Fertility study among the Ithing of Manipur, India

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Abstract

The importance of application of demographic studies is ever increasing. No detailed demographic study has been conducted on Ithing so far. Population composition of Ithing was evaluated. The survey was conducted in five parts of the village. Data were collected by interviewing 99 ever-married women from a sample of 211 households. Sex ratio is high. Highest numbers of women get married within the age group of 16-17years and males get married a little later 18-19 years than females. Among the Ithing literacy is low at the same time level of education attained is also low. Most of them have combined their traditional occupation of fishing and cultivation. Residence characteristic indicate rural nature of settlement.

INTRODUCTION

Ithing is an ethnonyme that also denotes the name of the village inhabited by them. It therefore, signifies both the ethnic name and the place name. It is a village located in Bishnupur District of Manipur. It is surrounded by Loktak Lake, the biggest fresh water lake of North East India on all sides. It is physically divided into five parts, namely, Ithing Heikon, Ithing Sendra, Ithing Takmu, Ithing Khola and Ithing Khunjao. Ithing Khunjao is the biggest of all and is core settlement area whereas other parts are the satellite villages, wherein people coming from Ithing Khunjao presently live.

The Ithing is an endogamous group who live on fishing. Being an endogamous group, it is constituted by a number of endogamous clans, which are again divided into lineages. It is worth mentioning here that, the Ithing being part and partial of the larger Meitei society (dominant group) they also bear similar clan and lineage names. The dominant lineages found among them are Moirangthem, Pukhrambam, and Khundrakpam that belongs to Moirang, Khuman and Ningthouja clans respectively.

Though fishing is their primary economic pursuit, agriculture also plays an important role in their economic life, for they also practice agriculture in the field located at Thamnapokpi village which is at a distance of about three kilometers to the Southwest from their village.

Monogamy is the ideal rule though polygamy is permitted. Marriage by elopement locally known as Chelhong is the most prevalent type of marriage.

As the people follow patrilocal residence, after marriage a woman ceases to be a member of her natal lineage and becomes a member of her husband's lineage.

MATERIAL AND METHODS

The present study, which aims at understanding the demographic picture of Ithing village, is based on the demographic data collected from entire population of Ithing village of Manipur. Altogether 211 households were surveyed for census enumeration using structured schedule. The data include information like name, age, sex, clan, marital status, educational attainment, occupational status, income, age at marriage, house type, livestock, means of transport etc.

For a detail fertility survey, a random sample of 99 ever married women were interviewed using structured interview schedule. The data of fertility study include age at menarche, age at marriage, age at first issue, age at menopause, reproductive performance (serial outcome of each pregnancy), use of contraceptive devices etc.

Appropriate statistical treatment was given to the data for calculation of statistical constant and presentation of the data in a systematic and scientific way.

RESULTS AND DISCUSSION

Table 1 and 2 display the demographic profile and age and sex composition of Ithing village of Manipur. The total enumeration of Ithing population is 1437 out of which males

share 732 (50.94%) and females 705 (49.06%). This composition therefore gives a sex ratio of 963. This population can be considered as a young population on the basis of higher number of children (33.47%) and child dependency ratio (52.34) and also comparatively high crude birth rate (32.71).

DEMOGRAPHIC PROFILE OF ITHING

Figure 1

Table 1

Population size:	
Male	732 (50.94%)
Female	705(49.06%)
Total	1437
Sex Ratio	963 (female per 1000 male)
Total no. of household	211
Average no. of member per household	6.81
Child Dependency Ratio	52.34
Old Dependency Ratio	1.85
Total Dependency Ratio	54.19
Crude Birth Rate	32.71
Average no. of Child per Woman	3.63
Average Completed Fertility per Woman	5.18

Figure 2

Table 2: Frequency percent of age and sex composition of Ithing population

Age group (year)	Male		Female		Total	
	f	p.c.	f	p.c.	f	p.c.
0 -4	91	12.43	99	14.04	190	13.22
5 – 9	88	12.02	89	12.63	177	12.32
10 – 14	58	7.92	56	7.94	114	7.93
15 – 19	94	12.84	93	13.19	187	13.01
20 – 24	68	9.29	75	10.64	143	9.95
25 – 29	81	11.06	71	10.07	152	10.58
30 – 34	50	6.83	42	5.96	92	6.40
35 – 39	61	8.33	45	6.38	106	7.38
40 – 44	29	3.96	22	3.12	51	3.55
45 – 49	21	2.87	32	4.54	53	3.69
50 – 54	31	4.23	18	2.56	49	3.41
55 – 59	20	2.73	30	4.26	50	3.48
60 – 64	23	3.14	13	1.84	36	2.51
65 – 69	8	1.09	12	1.70	20	1.39
70 +	9	1.23	8	1.13	17	1.18
Total	732	100.00	705	100.00	1437	100.00
p.c.	50.94%		49.06%			

Menarchial age which marks the beginning of reproductive span is one of the important biological determinants of a population. It is at the same time influenced by environmental factors as well Johnston[1], Barry[2], Tanner and Keeffe[3].Variation of age at menarche of 24 different countries range between 10 to 18 years Shah[4], Bhasin[5]. At the same time, secular trend in age at menarche is also demonstrated Hoshi and Kouchi[6], Tanner and keeffe[3], Barry[2]. As for the present study is concerned, age at menarche of Ithing people range from 11 to 18 years with highest frequency (37.38%) at the age of 14 and mean age being 14.03 ± 0.12 years (Table 4). This mean value is same with the mean value of Nepali (14.03 ± 0.10 years) and very close the Pangal (14.04 ± 0.8 years) of Manipur and much later than the Meitei population (13.60 ± 0.10 years) as reported by Singh[7]. This later entrance to menarche among Ithings may be because of lower SES among them as compare to Meiteis. Similar findings were reported by Barry[2].

Figure 3

Table 3: Distribution of Ithing population according to marital status

Age group	MALE				FEMALE			
	Unmarried	Married	Widow	Total	Unmarried	Married	Widow	Total
0-14	237	-	-	237	244	-	-	244
15-19	94	-	-	94	88	5	-	93
20-24	52	16	-	68	32	42	1	75
24-29	32	49	-	81	13	58	-	71
30-34	11	39	-	50	6	36	-	42
35-39	9	50	2	61	1	43	1	45
40-44	1	27	1	29	1	19	2	22
45-49	-	20	1	21	-	29	3	32
50-54	-	27	4	31	-	15	3	18
55-59	-	17	3	20	-	21	9	30
60-64	-	19	4	23	-	6	7	13
65-69	-	8	-	8	-	3	9	12
70 +	-	6	3	9	-	1	7	8
Total	436	278	18	732	385	278	42	705
p.c.	59.56	37.98	2.46	50.94	54.61	39.43	5.96	49.06

Figure 4

Table 4: Distribution of women according to age at menarche

Age at menarche	f	p.c
11	1	1.01
12	6	6.06
13	25	25.25
14	37	37.37
15	21	21.21
16	6	6.06
17	2	2.02
18	1	1.01
Total	99	100.00

$\bar{X}$ = 14.03 ± 0.12 years SD = 1.19 ± 0.08 years B

Age at marriage is one such factor that plays a significant role in determining the fertility status of a population. It has been demonstrated by many of the earlier studies NSS[8], Agrarwala[9], Sharma and Abdul[10], Mutharayappa[11] that women getting married at an earlier age experience longer period of reproductive span and usually have more number of children as compared to those getting married at a later age. Age at menarche, educational qualification, socio-economic status, cultural beliefs and practices, urbanization

and employment status etc. have been reported to have influence in bringing variation of age at marriage in different population Caldwell[12],Chaudury and Devi[13], Maheo[14] .

Figure 5

Table 5: Distribution of women according to age at marriage

Age group	Male	p.c.	Female	p.c.	Total	p.c.
12 – 13	2	0.68	28	8.75	30	4.87
14 – 15	23	7.77	33	10.31	56	9.09
16 – 17	36	12.16	62	19.38	98	15.91
18 – 19	49	16.55	60	18.75	109	17.69
20 – 21	44	14.86	45	14.06	89	14.45
22 – 23	37	12.5	38	11.87	75	12.18
24 – 25	42	14.19	29	9.06	71	11.53
26 – 27	20	6.76	14	4.38	34	5.52
28 – 29	20	6.76	6	1.88	26	4.22
30 – 31	19	6.42	4	1.25	23	3.73
32 – 33	3	1.01	1	0.31	4	0.65
34 – 35	1	0.34	-	-	1	0.16
Total	296	100.00	320	100.00	616	100.00

Male
$\overline{X}$ = 21.74 ±0.27 years
SD = 4.73 ±0.19 years

Female
$\overline{X}$ = 19.19 ±0.23 years
SD = 4.18 ±0.17 years

Age at marriage among the Ithing people (Table 5) ranges between 12–33 years for females and 12–35 years for males. The highest numbers of women (19.38%) get married within the age group of 16-17 years. On the other hand, highest numbers of males (16.55%) get married at a little later age 18-19 years. The mean age at marriage for both females (19.19 0.23 years) and males (21.74 0.27 years) are comparatively lower as compared to Indian average (20.0 years). When compared with Meitei (19.98 years) and Kabui (20.03 years) of Manipur they have lower age at marriage as reported by Singh[7]. This is obviously because of romantic affairs at an early age among the boys and girls mainly stimulated by their peer groups and also sexual behaviors of married elders often observed in privacy lacking bedrooms of their rudimentary type of houses.

Menopause, the permanent cessation of menstruation resulting from less ovarian follicular activity WHO[15] determines the end of reproductive life in women. The occurrence of it generally ranges between 44 to 49 years with average being 46 years Pearl[16] .Though it shows a very high variation in a number of population Maheo[14] genetics, nutrition, socio-economic, marital status, geographic and climatic condition, smoking habit, disease, drugs and contraceptives have been reported to affect Menopause Khaw[17] , ICMR[18]. On the basis of present finding (Table 6) age at menopause is not sharply defined as that of menarche. Among the Ithing people, it ranges from 37 to 50 years .The mean average at menopause of the population is 41.94+ 0.99 years. If we compare the menopausal age of this population with other population (Muslim - 43.14 years, Meitei - 44.85 years, Kabui - 45.73 years and Nepali - 47.44 years) as reported by Singh[7] , it is seen that Ithings have lowest menopausal age. The reason as to why they have lowest menopausal age is not exactly known, however, their lower socio economic status and poor health condition might be responsible factors.

Figure 6

Table 6: Distribution of women according to age at menopause

Age at menopause	f	p.c
37	2	11.76
38	1	5.88
39	2	11.76
40	4	23.52
41	1	5.88
42	-	-
43	3	17.65
44	-	-
45	-	-
46	-	-
47	2	11.76
48	-	-
49	1	5.88
50	1	5.88
Total	17	100.0

$\overline{X}$ = 41.94 ±0.99 years SD = 4.08 ±0.70 years

Number of children ever-born to women of different age groups (Table 7) show a steady increase with increasing chronological age of mothers. It is evident from the table that women belonging to the age group 50 years and above i.e. women with completed fertility have highest number of ever born children (5.91) during their fertile period. Women of age group 15-19 years on an average have the lowest number of ever born children (0.5) per woman. It is obviously, because of their shorter period of exposure to married life. Thus, it holds true in general that longer the period of exposure to married life the higher the number of ever born children per woman unless birth control factors came into play. However, when all the women aged 15-50 years and above are considered the average number of children per woman is 3.63.

Figure 7

Table 7: Children ever born to women by age group

Age group	No. of women	f	Children per woman
15 – 19	4	2	0.5
20 – 24	13	27	2.08
25 – 29	26	85	3.27
30 – 34	15	57	3.8
35 – 39	19	70	3.68
40 – 44	7	36	5.14
45 – 49	4	16	4.0
50 and above	11	65	5.91
Total	99	359	

Average No. of Children per Woman = 3.63

Ever born Live birth delivered by mothers who completed fertility period (Table 8) reveal that as many as 11.76% of Ithing women have given birth to a maximum of 9 Live birth though average completed fertility per woman is 5.18.

Figure 8

Table 8: Children ever born to women who completed fertility

No of live birth	No. of women	No. of children
0	1	0
1	-	-
2	-	-
3	5	15
4	-	-
5	3	15
6	3	18
7	2	14
8	1	8
9	2	18
Total	17	88

Average Completed Fertility per Woman = 5.18

The outcome of pregnancies according to the age of the mother is shown in table 9. Number of Live birth is observed to be highest (23.74%) for the mother belonging to age group 25-29 years. And the average number of children per woman is 3.63 (Table 7) and 5.18 (Table 8) for the first and second categories of women (all the women and who completed reproductive period respectively). It is also evident from the table that when the average number of pregnancy per woman is 3.95, the average number of children per woman is 3.63 (Table 7) total pregnancy wastage account for 30 (7.67%) of the total pregnancies. Incidence of this high pregnancy wastage is contributed mainly by 3.07% still births and 2.81% induced abortion. Exceptionally, high rate of still birth may be attributed to poor health condition and inadequate care during pregnancy and child birth. Chronic malnutrition of the expected mother may also be another factor.

Figure 9

Table 9: Product of pregnancy by mothers' age

Age group	No. of women	Live Birth		Still Birth		Spontaneous Abortion		Induced Abortion		Total No. of currently pregnancy case	
		f	p.c.	f	p.c.	f	p.c.	f	p.c.	f	p.c.
15-19	4	2	0.55	-	-	-	-	1	9.09	1	33.33
20-24	13	27	7.54	-	-	-	-	-	-	-	-
25-29	26	85	23.74	6	50.0	4	57.14	6	54.5	1	33.33
30-34	15	57	15.92	2	16.6	1	14.28	1	9.09	1	33.33
35-39	19	70	19.55	1	8.33	2	28.57	2	18.18	-	-
40-44	7	36	10.05	1	8.33	-	-	-	-	-	-
45-49	4	16	4.46	1	8.33	-	-	-	-	-	-
50 and Above	11	65	18.16	1	8.33	-	-	1	9.09	-	-
Total	99	358	91.56	12	3.07	7	1.79	11	2.81	3	0.77

Total Pregnancy	= 391
Total No. of Women	= 99
Pregnancy per Woman	= 3.95
Total Pregnancy Wastage	= 7.67%
Still Birth per Woman	= 0.12
Abortion per Woman	= 0.18

Table 10 reveals the prevalence of Family planning practice of the sample population under study. It is observed that only (27.27%) of the sample use birth control devices. Tubectomy (13.13%) accounts for the most prevalent birth control device followed by oral contraceptive practice (7.07%). IUD cases are not prevalent among the males. The attributing factor to this is the belief that it weakens the physical strength of the males and cannot perform outdoor economic activities.

Figure 10

Table 10: Distribution of prevalence of family planning among the women

Method used	f	p.c
Oral Contraceptive Pill	7	7.07
Tubectomy	13	13.13
Hysterectomy	5	5.05
Copper-T	2	2.02
Total User	27	27.27
Total Non-User	72	72.72
Total	99	100.00

The frequency percent of total user of birth control device among the Ithings is comparatively very low as compared to the Meiteis (49.50%) as reported by Singh (2006). This obviously is because of lower literacy rate and low awareness of family planning programmed.

Demographically the Ithing population is a young one in the sense that 33.47% of the population constitutes children as compared to 2.57% elderly persons. Though detailed mortality study is beyond the preview of this article it is ample clear from the above factual data of low percentage of aged persons, that mortality level of elderly persons are high as compared to the younger groups. Ithing people being dependent on fishing and agricultural economic pursuits, people of younger age are adding more to economic subsistence of the population neglecting educational sphere on the other hand. Thus the people are still in lower socio-economic status.

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