	100 (18.90)
Nursery to V	58 (10.90)	Imphal East	230 (43.40)
VI to X	205 (38.70)	Imphal West	100 (18.90)
XI to Graduation	220 (41.50)	Ukhrul	100 (18.90)
PG & above	16 (3.00)	<b>Community</b>	
<b>Occupation</b>		Meeties	268 (50.60)
Cultivator	18 (3.40)	Nagas	193 (36.40)
Manual labour	6 (1.10)	Kuki	13 (2.50)
Business	59 (11.10)	Kabui	22 (4.20)
Weaving	90 (17.00)	Muslim	34 (6.40)
Govt. Service	25 (4.70)	<b>Age at marriage</b>	
Others	69 (13.00)	≤19	113 (21.30)
Homemaker	263 (49.60)	20-24	217 (40.90)
<b>Family Income</b>		25-29	133 (25.10)
Non Response	24 (4.50)	30-34	51 (9.60)
Less than Rs. 5000	59 (11.10)	35-39	16 (3)
5000 to 10000	161 (30.40)	<b>Age at Menarche</b>	
10000 to 20000	170 (32.10)	≤11	23 (4.30)
20000 to 30000	68 (12.80)	12-14	336 (63.40)
30000 & above	48 (9.10)	15-17	162 (30.60)
		18 & above	8 (1.50)

Table 2 shows the distribution of the female population who are currently using family planning methods. Ten family planning methods and their possible combinations are displayed in the table along with number of users in Manipur. Out of 530 female respondents 60.80 percent are currently using any family planning methods where numbers of non-users are 39.20 percent. It is a very positive indication towards controlling fertility of having a major users of family planning methods. The combination of family planning methods, viz., “Rhythm method and withdrawal method” dominates users of family planning methods (women in the age group 15-49 years) of the study subjects. The same is 38.70 percent. The reason for using these

two methods together is obvious as these are priceless and easily assessable. So, the women of the reproductive span prefer these methods the most.

According to National Family Health Survey-4 (2015-16), any one or combination of family planning methods users in Manipur is 23.6 percent. The positive aspect is that as per the above survey the figures of contraceptive users in rural and urban area of the state are very close to each other (rural= 22.7%, Urban=25%). The present study indicates that the situation of Manipur is far better than the NFHS-4 so far as birth control measures users are concerned. However, the findings published in NFHS-4 factsheets is also in doubt as according to NFHS-3 the percentage of any family planning methods user were 48.73 percent and it was increased from 38.7 in NFHS-2. If pill is taken regularly every day for best protection, it is the most reliable and effective contraceptive method available today. Taking pill is also preferred by 3.80 percent women of Manipur where NFHS-4 reported 4.2 percent and 5.3 percent in NFHS-3. The reason for high acceptability of pill are it is easy to take and reversible. It can be used as emergency method after unprotected sex. Some users have side effects such as upset stomach, bleeding between periods or spotting, weight gain, or mild headache especially in first few months. It is safe for almost all women. Serious side effects are very rare. It can be use by any women of any age, whether or not she has children. It is not a good choice for nursing mothers. It can reduce milk supply. So, there shows a negative trend in NFHS-3, NFHS-4 and our present research work. Female sterilization is permanent method for women who are sure that they don't want more children. It was reported by 2.60 percent of female population of Manipur is going for female sterilization and in NFHS-4 it is reported as 3.10 percent but in NFHS-3 it was 8.20 percent. The negative trend among the female population towards sterilization may be because of the awareness of other available family planning methods and they don't want to lose their fertility permanently.

**Table 2:** Distribution of women according to family planning Methods

<b>Methods</b>	<b>Frequency (Percentage)</b>	<b>Methods</b>	<b>Frequency (Percentage)</b>
Non-user	208 (39.2)	Injectables	1 (0.2)
Female sterilization (Tubectomy)	14 (2.6)	Injectables, Rhythm method, Withdrawal	1(0.2)
Female sterilization (Bisectomy), Rhythm method, Withdrawal	2 (0.4)	Implants	1 (0.2)

Male sterilization (vasectomy)	1 (0.2)	Condom/Nirodh	21 (4.0)
Withdrawal	19 (3.6)	Condom/Nirodh, Withdrawal	1 (0.2)
Pill	20 (3.8)	Condom/Nirodh, Rhythm method	1 (0.2)
Pill, Condom/Nirodh	2 (0.4)	Condom/Nirodh , Rhythm method, Withdrawal	1 (0.2)
Pill, Rhythm method, Withdrawal	4 (0.8)	Foam/ Jelly, Rhythm method	6 (1.1)
IUD/Loop	13 (2.5)	Foam/ Jelly, Rhythm method, Withdrawal	3 (0.6)
IUD/Loop, Rhythm method, Withdrawal	1 (0.2)	Rhythm method	5 (0.9)
Rhythm method, Withdrawal	205 (38.7)	Total	530 (100)

Intrauterine Device is a small device that a specially trained family planning provider places inside the womb. It is very effective, reversible, long-term method. The user of IUD is 2.50 percent in Manipur where in NFHS-4 it was reported as 3.70 percent and 5.30 percent in NFHS-3. The IUD users are rapidly decreasing may be because of this method is not good for women likely to get sexually transmitted diseases (STDs) and this STDs may lead to Pelvic Inflammatory disease (PID). The user of condom is reported as 4 percent due to its preventive nature of STDs including AIDS and prevention of pregnancy. It is easy to use with a little practice, cheap, easily available, reliable and harmless. The main disadvantage of the condom use is that it can be only effective if used correctly every time. Some men object that condom interrupt sex reduces sensation or embarrasses them. So, by observing NFHS-3 (4.10%) and NFHS-4 (1.30%) a negative trend of condom user is noticed. Condom is one of the preferred contraceptive methods among the female population of Manipur.

**Table 3:** Son Preferences versus Current Contraceptive Users

		Contraceptive user's status		Total	Chi-square value	p-value
		User	Non-user			
Son Preference	Either sex	111 (64.2%)	62 (35.8%)	173 (100%)	0.45	0.36
	preferred at-least one son	209 (61.5%)	131 (38.5%)	340 (100%)		
Total		320 (62.4%)	193 (37.6%)	513 (100%)		

Table 3 shows that out of 513 (66.27%) respondent 340 (33.72%) respondents prefer at-least one boy child and 173 respondents are saying that whatever the child is boy or girl they don't have any discrimination among them. So, the son preferred respondent are higher than non-preferred population. Among the son preferred female population 209 respondents are using any family planning methods to avoid unwanted pregnancy whereas in non-preferred study subjects number of the users is 111 (64.20%). Out of 513 respondents the family planning user percent of son preferred respondent is 40.74 percent and either sex is 21.63 percent. It may be because of that the son preferred respondent wants control on their pregnancy so that they get desired baby. But it is not same for the non-preferred group; it may be because of that they don't have any desire towards getting sex specific child. However, test of significant shows insignificant association between current contraceptive user and son preference.

**Table 4:** Religion versus Current Contraceptive Users

		contraceptive user's status		Total	Chi-square value	p-value
		user	Non-user			
Religion	Hindu	135 (60%)	90 (40%)	225 (100%)	1.057	0.589
	Islam and others	49 (62.80%)	84 (37.20%)	78 (100%)		
	Christian	136 (64.80%)	74 (35.20%)	210 (100%)		

From the table 4, it is observed that sixty percent of the Hindu population is practicing family planning methods to prevent unwanted pregnancy. Rest of the Hindu female population is not using family planning methods due to different reasons. Unwillingness to use, lack of awareness, do not having the facility of family planning methods may be the cause of not using any family planning methods. Decision making is also another major factor of using or non-using of family planning methods by the female population of Manipur. Christians have highest number of family planning users having 65.3 percent followed by the Hindu female population. However, these differences are also not statistically significant.

**Table 5:** Educational level versus current Contraceptive User’s Status

		Contraceptive User’s Status		Total	Chi-square value	p-value
		user	Non-user			
Educational level	Illiterate	20 (71.4%)	8 (28.6%)	28 (100%)	1.655	0.799
	Nursery to v	33 (57.9%)	24 (42.1%)	57 (100%)		
	VI to 10 <sup>th</sup> standard	122(61.3%)	77 (38.7%)	199(100%)		
	XI to graduate	136 (63.3%)	79 (36.7%)	215 (100%)		
	PG & higher education	9 (64.3%)	5 (35.7%)	14 (100%)		

So far as the status of contraceptive users with respect to level of education of the study subjects are concerned, from table 4 it is observed that only 5.45 percent of the respondents is illiterate and 71.4 percent of these illiterate female respondents are practicing any kind of family planning methods to delay or avoid getting pregnant which is a positive indication towards population control. Data shows that barring illiterate women, when levels of education increases the family planning practices are also increases. This exception may be due to the small sample size against the illiterate education level. The user’s percentage according to the levels of education such as Nursery to class V, class VI to 10<sup>th</sup> standard, class XI to graduate and PG and Higher education are 57.9, 61.3, 63.3 and 64.3 respectively. So, education has a

positive impact on the use of family planning methods. In other words, this study also establishes role of education on fertility behaviour. However, these differences from one level of education to others is not statistically significant ( $p>0.05$ ). From this point of view, we can infer that the number of users of any family planning methods in the study area is satisfactory irrespective of educational level, thereby establish the level of awareness is also high in the study area.

**Table 6:** Caste and current contraceptive user

		contraceptive user's status		Total	Chi-square value	p-value
		user	Non-user			
Caste	ST	145(65.0%)	78 (35.0%)	223 (100%)	1.175	0.161
	Others	175 (60.3%)	115 (39.7%)	290 (100%)		
Total		320 (62.4%)	193 (37.6%)	513 (100%)		

The table 6 depicts a 2×2 contingency table for studying association between caste and status of contraceptive users. From this table it is observed that in the schedule tribe population any one or more of the family planning methods users are higher than all other castes in Manipur followed by others which includes all other castes dominated by general castes. However, this difference is very meagre and it is not statistically significant. So, the number of users of contraceptive methods is around 60 percent irrespective of castes.

Similarly, it can be seen that there is no association between status of contraceptive users and different communities of Manipur. All the communities are using any one or more methods of contraceptive almost equally and the same is around 62 percent. In this context, it can be noted that the situation of Manipur is quite advance compared to earlier study of Mao (2006) on Meetie community.

**Table 7:** Contraceptive user's status versus community

		contraceptive user's status		Total	Chi-square value	p-value
		User	Non-user			
Community	Meeties	153 (59.1%)	106 (40.9%)	259 (100%)	2.512	0.285
	Nagas	122 (65.2%)	65 (34.8%)	187 (100%)		
	Others	45 (67.2%)	22 (32.8%)	67 (100%)		
Total		320 (62.4%)	193 (37.6%)	513 (100%)		

**Table 8:** Age versus contraceptive user's status

		contraceptive user's status		Total	Chi-square value	p-value
		User	Non-user			
Age	15-25	25 (45.5%)	30 (54.5%)	55 (100%)	9.454	0.009
	25-35	139 (61.2%)	88 (38.8%)	227 (100%)		
	35 and above	156 (67.5%)	75 (32.5%)	231 (100%)		
Total		320 (62.4%)	193 (37.6%)	513 (100%)		

The table 8 shows that, the family planning practices are increasing in the reproductive span with respect to age. These differences are also statistically significant. This finding may be interpreted as follows: In Manipur majority of women get married at early age which is about 62 percent. Also, they are thinking for a child at the early part of their conjugal life. So, the percentage of contraceptive users is only 45.50% in the age group (15-25) years compared to the age groups (25-35) years and (35 and above) ages. Again, the more users in the latter two age groups (61.2% and 67.50%) indicate that after bearing desired number of children they are going to protect pregnancy. As a result, the number of contraceptive users increases.

**Table 9:** Future Contraceptive Users versus Current Contraceptive Users Status

		contraceptive user's status		Total	Chi-square value	p-value
		user	Non-user			
Future intension to use contraceptive	in next 12 months	38 (60.3%)	25 (39.7%)	63 (100%)	5.191	0.158
	to use later	68 (52.7%)	61 (47.3%)	129 (100%)		
	does not intend to use	48 (68.6%)	22 (31.4%)	70 (100%)		
	Unsure	23 (53.5%)	20 (46.5%)	43 (100%)		
Total		177 (58.0%)	128 (42.0%)	305 (100%)		

The table 9 is a 2×2 contingency table to study the association between current contraceptive users and their willingness to use in future. The results reveal that there is no association ( $p > .05$ ) between current contraceptive users and future intention to use contraceptive among the women of Manipur.

**Table 10:** Residential Status versus Current Contraceptive User's Status

		contraceptive user's status		Total	Chi-square value	p-value
		user	Non-user			
Residential status	Rural	245 (61.6%)	153 (38.4%)	398 (100%)	0.509	0.274
	Urban	75 (65.2%)	40 (34.8%)	115 (100%)		
	Hill	125 (64.1%)	70 (35.9%)	195 (100%)	0.399	0.296
	Plain	195 (61.3%)	123 (38.7%)	318 (100%)		

From table 10 it is clear that more than sixty percent of the female population of the reproductive span are currently using any contraceptive method irrespective of residential status. So far as residential status (rural/urban) is concerned, there is no

significance association between residential status and the status of contraceptive users. The same picture has also been noticed in case of two localities (hill/plain).

Thus, a good number of women of the above two groups in particular and all the study subjects in general aware the positive impact of family planning methods in progress for the betterment of family as well as for the society as a whole. So, they want to give contributions towards development of the nation by preventing unwanted needs. However, there are around 40 percent of women are still not using any one of the family planning methods. So, there is further scope to enhance the awareness programme on different family planning methods. Mass media can also play role in this context.

## **CONCLUSION**

The study reveals that more than 60 percent of women of the study area in the reproductive period are using any method of birth control measures. As such, to some extent, the level of awareness among the study group is found to be satisfactory. The family planning method users among the female of Manipur have been increasing day-by-day. Present study has found more numbers of contraceptive users in comparison to recent National Family and Health Survey. It is also noticeable that 'rhythm method' and 'withdrawal method' are practicing more among the female of the reproductive span. Pill and condoms are also practicing in a high rate but the percentage of female sterilization is decreasing rapidly. The person who has son preference uses more family planning methods in comparison to the non-preferred group. They want control their pregnancy by applying the available methods of family planning. Here, the interesting finding is that illiterate female population of the age in between 15 to 49 are also practicing family planning methods very much. There is no significance difference between this group of women and a group of educated women up to the level of higher education. This exception may be due to the small sample size in that particular group or although they have no formal education they are educated socially either by the peer team or by the health professionals. However, it contradicts general feeling among people that, awareness among illiterate persons about the family planning methods is less than the others. Again, more users in the lower income group indicate that they may think that a family having more number of children have more burdens. It may be because of their low economic condition they don't want more children. An earlier study of Dey and his colleague (2009) reported that the adoption of family planning methods is very poor and it varies from state to state. But, the present study shows that now the situation is improved. Earlier works of several researchers (Mari Bhat *et al.*, 1999; Bora *et al.*, 1998; Gulati, 1996; Parek *et al.*, 1991; Regassa, 2007; Singh *et al.*, 2004) reveal that there is association between family planning practices; and socio-economic and demographic factors. But, the

findings of present study are exception from the above studies. Here, although, the status of the users of birth control measures is improved, it is irrespective of different socio-economic and demographic variables. Only the single demographic variable, viz., age is found to statistically significant. In other cases, although, the figures slightly vary from category to category of a particular variable, these variations are not statistically significant. Finally, it can be concluded that after more than fifty years of implementation of family welfare programmes in India, cent percent of women are not adopting birth control measures. The reason behind this gap may be due to lack of full awareness and failure of motivation.

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