

CHAPTER IV

HEALTH PRACTICES IN INTERVENED SLUMS

REPRODUCTIVE HEALTH

In the earlier chapter, the reproductive health practices in slums without health interventions had been studied. It was found that to a large extent the slum residents were guided by social norms and cultural taboos which had influenced their behaviour with respect to age of marriage, pregnancy, childbirth, institutional deliveries, deliveries conducted by male doctors, antenatal and postnatal care as well as contraception and family planning.

The present chapter looks at the reproductive health behaviour of the slum dwellers in four slums of the Kolkata Corporation area, which have been systematically receiving preventive health and family welfare interventions for some time. These analyses would like to compare the results of findings on similar characteristics in the non intervened slums. The present chapter would like to

- Establish to what extent the residents of the intervened slums are still influenced by social factors and cultural taboos in their reproductive health behaviour despite receiving health interventions through various programmes and projects in the area.
- Analyse to what extent the slum dwellers have changed their health care practices where health intervention programmes have been introduced in areas of reproductive health, immunisation, nutrition and diarrhoea.
- Compare the health care practices between the slums without health interventions and slums with interventions.

The study has chosen a sample of 443 households within the slums that have received interventions. These households comprise a total of 1515 men and 1448 women in the intervened areas,

Research findings in the intervened slums.

One of the purposes of this study is to enquire about the levels of literacy in the slums and gender differentials therein.

Eligible couples and their income, religion and literacy

As in the case of the study of non intervened slums, the educational standards of the wives in comparison with that of their husbands have been classified according to income and religion.

Between the Hindu and Muslim respondents who have been considered for the study, 10.52% of Hindus and 23.33% of Muslim are illiterate. 62.30% of the respondents are educated up to the secondary level and above comprising 68.11% Hindus and 46.66% Muslims. 17.02% of Hindus and 28.33% of Muslims are educated up to the primary levels. Looking at the distribution of illiterates among Hindu respondents of different income levels, the highest proportion of 12.41% illiterate Hindus are in the lowest income group. In Muslims the highest proportion of 29.7% illiterates is in the income group Rs. 1000/- to Rs. 1500/- (See Table 51).

Table No 51

Distribution of respondents classified according to monthly income, religion and literacy

Level of monthly income of the family	Religion	Level of literacy of the respondent mother				
		Illiterate	Can read and write	Primary	Secondary and above	Total
Up to Rs.1000/-	Hindu	18 (12.41)	9 (5.66)	31 (21.37)	87 (60.0)	145 (100)
	Muslim	9 (33.33)	2 (7.40)	6 (22.22)	10 (37.03)	27 (100)
Rs.1000 – 1500	Hindu	9 (12.0)	1 (1.33)	13 (17.33)	52 (69.33)	75 (100)
	Muslim	11 (29.7)	0 (0)	9 (24.32)	17 (95.99)	37 (100)
Rs.1501 – 2000	Hindu	1 (1.81)	2 (3.63)	6 (10.90)	46 (83.63)	55 (100)
	Muslim	7 (30.43)	0 (0)	8 (34.7)	8 (34.7)	23 (100)
Rs.2001 and above	Hindu	6 (12.5)	2 (4.16)	5 (10.4)	28 (58.3)	48 (100)
	Muslim	1 (3.03)	0 (0)	11 (33.33)	28 (84.84)	33 (100)
All Income levels	Hindu	34 (10.52)	14 (4.33)	55 (17.02)	220 (68.11)	323 (100)
	Muslim	28 (23.33)	2 (1.66)	34 (28.33)	56 (46.66)	120 (100)
Total		62 (13.99)	16 (3.61)	89 (20.09)	276 (62.30)	443 (100)

Figures in parenthesis indicates % of literacy levels.

Distribution of the level of education of the respondent wife in relation to the level of education of the husband

In contrast with the level of education of the Hindu wives, their husbands have a higher standard of education. As compared to 21.68% of illiterate Hindu wives, there are only 10.52% of illiterate Hindu husbands. Again, as compared to 44.27% of Hindu wives educated up to the secondary level, 52.32% are secondary educated Hindu males. The overall educational standards are better as compared to the non intervened slums where only 39.5% of the Hindu males and 25.58% of the Hindu females are educated up to the secondary level. Similarly, in the non intervened slums, only 1.16% of the Hindu wives and 10.46% of the Hindu husbands are educated up to the higher secondary level and above in the intervened slums, in contrast, 2.78% of Hindu wives and 17.36 % of the Hindu husbands are educated up to the higher secondary standard and above (See Table 52).

Among the Muslim population of the intervened area, 41.67% of the wives and 25.35 % of the husbands are illiterate. 22.50% of the Muslim wives and 45% of the Muslim husbands have studied up to the secondary level. Only 1.65% of the husbands have studied up to the higher secondary level and above, there are no Muslim wives in this category (See Table 52). These standards, however, compare favourably with the educational standards in the non intervened slums where 68.42% of the wives and 42.1% of husbands in the Muslim community are illiterate and only 26.31% of the wives and 42.1% of the husbands are educated up to the secondary level. (See Table 23)

Table No 52
Distribution of the level of education of the respondent wife as compared to her husband

Level of Education of the husband													
Level of monthly income of the family (Rs.)	Level of Education of the Wife	Illiterate		Can read and Write		Primary		Secondary		Higher secondary and above		All levels of education of wives	
		H	M	H	M	H	M	H	M	H	M	H	M
Up to Rs.1000	Illiterate	8	9	5	2	12	5	11	2	-	-	36 (11.14)	18 (15)
	Can read and write	1	-	2	-	2	-	3	1	-	-	8 (2.47)	1 (0.83)
	Primary (I-IV)	8	-	-	-	10	-	28	4	-	-	46 (14.24)	4 (3.3)
	Secondary (V-X)	1	-	1	-	7	1	40	3	4	-	53 (16.4)	4 (3.3)
	Higher secondary and above	-	-	1	-	-	-	-	-	1	-	2 (0.60)	0 (0)
Rs.1001 to Rs.1500	Illiterate	7	10	-	-	12	2	3	-	-	-	22 (6.81)	12 (10)
	Can read and write	-	-	-	-	1	-	2	-	1	-	4 (1.23)	0 (0)
	Primary (I-IV)	1	1	1	-	-	4	8	4	2	1	12 (3.71)	10 (8.33)
	Secondary (V-X)	1	-	-	-	-	3	5	11	28	1	34 (10.52)	15 (12.5)
	Higher secondary and above	-	-	-	-	-	0	1	-	2	-	3 (0.92)	0 (0)
Rs.1501 to Rs.2000	Illiterate	-	7	-	-	1	3	2	-	-	-	3 (3.09)	10 (8.33)
	Can read and write	-	-	1	-	1	-	-	-	-	-	2 (0.61)	0 (0)
	Primary (I-IV)	1	-	-	-	3	4	14	1	-	-	18 (5.57)	5 (4.16)
	Secondary (V-X)	-	-	1	-	1	1	24	7	4	-	30 (9.28)	8 (6.6)
	Higher secondary and above	-	-	-	-	-	-	-	-	2	-	2 (0.61)	0 (0)
Rs.2001 and above	Illiterate	5	-	-	-	3	8	1	2	-	-	9 (2.78)	10 (8.33)
	Can read and write	1	0	1	-	-	-	2	-	-	-	4 (1.23)	0 (0)
	Primary (I-IV)	-	1	-	-	-	2	7	5	-	-	7 (2.16)	8 (6.6)
	Secondary (V-X)	-	-	1	-	2	1	17	14	6	-	26 (8.04)	15 (12.5)
	Higher secondary and above	-	-	-	-	-	-	1	-	1	-	2 (.61)	0 (0)
All income Group	Illiterate	20	26	5	2	28	18	17	4	0	0	70 (21.68)	50 (41.60)
	Can read and write	2	0	4	0	4	0	7	1	1	0	18 (5.57)	1 (.8)
	Primary (I-IV)	10	2	1	0	13	10	57	14	2	1	83 (25.69)	27 (22.5)
	Secondary (V-X)	2	0	3	0	10	6	86	35	42	1	143 (44.27)	42 (35)
	Higher secondary and above	0	0	1	0	0	0	2	0	6	0	9 (2.78)	0 (0)
	All levels of Education of Husband (total-I)	34 (10.52) %	28 (25.35) %	14 (4.33) %	2 (1.66) %	55 (17.02) %	34 (28.33) %	169 (52.32) %	54 (45) %	51 (17.36) %	2 (1.65) %	323 (100) %	120 (100) %

NOTE:- H-HINDU, M-MUSLIM

The following observations emerge with regard to education from an analysis of Table 51 and Table 52.

- Overall educational levels in the intervened slums are better than the non intervened slums.
- Among the Hindus in the intervened slums there is a better level of education among both males and females with higher proportions having been educated up to secondary and higher secondary levels.
- In the intervened slums though the level of education among the Muslims is marginally higher it is lower as compared to that of the Hindus. The education of the women is given a low priority in the Muslim Community
- The educational standards in the non intervened slums and the priority given to women's education are much poorer than those in the intervened slums.

As in Chapter III, where a study was conducted in the non intervened slums, the following factors have been studied

1. Age at marriage
2. Beliefs associated with pregnancy
3. Influence of social and cultural norms and concepts
4. Size of family
5. Age at first child birth
6. Spacing between two successive births
7. Antenatal care seeking behaviour
8. Managing high-risk pregnancy
9. Safe deliveries
10. Acceptance of male doctors
11. Postnatal Care
12. Place of confinements
13. Beliefs and faith in family planning
14. Factors influencing adoption of family planning methods.
15. Factors influencing women to take recourse to permanent family planning methods.

Age of Marriage

As has been assessed from the study of the non intervened slums, age of marriage is an important determining factor in the area of reproductive Health, especially in deciding the total fertility rate and the health conditions for both the mothers and the children.

The present study enquires into the following:

- Whether social and cultural norms govern the actual age of marriage even in slums which have received health interventions.
- The difference between age of marriage as preferred by individuals vis-à-vis the actual age of marriage.
- Whether individual preference for higher age of marriage are dominated by dictates of the community.

The significant observations that arise out of the present study are that in 34 households the respondent mothers have been married at the age below 15 years and in 59 households the mothers have been married at the age of 15. Hence, 93 households represent marriage of women at 15 or below representing a significant proportion of 21%. In 250 of the households the mothers have been married at the age below 18 implying that more than 50% of the mothers have been married below 18 years of age. It can be seen that the illiterate, read and write and primary group contribute significantly to the lower age at marriage. (See Table 53)

The Mean age of marriage of combined religion is 17.15 years for overall income groups, being 17.93 years for Hindus and 16.37 years for Muslims. This is marginally less than the prescribed age of marriage for girls in the country and also marginally less than the Mean age of marriage as derived from the non intervened slums. The present study has found that one contributory factor is that the average age of marriage among the Muslim women in the intervened slums is concentrated mostly around 15 to 17 years and the resultant average is considerably influenced. This establishes that the Muslim community especially originating from Uttar Pradesh has to a large extent retained their tradition of early marriage of girls and also, as seen from the previous section, education of girls in this community is also at a discount in these slums.

Table No. 53

Distribution of respondent mothers according to the ages of marriage, classified by income, religion and literacy

Level of monthly income of the family (Rs.)	Level of literacy	Age at marriage of the respondent mother(Combined)														Total	
		<15 yrs	15	16	17	18	19	20	21	22	23	24	25	26	27		>27
Up to Rs.1000	Illiterate	7	7	4	11	4	1	3	1	-	-	-	-	-	-	-	38
	Can read and write	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	Primary (I-IV)	2	4	5	2	5	2	2	1	-	-	-	-	-	-	-	23
	Secondary (V-X)	-	1	3	2	7	3	4	1	1	-	-	-	-	-	1	23
	Higher secondary and above	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
	Total	9	12	12	15	17	6	10	3	1	-	-	-	-	-	1	86
Rs.1001 to Rs.1500	Illiterate	6	9	12	7	3	3	4	-	-	-	-	-	-	-	2	46
	Can read and write	1	2	4	2	-	-	1	-	-	-	-	1	-	-	-	11
	Primary (I-IV)	3	6	9	3	5	3	4	1	1	-	-	1	-	-	-	36
	Secondary (V-X)	4	6	10	5	16	5	8	1	4	-	-	-	-	-	-	59
	Higher secondary and above	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	Total	14	23	35	17	24	12	17	2	5	-	-	2	-	-	2	153
Rs.1501 to Rs.2000	Illiterate	3	3	7	3	4	-	1	-	1	-	-	-	-	-	-	22
	Can read and write	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	3
	Primary (I-IV)	2	6	8	7	7	2	-	-	-	-	-	1	-	-	-	33
	Secondary (V-X)	3	3	9	5	13	3	9	3	2	-	-	-	-	-	1	51
	Higher secondary and above	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	Total	8	13	24	15	25	5	12	3	5	-	-	1	-	-	1	112
Rs.2001 and above	Illiterate	1	3	4	3	1	1	-	-	-	-	-	-	-	-	-	13
	Can read and write	-	1	1	-	2	-	-	-	-	-	-	-	-	-	-	4
	Primary (I-IV)	1	4	6	4	2	1	-	-	-	-	-	-	-	-	-	18
	Secondary (V-X)	1	4	14	7	7	6	7	1	3	-	1	1	-	-	1	53
	Higher secondary and above	-	-	-	1	1	-	1	-	1	-	-	-	-	-	-	4
	Total	3	12	25	15	13	8	8	1	4	-	1	1	-	-	1	92
All Income Groups	Illiterate	17	22	27	24	12	5	8	1	1	-	-	-	-	1	1	119
	Can read and write	1	4	5	-	6	-	2	-	-	-	-	1	-	-	-	19
	Primary (I-IV)	8	19	29	16	19	8	6	2	1	-	-	2	-	-	-	110
	Secondary (V-X)	8	14	36	19	43	17	28	6	10	-	1	1	-	-	3	186
	Higher secondary and above	-	-	-	1	1	1	1	-	3	-	-	-	-	-	-	7
	Total	34	59	97	60	81	31	47	9	15	-	1	4	-	1	4	443

In the case of the non intervened slums, it was seen that individual opinion of mothers on the suitable age of marriage was overridden by the opinion of the community. A similar exercise has been conducted within the intervened slums to ascertain the response in the same. The predominant opinion among Hindus is that marriage of girls should be solemnised when they are within the age range of 19 to 22 years. Upon calculation of the Mean of the suitable age of marriage, it is found that the individual Hindu mother placed the suitable age of marriage at 19.81 years. In Muslim community, the predominant choice is for marriage of girls within the age range of 15 to 18 years.

The individual Muslim mother has placed the suitable age of marriage at 18.47 years. This conservative view is borne out by actual age of marriage, which is only 16.37 years for Muslim girls in the intervened slums. (See Tables 54 & 55)

Table No 54

Distribution of respondent mothers according to their opinion on the suitable age of marriage

Distribution of respondent giving her opinion to which age the marriage of her daughter should be solemnized according to her level of literacy and religion																		
Level of literacy of Respondent E.C.	Below 15 years			15 - 18 years			19 – 22 yrs			23 - 26 yrs			27 years and above			Total		
	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T
Illiterate	1	1	2	17	20	37	52	29	81	-	-	-	-	-	-	70	50	120
Can read and write	-	-	-	4	0	4	13	1	14	1	-	1	-	-	-	18	1	19
Primary (I-IV)	-	1	1	26	16	42	56	10	66	1	-	1	-	-	-	83	27	110
Secondary (V-X)	-	1	1	32	34	66	111	7	118	-	-	-	-	-	-	143	42	185
Higher secondary and above	-	-	-	3	0	3	5	0	5	1	-	1	-	-	-	9	0	9
Total	1	3	4	82	70	152	237	47	284	3	-	3	-	-	-	323	120	443

H:- Hindu, M:- Muslim, T:- Total

Hence, the following findings may be summarised:

- Individual Hindus have placed the suitable age of marriage at 19.82 years and the Hindu community at 19.30 years.
- The actual age of marriage in Hindu community is 17.93 years.
- Individual Muslims have placed the suitable age of marriage at 18.47 years and the Muslim community at 17.53 years.
- The actual age of marriage in Muslim community is 16.37 years.

The results of the present study as against our hypotheses are as follows:

- Social and cultural factors have continued to influence the Muslim community while preferring the age of marriage of girls in their community.
- There is significant difference between ages preferred for marriage and actual age of marriage in the Hindu community.
- In the Muslim community the age preferred by the community and the actual age of marriage are quite close to each other.
- In the Hindu community, community dictates overrule individual preferences. In the Muslim community, community dictates are predominant and all pervasive. Individual decisions are influenced by the dictates of the community.

Distribution of the mothers opining on the suitable age of marriage as compared with the dictum of the community

The Mean ages of marriage as considered being suitable by respondents of the Hindu community lie within 18.66 years and 20.17 years considering both the intervened and the non intervened areas. For the Muslim community the range lies within 16.44 years to 22.33 years, which surprisingly for the non intervened areas has been placed at quite a high level by the members of this community. In the case of the literate Muslims, the actual Mean age is found to be nearly 4 years less than that stated by respondents as well as by the community in the context of desired age of marriage. This reiterates that the residents hailing from Uttar Pradesh the slums of Garden Reach advocate predominantly a low age of marriage for girls. In the cases of both intervened and non intervened slums, for both illiterate and literate groups, the individuals have placed the age of marriage at a high level than that placed by the community. This shows that in urban slums under survey the dictum on social issues such as the age of marriage overrides the individual's opinion and girls are made to marry at a relatively early age, often earlier than that prescribed by the national law. (See Table 55)

Table No. 55

Table contrasting the individual opinions with that of the community on the suitable age of marriage for girls in the non intervened and intervened slums

	Literacy/ religion	Hindu (age in years)		Muslim (age in years)	
		Opinion of respondent	Community's dictum	Opinion of respondent	Community's dictum
Illiterate	Intervened area	19.91	19.40	16.47	16.44
	Non intervened area	19.89	19.40	19.77	19.15
Literate	Intervened area	19.80	19.28	17.91	16.89
	Non intervened area	20.17	18.66	22.33	21.00
All literacy levels combined	Intervened area	19.82	19.30	18.47	17.53
	Non intervened area	19.23	18.98	20.58	19.74

The significant finding that can be drawn from the above analysis is that both in the non intervened and intervened areas there is a significant difference between the individuals' opinion and that of the community's dictum in the case of Hindu respondents especially in the educated group. The degree to which this holds good in the Muslim community is much less. Hence, religion needs to be taken as a significant factor of segmentation while designing the interventions.

Beliefs associated with pregnancy

In the tradition ridden non intervened slums, it was seen that a number of superstitions, beliefs and taboos guide the individual's mindset on conception. The following hypothesis have been considered:

- Rational beliefs of self-planning of pregnancy would dominate because of knowledge imparted through intervention
- Education and literacy combined with knowledge imparted through the intervention would reinforce the rational beliefs about pregnancy

40% of the Muslim mothers of the intervened area as against 15.47% of the Hindu mothers were firm in their belief that only God's blessings allowed mothers to conceive to beget a child. The corresponding proportion of such believers in the non intervened areas came to about 90% in the community. 50.46% of the overall Hindu mothers of the intervened area explained that self-planning motivated the couples to plan the size of their family. Among Muslims, however, only 7.5% supported this view in the intervened area. The corresponding proportions in the non intervened area were 8.1% of the Hindus and none from the Muslim community respectively. 1.8% of the Hindus and 5.8% of the Muslim mothers of the intervened slums reported that the pregnancies as unplanned, as compared to 5.26% of mothers in the non intervened area. In the intervened area, 32.1 % of the Hindu mothers and 46.5% of the Muslim mothers stated that the desire of the husbands and in laws prompted them towards childbearing. In the non intervened area, however, 3.4% of the Hindus and 5.2% of the Muslims had planned childbirth according to the desires of the husband and other members of the family.

Upon studying the impact of the literacy on the beliefs associated with childbirth, it is observed that higher proportions of Muslim mothers who were either illiterate or were educated up to the primary and secondary levels relied more on God's blessings than on rational reasoning such as self planning or the desire of the husband and other family members. Hindu mothers of all levels of literacy relied more on the rationale of self-planning. In the non intervened areas, only 10.5% of the Hindu illiterate mothers and 1.16% of the Hindu mothers, educated up to the secondary levels, agreed with this view. Unplanned pregnancies were reported by less than 1% of the illiterate mothers, and mothers who were able to read and write only and 0.92% of the Hindu mothers educated up to the secondary level in the intervened areas opined similarly. The corresponding proportions in the mothers of the Muslim community in the intervened area are 0.83% among the illiterates, 0.22% among the primary educated and 4.16% of those educated up to the secondary level. Compared to this, 6.6% of Hindu mothers and 5.26% from the Muslim community in the non intervened area stated that their pregnancies are unplanned. (See Table 56)

Table No. 56

Distribution of respondents classified according to their belief/ knowledge on the causes of pregnancy

Level of literacy of the respondents	Classifications of beliefs on causes of pregnancy											
	God's blessings			Self planning			Without planning			Desire of the husband or of other in-laws		
	H	M	T	H	M	T	H	M	T	H	M	T
Illiterate	15 (4.64)	15 (12.5)	30 (6.77)	32 9.9	4 3.33	36 8.12	1 (.3)	1 (.83)	2 (.45)	22 (6.81)	30	52 (11.73)
Read and Write	2 (.45)	0 (0)	2 (4.96)	9 (2.78)	1 (.83)	10 (2.25)	2 (.61)	0 (0)	2 (.45)	5 (1.59)	0 (0)	5 (1.12)
Primary (I-IV)	11 (3.4)	12 (10)	23 (5.19)	32 (9.9)	1 (.83)	33 (7.44)	0 (0)	1 (.83)	1 (.22)	40 (12.38)	13 (10.8)	53 (11.9)
Secondary (V-X)	22 (6.8)	21 (17.5)	43 (9.7)	81 (25.07)	3 (2.5)	84 (18.9)	3 (.92)	5 (4.16)	8 (1.8)	37 (11.4)	13 (10.8)	50 (11.2)
Higher secondary and above	0	0	0	9 (2.7)	0	9	0	0	0	0	0	0
Total	50 (15.47%)	48 (40%)	98 (22.12%)	163 (50.46%)	9 (7.5%)	172 (38.8%)	6 (1.8%)	7 (5.8%)	13 (2.9%)	104 (32.1%)	56 (46.5%)	160 (36.1%)

The following can be concluded from the study in the intervened area:

- A high proportion of mothers rely on the rationale of self-planning. 50.5% of the mothers of the Hindu religion think rationally on the issues of conception and pregnancy.
- A significant deviation is observed in the case of the Muslim Community wherein 40% of respondents combined for all literacy levels ascribed childbirth to God's blessings. This can be attributed to the ingrained cultural beliefs of the migrant Muslims of Uttar Pradesh believing in early marriage and adhering to traditional beliefs.
- Among the Muslim community even in the intervened slums only 7.5% relied on self-planning while the rest of the mothers adhered to traditions and practices.

The hypothesis in the intervened slums is that rational beliefs of self-planning of pregnancy would dominate. Education and literacy combined with knowledge imparted through the interventions would reinforce the rational beliefs about pregnancy. This hypothesis holds good to a large extent for the Hindu community but only to a very limited extent for the Muslim community. This again reinforces the factor that interventions need to reckon religion as a significant variable.

This contrast becomes all the more glaring when compared with 90% of respondents of all literacy levels and of both religions in the non intervened area who have expressed strong beliefs in traditional norms and practices. Hence, it may be concluded that the interventions have had a significant impact on the Hindus rather than on the Muslims in this study. Education has had a positive impact on Hindu mothers while planning for children in

intervened slums. 25.07% of mothers educated up to the secondary level believed in self planning as against 1.16% of secondary educated mothers in non intervened slums. At all levels of literacy more Hindu mothers advocated self planning towards childbirth as against Muslim mothers both in the intervened and in the non intervened slums. This validates the hypothesis that self-planning of pregnancies would dominate because of knowledge imparted through interventions and programmes though with varying degrees on each community. This also establishes the veracity of the hypothesis that literacy and knowledge introduce rational beliefs on pregnancy but has differential effects on each community.

Influence of social and cultural norms on conception

Associated closely with the traditions guiding individual beliefs towards conceiving children are various social and cultural practices that are often practiced in many societies to beget children. In the non intervened slums, 94.5% Hindus and 78.93% of the Muslim mothers adhere to such practices to beget children. The following hypotheses have been examined in the intervened slums.

- The beliefs regarding conception would be guided by rational thinking
- The beliefs in social and cultural practices leading to faith based practices to beget children would be minimal

In the non intervened area, 89.53% of the Hindu mothers and 78.94 % of the Muslim mothers supported observing of such rituals. Surprisingly, in the intervened area also, 52.94% of the Hindu mothers and ~~72.5%~~^{69.16%} of the Muslim mothers have agreed to support such traditions and rituals to beget children. Interestingly, while illiterate mothers formed the largest proportion in the non intervened slums, mothers educated up to secondary level were in the majority in the intervened slums.

In the non intervened area, 1 illiterate mother and 1 mother educated up to the primary level believed in the practice of exorcism to beget a child. In the intervened slums no mother believed in exorcism to beget children. At the same time, however, in the intervened area, 3.09 % of the Hindu mothers and 2.5 % of the Muslim mothers believed in pacifying planets such as the Saturn in order to beget children. 44.58% of the Hindus and 12.5% of the Muslim mothers prayed to God to beget a child. 5.57% of the Hindu mothers and 58.33% of the Muslim mothers believed in the supernatural powers to beget children.(See Table 57).

Table No 57

Distribution of respondents offering her opinion as to whether she agrees on the need to follow social dicta and cultural norms to beget a child (in %)

Level of Literacy of Respondent (%)	Whether respondent agrees to follow cultural norms / social dictum or not				If yes, nature of norms to be followed									
	Yes		No		To pacify influence of evil planet		Pray to God		Exorcism		Mysticism/ (supernatural) / superstition		Opting for doctor's advice along with socio cultural taboos	
	H	M	H	M	H	M	H	M	H	M	H	M	H	M
Illiterate	34 (10.52)	25 (20.83)	36 (11.14)	25 (7.73)	5 (1.54)	0 (0)	26 (8.04)	7 (5.83)	-	-	4 (1.23)	20 (6.19)	35 (10.83)	27 (22.5)
Can read and Write	11 (3.40)	0 (0)	7 (2.16)	1 (0.83)	0 (0)	0 (0)	9 (2.78)	0 (0)	-	-	3 (.92)	0 (0)	12 (3.71)	0 (0)
Primary (I and IV)	56 (17.33)	22 (18.33)	27 (8.35)	5 (4.16)	3 (.92)	0 (0)	47 (14.55)	0 (0)	-	-	6 (1.85)	14 (4.33)	56 (17.33)	19 (15.8)
Secondary (V to IV)	67 (20.74)	40 (33.33)	76 (23.52)	2 (1.66)	2 (.61)	0 (0)	62 (19.19)	3 (2.5)	-	-	5 (1.54)	36 (11.14)	69 (21.36)	39 (32.5)
Higher secondary and above	3 (.92)	0 (0)	6 (1.86)	0 (0)	0 (0)	3 (2.5)	0 (0)	0 (0)	-	-	0 (0)	0 (0)	3 (.92)	0 (0)
Total	171	87	152	33	10	3	144	15	-	-	18	70	175	85
Percentage	52.9	72.5	49.05	29.5	3.09	2.5	44.58	12.5	-	-	5.57	58.33	54.17	70.83

H – HINDU, M – MUSLIM

The following are the conclusions that can be drawn:

- Certain households even in the intervened slums still remain under the influence of their social, cultural and religious traditions in their beliefs that rituals were required to be followed to beget children
- Policy makers need to take into cognizance such beliefs and practices while advocating interventions in the area of reproductive health.

This to a certain degree, rejects that the hypotheses

- The beliefs regarding conception would be guided by rational thinking and
- The beliefs in social and cultural practices leading to faith-based practices to beget children would be minimal.

Size of the family

As seen in the case of the non intervened slums, average size of the family depends on the age of marriage of the women and also the attitudes families have towards planning for children. It was found that early age of marriage for the girls as well as traditional influences on the concept of childbearing had led to an average number of 3.2 for Hindu households to 3.0 children in the Muslim Households in the non intervened slums.

The following hypotheses have been examined in the intervened slums:

- The number of children in a family would directly correlate with literacy and education
- Age at marriage would considerably influence the number of children

Literacy wise, in the intervened area, the average number of children born to illiterate mothers range from 1.00 to 2.7 in the case of Hindu households. The range in Muslim households is from 1.84 to 2.7 children born to illiterate mothers. Comparing this to the non intervened slums, the average number of children ranged between 3.3 to 3.7 in Hindu illiterate families and from 2.0 to 3.4 in Muslim illiterate families. Clearly interventions had an effect on limiting the family size in the non intervened slums given that both groups compared are from illiterate backgrounds and mothers have been married at a very early age. Among the literates, in the intervened slums, the average number of children ranges from 1.64 to 2.08 in Hindu households and 1.6 to 2.1 in Muslim households. In non intervened slums, the average ranged from 1.0 to 2.75 in Hindus and 1.5 to 3.75 in Muslims. The upper end of the ranges was higher in the illiterate groups in both categories of slums. Hence in both slum areas literacy has had an effect in determining size of the family.

In the case of the income effect, the highest average number of children in the intervened slums is in the highest income group among Hindus. This is similar to the findings in the non intervened slums where the highest average number of children belonged to the highest income group. In the Muslim community in the intervened slums, however, the highest average number of children is found in the lowest income group. Hence children are clearly seen as potential to higher family income in both areas. (See Table 58)

Table No 58

Number of living children per eligible couple classified by income and religion in intervened slums

Average number of living children per eligible couple						
Income group	Hindu			Muslim		
	Illiterate	Literate	Total	Illiterate	Literate	Total
Up to Rs.1000	2.1	1.64	1.78	2.7	2.1	2.6
Rs.1001-1500	1.68	2.08	1.97	1.84	1.7	1.78
Rs.1501-2000	1.0	1.79	1.59	1.84	1.6	1.6
Rs.2501 and above	2.7	1.86	2	2.2	1.64	1.7
All income groups	1.62	1.84	1.83	2.14	1.76	1.92

On comparing the findings of this study with the hypotheses, it is seen as follows:-

The ages of marriage of women in both the intervened and the non intervened areas are broadly compatible. Hence, what has led to the smaller family size among the slum households in the intervened areas is the positive attitude that the families have developed towards family planning.

The above observations clearly establish the hypothesis that in the intervened slums the number of children directly correlates with literacy and education. The hypothesis that the age at marriage would considerably influence the number of children in a family does not hold good in the intervened slums. This implies a favourable effect of interventions on the intervened slum.

Childbirth

In the non intervened slums, mothers interviewed had opined on what they considered to be the suitable age for giving birth to the first child. The hypothesis that has been examined is the influence of social, cultural and religious beliefs on the age at birth of the first child would be considerably low. The Mean ages computed for literacy and religion differentials oscillate within the age group 19 years to 22 years and more specifically between 20.84 years to 21.8 years. The Standard Deviation ranges between 0.79 and 2.17. In the non intervened areas, mothers placed 19 years as the suitable age for bearing the first child. In the intervened area, the desired age ranges between 20.84 years to 21.80 years, which is clearly an improvement over the standards set by the mothers of the non intervened slums. In the non intervened area, 39.5% of the Hindu mothers had supported 19 years to be a reasonable age for childbearing on health grounds; in the intervened slums, 47% of the Hindu mothers supported 20-21 years as the suitable age of childbearing on health grounds. 34.9% of Hindu mothers of the non intervened slums had cited social and religious factors for determining the suitable age of first childbirth. In the intervened slums, only 3.09% had associated the age of childbearing with social issues and 0.3% with customs and taboos.

Similarly, among the Muslim mothers, 47.4% mothers had supported the age of child bearing on social and religious grounds in the non intervened slums. In the intervened slums, none of the mothers from this community supported the age of childbearing with social taboos and customs. In the non intervened area, illiterate mothers formed the predominant opinion group. In the intervened area, literate mothers who had studied up to the secondary level were more strongly represented.

The following emerge from the above analysis:

- Mothers of the intervened area support a higher age of childbearing than their counterparts in the non intervened slums.
- Further, most mothers in the intervened area advanced health of the mothers and children to be the deciding factor rather than social and cultural traditions as cited by the mothers in the non intervened slums.

This clearly establishes the hypothesis that the interventions have an impact in reducing the influence of social, religious and cultural factors on age at first childbirth.

Spacing between two successive births

While in the context of childbearing, mothers were asked to opine on what they felt should be the appropriate interval between two successive births. In the non intervened areas, awareness on birth spacing was rather limited and domestic convenience was cited as the main factor in desiring that the second child may be born when the first child has at least become a toddler. The study summarises the position in the intervened slums. In the Muslim community, the Mean differential interval ranges from 3.96 years to 4.16 years and the Standard Deviation ranges from 0.72 to 0.94. In the case of Hindu mothers the Mean differential ranges from 4.05 to 4.18. (See Table 59)

Table No 59

Mean and Standard Deviation between two successive childbirths (in years except for Standard Deviation)

Religion	Statistic	Illiterate	Primary	Secondary	Combined literacy
Hindu	Mean	4.186	4.12	4.05	4.1
	Standard Deviation	0.993	0.874	0.841	0.892
Muslim	Mean	3.96	4.16	4.11	4.06
	Standard Deviation	0.729	0.942	0.722	0.782
Combined religion	Mean	4.91	4.13	4.06	4.09
	Standard Deviation	0.84	1.043	0.816	0.864

Among the illiterate Hindu mothers, 21.12 % supported the spacing between children on grounds of good health for the mother, 23.07% based their reasoning on domestic advantages, and 10% advocated economic grounds and 64.28% wanted to give adequate care to both children. Among the Muslim mothers, 64.25% quoted domestic advantages to be the predominant factor in supporting spacing between births. Among the literate Hindus, 33.43% quoted domestic advantages and 30.33% wanted to pay more attention to both children. Among the Muslims, 27.47% quoted domestic advantages and 52.17% wanted to take adequate care of both children. Thus literacy has played an important role in influencing mothers' responses towards spacing of their children. More mothers in the intervened area wished to take better care of both their children and had a rational ground for advocating spacing between childbirths.

A T test of significance was conducted to ascertain association, if any, between the Mean ages of marriage and the Mean ages at pregnancy between the two religions. High degree of significance is established at 5 percent level with 441 degrees of freedom for the association between ages of marriage in the intervened slums. A similar high degree of association is established at 5 percent level with 103 degrees of freedom in the non intervened slum and it is found that there is close association between the ages of pregnancy between the two religions.

The following can be concluded from the analysis:

- There is a significant association between the Mean ages of marriage and Mean ages of pregnancy in both slum areas.
- More mothers in the intervened slums could cite better rationale based on health ground for mothers and children for spacing between two children
- Mothers have satisfactory awareness and play an enhanced role in determining family size and spacing of children in intervened slums.

Antenatal Care

In the non intervened slums, 90% of the Hindu mothers and 68% of the Muslim mothers had preferred to avail of antenatal care. While the effect of income was not established, the educated mothers supported the need in higher numbers. In the intervened slums, a similar exercise has been conducted. Awareness of the importance of regular antenatal care of the pregnant mothers has been found almost absolute between both the communities----the proportion being 99.38 % and 97.5 % of the Hindu and the Muslim mothers respectively who have preferred to take recourse to antenatal check ups. Among the 321 out of 323 Hindu mothers who have so preferred, 47.05 % are aware of the health need of pregnant mothers. 85.1% wishes to ascertain status of blood pressure with foetal position. 53.4 % desired to have access to immunisation, pathological examination and nutrition packets. Among the 117 Muslims out of 120 respondents, who preferred antenatal check ups, 95 % were aware of health requirements of a pregnant woman, 1.6% of the need to check blood pressure and foetal position, and 17.5% wished to avail of pathological tests, immunisation and nutrition packets. (See Table 60)

Table No 60

Distribution of respondent mothers supporting the need for antenatal care

Level of Monthly Income of Family	Level of Literacy	Whether ANC is to be sought				Causes for seeking Ante Natal Care									
		Yes		No		Awareness of health		BP with foetal position (antenatal care)		Nutrition packet. Immunisation, Stool, Urine, Blood, exams.		Traditional belief		Fatalism	
		H	M	H	M	H	M	H	M	H	M	H	M	H	M
Upto Rs 1000	Illiterate	18	20	-	-	14	20	8	18	3	13	-	-	-	-
	Can read and write	1	0	-	-	1	0	1	0	1	0	-	-	-	-
	Primary (I-IV)	18	4	-	-	13	4	9	4	6	1	-	-	-	-
	Secondary(V-X)	21	2	-	-	6	2	16	1	4	0	-	-	-	-
	Higher secondary and above	2	0	-	-	0	0	1	0	0	0	-	-	-	-
	Total	60	26	-	-	34	26	35	23	14	14	-	-	-	-
Rs. 1001-1500	Illiterate	32	12	-	-	16	12	20	5	17	8	-	-	-	-
	Can read and write	10	1	1	1	3	1	6	1	7	1	1	0	-	-
	Primary (I-IV)	27	8	-	-	10	8	16	3	12	0	1	2	-	-
	Secondary(V-X)	47	10	0	1	19	10	32	1	23	0	-	-	1	0
	Higher secondary and above	1	0	-	-	1	0	0	0	0	0	-	-	-	-
	Total	117	63	1	2	49	31	74	10	59	9	2	0	1	0
Rs.1501-2000	Illiterate	15	12	1	1	9	11	5	5	2	5	-	-	-	-
	Can read and write	3	0	-	-	2	0	1	0	2	0	-	-	1	1
	Primary (I-IV)	38	5	1	0	22	5	10	0	11	1	-	-	-	-
	Secondary(V-X)	43	8	-	-	31	8	10	0	10	0	-	-	-	-
	Higher secondary and above	3	0	-	-	3	0	0	0	0	0	-	-	-	-
	Total	102	25	2	1	67	24	26	5	25	6	-	-	1	1
Rs. 2001 and above	Illiterate	9	5	-	-	7	5	2	3	2	4	-	-	-	-
	Can read and write	4	0	-	-	2	0	4	0	1	0	-	-	-	-
	Primary (I-IV)	10	7	-	-	6	7	4	0	3	1	-	-	-	-
	Secondary(V-X)	32	20	-	-	24	20	7	0	4	0	-	-	-	-
	Higher secondary and above	4	0	-	-	3	0	1	0	1	0	-	-	-	-
	Total	59	32	0	0	42	32	18	3	11	5	-	-	-	-
All income groups	Illiterate	70	57	0	1	36	48	65	1	24	30	-	-	-	-
	Can read and write	18	2	1	1	15	1	9	1	11	0	1	2	1	1
	Primary (I-IV)	84	24	1	0	48	34	114	0	31	3	1	0	1	0
	Secondary(V-X)	140	34	0	1	46	81	87	0	41	0	-	-	-	-
	Higher secondary and above	9	0	-	-	7	0	0	0	1	0	-	-	-	-
	Total	321	117	2	3	152	114	275	2	108	33	2	2	2	1
	Percentage	99.38	97.5	0.68	2.5	47.05	95.0	85.1	1.6	53.4	17.5	0.61	1.66	0.61	0.83

ANC – Antenatal Care, BP – Blood Pressure

In comparison, in the non intervened area, only 32.05 % and 7.69 % Hindu mothers wished to ascertain blood pressure, weight gain, foetal status, and receipt of nutrients, vitamins, folipher tablets, immunisation and other services respectively. Among Muslim mother of the non intervened area, 53.84% and 23.07% respectively desired to check their blood pressure, weight gain, foetal status, and avail of pathological tests, immunisation and nutrition packets respectively.

In the intervened area, 2 Hindu and 3 Muslim mothers did not prefer to avail of antenatal care. 2 Hindu mothers were traditionally influenced to refrain from taking recourse to any antenatal care. The same 2 Hindu mothers were totally fatalistic who believed that whatever happens is by the grace of God only. Similarly, 2 Muslim mothers held back on traditional grounds and 1 on grounds of fatalism. In the non intervened area, 8 Hindu mothers negated the need to avail of antenatal care on grounds of traditional belief and taboos, while 3 mothers had no knowledge at all of such care. Of the 6 Muslim mothers who had similarly negated, 1 rested on fatalism, and the other 5 had no knowledge of the facilities and benefits of antenatal care.

Clearly, income levels had no impact on the preference for antenatal check ups both in the intervened and in the non intervened areas. Members of both communities of the intervened area had excellent awareness irrespective of literacy and were also aware of specific antenatal issues, which demanded attention.

It is of interest, however, that despite interventions, even in the intervened areas, a certain proportion of mothers, namely, 1.2 % of the Hindus and 2.5 % of the Muslims fell back on traditional beliefs/taboo and fatalism. This implies that while interacting with the urban poor mothers in the area of ante natal care, the policy makers would have to carefully work their way through taboos and beliefs among the urban poor.

The following conclusions emerge:

- Awareness among the mothers in the intervened slums regarding requirements of antenatal check ups and the issues involved are higher than in the non intervened slums
- Income levels had no impact on preference for antenatal check ups
- The awareness levels are higher irrespective of the literacy levels
- The preference of antenatal check ups has been established as neutral to income and literacy effects in the non intervened slums also.
- There are certain pockets of beliefs regarding tradition/taboo/fatalism that needs to be intensively worked upon

Management of high risk pregnancies

One of the factors leading to maternal deaths is eclampsia which leads to epileptic outbursts from would be mothers. In tradition-ridden societies, these outbursts are often associated with superstitions and often exorcists are called in to remove the so-called evil influence at a great peril to mothers and children. In the non intervened slums very few mothers were aware of this complication causing high-risk pregnancies; further a few mothers also believed in exorcism as a remedy. Studying the above configuration of data in the intervened slums for each stratum of individual literacy, it appears that 72.85 % of the illiterate, 59.03 % of the primary and 59.44 % of the secondary educated Hindu mothers affirmed such knowledge. On the whole, 61.91% of Hindu mothers of all literacy levels appear to have knowledge of eclampsia during pregnancy. This is in sharp contrast with the non intervened area, wherein 75.6 % of Hindu mothers have no idea of this particular hazardous obstetrical complication, which may occur during child bearing. Similarly, in the intervened areas, 76.52% of Muslim mothers have knowledge of eclampsia of pregnancy as compared to a proportion of 73.7% of mothers in the non intervened area that had no knowledge of the same. 70% of the illiterates, 81.48% of the primary and 78.57% of the secondary level respondents of the Muslim community had knowledge of eclampsia of pregnancy. In both the religious groups, illiterate mothers tended to be well aware of eclampsia proving that in the intervened areas, sufficient awareness on this issue had developed among the urban poor. 5 Hindu mothers and 2 Muslim mothers, forming 1.54% and 1.66% of the sample population respectively, admitted their faith on the influence of evil spirits. In the non intervened area, no Muslim mother believed in such superstitions.

This demonstrates that even in the intervened area, there is the persistence of social and cultural taboos, although much less than that of the non intervened area. 4 of the 5 Hindu mothers and 2 of the Muslim mothers who relied on the evil spirits in the intervened area agreed that an exorcist should be brought in to drive away such evil spirits. Hence, universal awareness of the cause and treatment of eclampsia during pregnancy is necessary even in intervened areas to combat the influence of exorcists which is sure to have unfavourable effect on would be mothers.

Safe deliveries

This section attempts to look at the responses of the mothers in the intervened slums to assess whether the mothers support home deliveries with the assistance of trained *dais*. Only 5.88% of Hindus and 6.66% of Muslims supported the service of *dais* during delivery. In other words, 94.11% ^{of Hindus} and 93.33% of Muslims desired to avail of institutional facilities to ensure safe delivery. This is in contrast to the responses analysed in the context of the non intervened area, wherein 32.55% of Hindus and 26.31% of Muslims supported the services of *dais* during delivery. A religion wise comparison of the proportion of affirming respondents is given below. (See Table 61)

Table No 61

Respondents supporting delivery by a *dai* (local birth attendant)

Literacy	No of respondents justifying delivery by a <i>dai</i>			
	Yes		No	
	Hindu	Muslim	Hindu	Muslim
Illiterate	10 (14.28)	5 (10.00)	24 (70.58)	23 (82.14)
Read and write	0 (0)	0 (0)	14 (100)	2 (100)
Primary	4 (4.81)	2 (7.4)	51 (92.92)	32 (94.11)
Secondary	5 (3.43)	1 (2.38)	164 (97.04)	53 (98.14)
Higher secondary	0 (0)	0 (0)	51 (100)	2 (100)
Total	19(5.88)	8(6.66)	303(93.80)	112(93.33)

Figures in parenthesis indicate % of response.

The proportion is almost similar in both religions. A very nominal 5.88% of Hindus and 6.66% of Muslims respectively support home deliveries through *dais*. This is in sharp contrast to the analysis derived from the responses in the non intervened area wherein 32.55% of Hindu mothers and 26.31% of the Muslim respondents supported the idea in the intervened areas. Even among the various literate groups, home delivery is supported only by 3.43% secondary and 14.28% illiterate Hindus. The corresponding proportions among the Muslim community are 2.38% among the secondary educated and 10% among the illiterates. Of those mothers supporting home delivery, 14 out of 19 Hindu and 2 out of 8 Muslim mothers insisted that the *dai* should be a trained one.

Hence, in the intervened area, there is general awareness of the need to have safe delivery in a health facility such as a hospital. Even while supporting home delivery by a *dai*, the respondents mostly prefer to avail of the services of a trained *dai*. In the non intervened area, in comparison, 29.43% of both communities justified home delivery by a *dai*, but only 66.7% of this group supported that the *dai* should be a trained one. In the non intervened area, the preference is for home deliveries and not always by a trained *dai*. In the intervened area, the preference is clearly towards institutional deliveries, whether in a hospital or in other health facilities. The necessity for intervention is clearly established for bringing about the behavioural changes in the attitude to increase institutional deliveries.

Acceptability of male doctors

Our hypotheses in this section are

- Mothers are more agreeable to avail of services by male doctors.
- Rational thinking influenced by interventions has overridden social permissiveness.

93.80% of Hindus had objected to home deliveries by a *dai* (See Table 61). 94.73% of Hindus agreed to hospital delivery by a male doctor. (See Table 62)

Among the Muslims, 93.33 % had refused to avail of home delivery by a *dai* (Table 61). 83.33% of this group, however, had agreed to hospital delivery by a male doctor. (See Table 62)

Table No 62

Opinion of respondent mothers regarding delivery by a male doctor with reasons

Level of Literacy of the respondent mothers	Number of respondent mothers						Reasons for negative opinion								
	Yes			No			No Response			Personal shyness			Social hindrance		
	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T
Illiterate	63	45	108	6	4	10	1	1	2	5	4	9	1	0	1
Can read and write	45	1	46	2	0	2	-	-	-	2	0	2	0	0	0
Primary (I-IV)	110	20	130	3	4	7	-	-	-	3	0	3	4	0	4
Secondary (V-X)	85	34	119	2	7	9	-	-	-	2	0	2	7	0	7
Higher secondary and above	3	0	3	1	0	1	-	-	-	1	0	1	1	0	1
Total	306	100	406	14	15	29	1	1	2	13	4	17	12	-	13
(%)	94.73	83.33	91.64	4.33	12.5	6.54	0.30	0.83	0.45	4.02	3.33	3.83	3.71	-	2.93

H – Hindu, M – Muslim, T-Total

In the non intervened area, 67.44% of the Hindu respondents objected to home delivery by a *dai* and 82.65% had agreed to hospital delivery by a male doctor. 73.68% of the Muslim respondents objected to home delivery by a *dai* and 63.15% supported hospital delivery.

Hence, it may be concluded that both in the intervened and non intervened areas, Hindus are more comfortable with the pregnant mothers being treated by male doctors than the Muslim community. This observation holds good for the latter community in all literacy and income groups. Analysing the reasons of the reluctance to be treated by a male doctor, 13 Hindu mothers withheld on account of personal shyness and 12 on account of social hindrances. 4 Muslim mothers withheld on grounds of personal shyness. Except the illiterate group, Hindus have responded more favourably towards hospital delivery as well as treatment by a male doctor. In the Muslim group there is more positive response on behalf of illiterate Muslims in an interesting contrast to the non intervened area namely 45/120(37.5%) of Muslims supported hospital delivery as against 4/10 (21.0%) in the non intervened area. It may be concluded that, in the intervened area greater proportion of respondents prefer both hospital delivery and services of male doctors. This confirms that interventions have created awareness and demand for hospital delivery. This also confirms our hypotheses that

- Mothers in intervened slums are more agreeable to service by male doctors
- Rational thinking has overcome social permissiveness
- The mothers of the Hindu community are more agreeable to hospital delivery and accepting services of male doctors as compared to those of the Muslim community.

Post Natal Care

This section analyses the responses of the sample population that is proportion of individual response to total in the intervened area of the necessity of availing of postnatal services. It is seen that 95% of illiterate mothers comprising 95.71% illiterate Hindu and 94% illiterate Muslim mothers have appreciated the need of postnatal care. This agreement is literacy neutral and an overall 97.06% mothers including 98.76% Hindu and 96.38% Muslim mothers are very positive towards availing of postnatal care. (See Table 63)

Table No 63

Proportion of responses towards post natal facilities by religion and literacy

Category	Religion		
	Hindu	Muslim	Combined
	Proportion affirming	Proportion affirming	Proportion affirming
Illiterate	95.71	94.00	95.00
Read and Write	88.88	100.0	89.47
Primary	97.59	96.29	97.27
Secondary	99.30	95.23	98.37
Higher secondary and above	100.0	0	100.0
Total	98.76	96.38	97.06

At all levels of literacy, mothers have a high level of understanding of the need to avail of various types of postnatal services towards mother's care and infant's care such as child development, immunisation, growth monitoring and administration of nutritious food. Of the illiterate mothers, 83.58% wish to seek postnatal advice on health grounds, 44 % want advice on infant's food, 50.74 % sought advice on immunisation and 49.22% on nutrition. Among illiterate Muslim mothers, the corresponding percentages are 59.57, 0, 25.53, and 8.9 percent respectively. The corresponding proportions among primary level Hindu mothers are 77.7, 22.2, 32.09, 17.30 and those for Muslims are 69.5, 0, 13.04 and 17.39 respectively. Corresponding proportions for secondary level Hindu mothers are 71.03, 14.48, 40.68 and 36.55 respectively. Those for Muslim mothers are 75, 0, 7.5, and 17.5 percent respectively. 1 illiterate Hindu mother refused to avail of such postnatal advice. Similarly, 1 illiterate Hindu mother and three illiterate Muslim mothers had no knowledge of such postnatal services and benefits.

The following conclusions emerge:

- As compared to the non intervened area, higher proportion of both communities had expressed desire to avail of such postnatal services in the intervened area.
- In the intervened area, the respondents are more aware of and desirous of availing of postnatal services for better health of mother and child. The fact that there are still some elements of reluctance and ignorance among the mothers of the intervened area indicates that there is still greater need to interact with the mothers and families of the urban poor to convince the household of the need to avail of post natal care.

Reproductive health Services actually availed of by mothers of intervened slums

The present analysis examines the antenatal medical consultations actually availed of by the respondent mothers in the intervened slums during their previous pregnancies. The hypothesis that is examined here is that the health seeking behaviour for accessing antenatal care would be considerably high as compared to the intervened slums.

It is seen that 96.90% of the Hindu mothers, that is nearly 10 % more than their counterparts in the non intervened area have actually availed of antenatal services prior to delivery. For the Muslim community, the proportion is 95.83%. This compares very favourably with 78.9% Muslim mothers who had actually availed of antenatal facilities in the non intervened area. In the intervened area, almost the same proportion of Hindus and Muslims availed of antenatal care. In the non intervened area, however, 8.3 % more Hindus had availed of such services. In the intervened area, almost all the literacy groups had favourable responses ranging from 92.85% to 100 %. (See Table 64)

Table No 64

Proportions of mothers actually availing of antenatal services during the last pregnancy of the mother

Literacy	Hindu	Muslim	Combined
Illiterate	92.85	98.00	95.00
Read and Write	94.44	100.0	94.73
Primary	96.38	88.88	94.54
Secondary	99.30	97.61	98.91
Higher secondary and above	100.0	-	100.0
Total	96.90	95.83	96.61

In the non intervened area, the illiterate groups dominated the responses. Of the Hindu mothers of the intervened area who had availed of the antenatal medical care 51 went to hospitals, 3 went to private doctors, 1 went to a nursing home, 10 went to various municipal clinics. 5 Hindu mothers who did not avail of antenatal care did not advance any reasons for

the same. In the non intervened area, Hindu mothers not availing of antenatal care had either not ascribed any reason or had preferred not to go to a hospital due to apathetic attitude of the hospital staff. In the non intervened areas 45 Muslim mothers visited hospitals, 1 went to a private doctor, 1 went to a nursing home, and 2 to municipal clinics. 1 Muslim mother refrained from using any services. Similarly, Muslim mothers of the non intervened area had shied away from the difficult atmosphere in hospitals or had pleaded economic stringencies to pay for visits or transport.

It may be concluded that apart from creating awareness, it is necessary to build a user friendly atmosphere in institutions such as hospitals to encourage the urban poor to avail of such care and services at a reasonable cost.

Coverage by Tetanus Toxoid:

One of the important components of antenatal care is the administration of Tetanus Toxoid immunisation to the pregnant mothers. 98.76 % of the Hindu mothers and 99.16 % of the respondent Muslim mothers were so immunised. 99.16 % of all mothers received the first dose of Tetanus Toxoid immunisation. Of these, 82.61% received the second dose and 13.38% received the booster dose. Religion wise, the finding is almost uniform. 4 Hindu mothers and 1 Muslim mother had not received any Tetanus Toxoid immunisation. While the Muslim mother stated that she did not have an escort to travel to the clinic, the Hindu mothers did not offer any explanation. In the non intervened area, though a high number of mothers had received the first doze of immunisation, very few completed the immunisation process thereby diluting the quality of antenatal care. In the intervened area, however, the follow up especially at the level of acceptance of second doze on Tetanus immunisation, has been quite satisfactory indicating that the quality of antenatal care has been good. Hence, it can be concluded that the health seeking behaviour for Reproductive Health services is higher in the intervened slums as indicated by a higher proportion of people receiving the second course of Tetanus Toxoid thus confirming the hypothesis.

Places of delivery

In the non intervened area, 79.06% of the Hindu mothers had been admitted to the hospitals for 67.40% of the total births. For Muslim mothers, the corresponding proportions are 63.15% and 56.14% respectively. It is observed^{here} that 93.49% of Hindu mothers were admitted to hospitals for delivery of 89.66 % of the total births. The corresponding proportions for Muslim mothers are 88.33% and 80.56% respectively. It transpires, therefore, that, mothers of both religions of the intervened areas are increasingly taking recourse to hospitals for the birth of their children. Another feature that has been observed is that an equal proportion of confinements at hospitals occurred to the mothers of both religions, that is, 92.09% of the total mothers favoured the hospitals for giving birth to 86.38% of the total births. Each mother had to have nearly two confinements on an average in the hospital to give birth to a child. On the other hand, though the average of 3.94 of confinements at home is higher than average confinements at hospitals, the percentage of home deliveries is only 13.61% of the total deliveries. The significant differences of proportional confinements in hospitals and at home by each mother by religion are possibly being influenced by variables of the order of births and frequency of confinements

particularly at home, though the number of mothers and their deliveries in the hospital are much higher than those at home. (See Table 65)

Table No 65
Proportion of deliveries according to places of confinement

Place of delivery	Hindu			Muslim			Total		
	Number of Mothers	No. of deliveries	Proportion of confinement	Number of mothers	No. of deliveries	Proportion of confinement	Number of mothers	No. of deliveries	Proportion of confinement
Hospital	302 (93.49)	564 (89.66)	1.86	106 (88.33)	286 (80.56)	2.69	408 (92.09)	850 (86.38)	2.08
Home	21 (6.50)	65 (20.12)	2.95	14 (11.66)	69 (19.43)	4.92	35 (7.90)	134 (13.61)	3.94
Total	323 (100.0)	629 (100.0)	1.94	120 (100.0)	355 (100.0)	2.95	443 (100.0)	984 (100.0)	2.22

This is tested statistically by Chi-square to ascertain any association between hospital and home confinements of the mothers of two religions and conclusion is that there seems to be no association between the two categories of places of confinements and the religion of the mothers.

Factors leading to choice of place for delivery

60.59% of the Hindu mothers and 42.45% of Muslim mothers respectively had gone to hospitals on their accord. Thus, the most important factor, which had influenced hospitalisation, is the own accord of the respondent mothers. This indicates significant awareness among the mothers who have decided on their own to take recourse to institutional deliveries for delivery of their children. This also underscores another significant development in the intervened area, namely, that the women have come to occupy a decision making position for themselves in their families.

The next determining factor is the opinion of the family members, especially that of the husband and the in laws accounting for 16.55% of Hindu mothers and 25.47% of Muslim mothers to go to a hospital for delivery. This proves to how necessary it is to educate the family members of the prospective mothers to ensure hospitalisation for safe delivery especially among the Muslim community. (See Table 66)

Table No 66**Factors leading to hospital confinements**

Factors	Hindu (%)	Muslim (%)
Own accord	60.59	42.45
Advice of husband, in-laws, etc.	16.55	25.47
Husband's advice	9.60	18.86
Joint advice of husband, family neighbours/health workers	11.58	6.60
Total	100.0	100.0

Factor leading to home deliveries

The following factors, on the other hand, have prompted the mothers to deliver their children at home. The major determining factor here is sudden labour pain. This is true of both communities. Economic factors such as lack of money and family apathy or negative attitude of mothers in law, though not significant in a quantitative sense, are nevertheless, important social issues, which have stood in the way of institutional deliveries despite the introduction of health and family welfare facilities by the policy makers. An interesting observation made here is that negative attitude of mothers in laws have only been reported in the case of Hindus and not in the case of Muslim community. (See Table 67)

Table No 67**Factors leading to home confinements**

Factors	Hindus (%)	Muslims (%)
Apathy	4.47	8.33
Dominating or negative attitude of mothers in law	4.47	0
Sudden labour pain	79.43	83.33
Lack of money and escort	10.44	8.33
Total	100.0	100.0

The following conclusions can be drawn regarding choice of the place of delivery in the intervened slums.

- Women in the intervened slums have been able to themselves decide regarding the place of delivery
- Social and other associated factors play a limited role in determining the place of delivery in the intervened slums.

Family Planning Practices

In the non intervened slums, eligible couples showed little faith on the acceptance of family planning methods. The present analysis is based on responses from mothers on the attitudes of the eligible couples on family planning methods and contraception in the intervened slums. The hypothesis that has been tested here is that social factors do not influence the adoption of family planning behaviour. Chi-Square tests were conducted for both communities to ascertain the influence of literacy on family planning. Both results proved insignificant thereby establishing that literacy has had no effect in reliance or otherwise of respondents on family planning methods. These results are similar to the findings in the case of the non intervened slums also where literacy was not established as a significant factor of consequence in determining the attitudes of the eligible couples towards family planning.

In the non intervened slums, 75.58% of the Hindu families and 68.42% of the Muslim families showed total indifference towards family planning and contraception. In the intervened area, 96.90% of the Hindu respondents and 95.83% of Muslim respondents affirmed their faith in family planning. This confirms the hypotheses that social factors have not influenced family planning behaviour in the intervened slums. The present study has shown that 38% of illiterate Hindu mothers accepted permanent methods of family planning because they had no faith in the temporary methods. 36% had no desire to have more children and were willing to take recourse to permanent methods of family planning. 14% adopted family planning to space the births of their children. Only 2% associated family planning with the choice of having a child. Hence, it may be concluded that illiterate Hindu mothers have resorted to family planning, especially to the permanent methods more as a compulsion to avoid births of more children rather than using family planning to guide their choice of determining family size.

In the ^{Hindu} ~~Muslim~~ community among the literate Hindu mothers, 40% of the mothers had no reliance on temporary methods, 30% wished to avoid further childbirths, 30% wished to space the births of their children, 22% wished to use it a method to determine family size.

It is interesting to observe that the educated mothers used family planning methods as much as a choice and for spacing as for avoidance of child births. This is in contrast with the behaviour of the illiterate mothers who used family planning almost on compulsion.

In the case of the Muslims, only 10% of secondary level mothers used family planning as a method of choice. Others failed to advance reasons, perhaps due to personal shyness. Illiterate Muslim mothers, however, were more forthcoming. Majority of them, unlike their Hindu counterparts, did not rely on temporary methods. 18% wished to avoid further childbirths. 12% wished to space the births of their children, 14% used family planning as an instrument of their choice. The Muslim illiterates, however, unlike their Hindu counterparts, used family planning both as instruments of choice as well as avoiding further births.

The above analysis clearly establishes the hypothesis that in the intervened slums the social factors do not have a significant influence on family planning acceptance. However, it needs to be noted that women are adopting it more as a limiting method than as a spacing method.

In the non intervened area, however, influence of in laws, apathy towards the concept of family planning, faith in God's blessings, and economic compulsions held back 75.58% of the Hindus and 68.42% of the Muslim mothers and their spouses from adopting family planning methods.

The analysis of this section, hence, leads to the following conclusions:

1. 97% of the Hindu mothers and 96% of the Muslim mothers believe in family planning. This belief is literacy neutral that is mothers of all literacy uniformly share this belief.
2. There was no predominant social and cultural influence in not believing in family planning.

The results derived from the intervened area as compared with the non intervened area contrasts sharply in the non intervened area, where about 75.58% and 68.42% of Hindus and Muslims did not believe in family planning respectively. In the intervened areas, 97% and 96% of the Hindus and Muslims believed in such programmes. This proves that the effect of interventions have surely prompted the respondent population to undergo a behavioural change so as to believe in the scientific methods of family planning. There were no social or cultural influences in this area.

Choice of contraceptives

The hypothesis that has been tested is that social and cultural practices would have lesser influence in adoption of contraceptive practices in the intervened slums. Further, another hypothesis that is tested here emerges is that women are predominant acceptors of permanent methods of family planning practices.

This section has looked at the contraceptive behaviour of the respondent population in the intervened area and has tried to ascertain the influence of literacy, if any, on the choice of contraceptives. A Chi-square test has been conducted and it has been found that the choice of different family planning methods by the Hindus and Muslims has no relationship with the educational levels of the respondent. Hence, it is observed that there is no relationship between literacy levels and the contraceptive behaviour of the respondent population of the intervened area. One factor, which has led to the acceptance of family planning methods in the intervened areas, is primarily acceptance of the small family norm by the eligible couples. This factor itself has accounted for 96.62% of the families in accepting modern methods of family planning to restrict the size of the family. This clearly establishes the first part of the hypothesis that the social and cultural factors have lesser influence in an intervened slum. (See Table 68)

Table No 68**Factors influencing eligible couples to use family planning methods (in %)**

Literacy	Social pressure	Reliance on methods	Health economics	Small family norm
Illiterate	3.99	35.69	9.85	98.60
Read and write	.63	5.63	1.55	95.52
Primary	3.64	32.56	8.99	93.80
Secondary and Higher secondary and above	6.72	60.11	16.59	98.56
Combined	3.79	33.49	9.24	96.62

Proportion of wives as acceptors of family planning methods

In most societies there is a feeling that it is the women who need to adopt permanent method of contraception such as Tubectomy. It is further felt that husbands should under no circumstance be made to accept permanent methods such as Vasectomy as the health and the working prowess of the men as principal earners in the family may be affected thereby. In the intervened areas, 70% of the illiterate Hindu mothers and 66.7% of the illiterate Muslim mothers agreed that only wives should accept permanent methods. The corresponding proportions of mothers educated up to the secondary level and assenting to the same are 26.7% and 30.5% among the Hindus and Muslims respectively.

An analysis has been made of the percentage distribution of the respondent mothers by religion and their levels of literacy on the basis of the opinion of the wives who would be adopting permanent methods of family planning. It is seen that the largest acceptors of permanent methods are the mothers educated up to the secondary level in both religious communities. This reflects the attitude of the more educated mothers among the urban poor. They clearly seem to have decided that they wish to have a small family and do not want more children. (See Table 69)

Table No 69**Proportion of wives agreeable to adopt permanent methods of family planning**

Literary	Hindu	Muslim	Combined
Illiterate	22.22	43.36	27.80
Read and write	5.71	2.65	4.90
Primary	25.71	19.46	24.06
Secondary	43.49	34.51	41.12
Higher secondary and above	0	0	2.10
Combined	97.13	99.98	99.98

Reasons influencing wives to take recourse to permanent methods

Among husbands, the majority of 32.38% adopted permanent methods to have a small family. Similarly for wives, 40% adopted permanent methods to limit the size of the family. 36.20% of the wives, however, were concerned about the earning power of their husbands and hence volunteered to undergo sterilisation themselves. In the non intervened area, 67.7% of the wives were concerned with the earning power of their husbands. Only 6.5% wished to adhere to the small family norm. The misconception of the adverse effects of male sterilisations is deeply rooted among the beliefs of the respondents of the non intervened area. In the intervened area also, this fear is present, although to a lesser degree. This proves the hypothesis that in the intervened slums the wives are to a lesser extent the only acceptors of family planning methods. However, the fear of wage earning capacity of males is still predominant even in the intervened slums. Hence, any attempt at introducing or popularising male sterilisations will have to take care of eliminating the misconceptions in the target areas.

Actual contraception practices

In the non- intervened areas, it was found that only 22.5% of the eligible couples were availing of family planning practices even after the birth of the third child; of this, 24.6% were from the Hindus and only 10.6% was from the Muslim community.

The hypothesis is to test whether social and cultural factors influence eligible couples to accept family planning up to the birth of the third child.

The contraceptive users among Hindus have improved from 79.51% to 87.67 % between the births of the first and the third child. Among the Muslim community, the proportion has improved from 66.66% to 75.64%. It is also of interest that 34 Hindu and 9 Muslim mothers have resorted to ligation after the birth of the third child and of these, 1 Hindu mother has undergone ligation after the birth of the first child itself. In comparison, it was seen in the non intervened area that 14.3%, 14% and 22.5% of the mothers of both communities combined, resorted to acceptance of contraception after the birth of the first, second and third child respectively. In the intervened area, the proportions are 76.06%, 79.93% and 81.45% respectively. This indicates a clear edge over the non intervened areas indicating thereby that eligible couples of intervened areas have consciously adopted family planning practices to limit their family size.

- The deep-rooted traditional beliefs do not have much influence in the intervened slums.
- Son preference prevails to a much lesser degree
- Social and cultural influences play a much lesser role in determining acceptance of family planning in intervened slums.

This confirms our hypothesis.

Findings on reproductive health:

The present study of the characteristics of reproductive health of the mothers of the two sets of slums reveals the following:

The levels of education of the husbands in general are superior as compared to that of the wives in both the sets of slums. The overall standards of education of the slums with interventions are superior as compared to that of the non intervened slums. In the non intervened slums, the proportion of illiterate males is 44.2% and that of females is 66.28% among the Hindus as compared to a proportion of 10.53% illiterate males and 21.67% illiterate females Hindus in the intervened slums. Similarly, among the Muslims in the non intervened slums, 68.4% of the females and 42% of the males are illiterate. In the intervened slums, 41.67% females and 23.33% males form the illiterate group.

The suitable Mean age at marriage as opined by the respondent mothers and as desired by the community in the intervened slums lies within the range of 18.66 years to 20.17 years for the Hindus and between 16.47 years to 22.33 years for the Muslims. In the case of non intervened slums, the individual opinion of mothers on the suitable age of marriage was overridden by the community. In the intervened slums also, there was a significant difference in the ages preferred for marriage and the actual age of marriage in the Hindu community. In the Muslim community, however, the community closely guides the individual opinion. While conducting a statistical T-test between the Mean age at marriage and the age at first pregnancies, the association is found to be highly significant between both religions. In the intervened slums, about 90% of mothers of both communities believe in God's blessings in order to be able to conceive a child. In the intervened slums, the corresponding proportions are 15.47% of the Hindus and 40% of the Muslims. While 50.5% of the Hindus and 7.5% of the Muslims have stated that their pregnancies resulted out of self-planning, in the non intervened slums, 8.1% of the Hindus and none of the Muslims have subscribed to such a view. Further, in the non-intervened slums, 32.22% Hindus and 46.7% of the Muslims have stated that the desire of their in-laws is an important social factor influencing the birth of their children. Hence, in the intervened slums, 50.5% of the mothers of the Hindus are more prone to rational and scientific thinking on the issues of conception and pregnancy. This difference becomes all the more palpable when compared with 90% of the respondents of all literacy levels and of both religious groups in the non intervened slums who have expressed faith and belief in traditional social dictates as against rational thinking. The corresponding proportion among the Muslims, however, even in the intervened slum attributing to self-planning is only 7.5%.

In the non intervened slums, nearly 90% of the Hindus and 79% of the Muslims have reported their faith in social and religious dicta to get a child. In the intervened slums, the

proportions are 52.63% of the Hindus and 69.16% of the Muslims respectively. In another interesting contrast, 11% more Hindus of the non intervened slums believe in such dicta as compared to their Muslim counterparts. In the intervened slums, 17% more of the Muslims believe in the dicta as compared to the Hindus. Hence, despite health interventions and creation of awareness, majority of the urban slum dwellers of both the intervened and the non intervened slums believe in the social, religious and cultural practices to beget a child. In the non intervened slums, the average number of living children, born to illiterate Hindu mothers of different income levels ranges from 3.3 to 3.7 for the Hindus. In the intervened slums, the average number of living children ranges from 1.0 to 2.7 for the same community. For Muslims, the average ranges between 2.0 to 3.4 and between 1.84 and 2.7 in the non intervened and intervened slums respectively. Hence, family planning interventions have had a favourable impact in reducing and stabilizing the family size between both religious communities in intervened slums.

In the non intervened slums, there is 35.1% greater preference for the male child among illiterates and 27.3% more preference for the male child among the secondary educated. In the intervened slums, the predominant choice is for 1 child of each sex.

The opinion of the likely Mean age as to when the mother should have the first child has been computed for the intervened slums and it oscillates between 20.84 years and 21.8 years. This is at a higher level than 19 years as opined by the mothers, in general of both religious groups, of the non intervened slums. While advancing various reasons for justifying the age for childbirth, mothers of the intervened slums mostly advocate physiological and health grounds (47% Hindus and 78.33% Muslims) as against their counterparts of the non intervened slums who have mostly advanced social, religious grounds and domestic convenience.

In the intervened slums, mothers of all religious groups have prescribed a reasonable interval of 3 to 4 years between 2 consecutive childbirths. They have justified this concept of spacing on grounds of health, social and economic reasons as well as domestic advantages and the desire to take appropriate care of each child.

The statistical T-tests prove strong association between the Mean ages at marriage between both religious groups but ^{and} insignificant association between age at first pregnancy between them.

Among the eligible couples 99.38% of the Hindu mother and 97.5% of the Muslim mothers have preferred to take recourse to antenatal care in the intervened slums. Of this proportion, 47.35% have wanted to ascertain the needs of pregnant mothers, 85.66% have wished to ascertain the status of blood pressure with the foetal position. About 33% have wished to have access to immunisation, pathological examinations and nutrition packets. Among the Muslims, the proportion of mothers is 95%, 1.7% and 28.20% respectively. The

corresponding proportions for Hindu and Muslim mothers in the non intervened slums are 32.05%, 7.69% and 53.8% and 23.1% respectively. In the non intervened slums, 8 Hindu mothers believe in traditional beliefs and taboos and hence have rejected the scope of antenatal care. 2 Hindu mothers are totally fatalistic. 1 Muslim mother shares this faith in fatalism also. 5 Muslim mothers believe in traditional beliefs. Surprisingly, even in the intervened slums, 2 Hindu and 1 Muslim mother fell back on fatalism. 2 mothers, each from either religious group have wished to adhere to the traditional concepts. In the intervened slums, 94.11% of the Hindu and 93.33% of the Muslims mothers have desired to avail of institutional facilities to ensure safe delivery. This is in contrast to 32.6% of the Hindu and 26.3% of the Muslim mothers of the non intervened slums. Hence, while in the non intervened slums, there is significant dependence on home deliveries, in the intervened slums, the eligible couples prefer institutional deliveries, showing better awareness and greater access to health infrastructure.

In the intervened slums, a greater proportion of respondents prefers hospital delivery and agrees to services of male doctors. While 94.73% of the Hindu mothers agree to the services of male doctors, among the Muslim respondent mothers, only 83.33% of those agreeing to hospital delivery have assented to the services of male doctors. This shows greater permissiveness especially in the latter society. In the non intervened slums, while 67.4% of Hindu mothers have agreed to hospital delivery, 82.6% have agreed to the services of male doctors. 73.7% of the Muslims mothers have agreed to hospital delivery but only 63.2% have agreed to the services of male doctors.

In the intervened slums, respondent mothers are more aware of and more desirous of availing of post-natal services for better health of mother and child. There are, however, nevertheless some elements of reluctance as well as ignorance with the sample population. 97% of the Hindu mothers of the intervened slums, 10% more than their counterparts in the non intervened area and 96% of the Muslim mothers, 17% more than their counterparts in the non intervened areas have actually availed of antenatal services. While similar proportions of the Hindu and Muslim mothers have availed of antenatal care in the intervened slums, 8.3% more of the Hindu mothers have availed of such services. Mothers shying away from visiting hospitals for ante natal and postnatal care facilities have stated that they are thwarted by the apathetic attitude of the hospital staff, lack of transport as well as want of escorts to the hospitals.

In the intervened slums, 93.49% of the Hindu mothers and 88.33% of the Muslim mothers have visited the hospitals to give birth to 89.66% and 80.56% of their children. In the non intervened slums, 79.1% of the Hindu mothers and 63.2% of the Muslim mothers have taken admission in the hospitals to deliver their children. Those visiting hospitals have an average of 2.08 confinements; those giving birth at homes have an average of 3.94

confinements, proving thereby that institutional deliveries encourage the eligible couples to have smaller families. Chi-square tests statistically prove that there is no association between the places of confinement on the basis of the religion of the communities. Coming to the rationale underlying home deliveries, such deliveries have been prompted by apathy, dominating attitude of the mothers-in-law (for Hindu respondents only), sudden labour pain as well as lack of escorts and money to attend hospitals. Hospital deliveries, on the other hand, have been prompted by the decisions of the eligible couples themselves, advice of husband, in laws and neighbours. In the intervened slums, most mothers have decided on their own to attend the hospitals for delivery, which indicates stronger decision-making position in the family for these women of the intervened slums. In the non intervened slums, on the other hand, social issues have stood in the way of the would-be mothers from taking recourse to hospital services.

Statistically speaking, literacy has not proved to have any effect on the communities on their decision making process on family planning. Illiterate Hindu mothers have resorted to family planning more as a compulsive measure to avoid further childbirths. Literate Hindu mothers, on the other hand have used family planning more as an instrument of choice. The Muslim mothers, even illiterate respondents have used family planning both on compulsion as well as choice. In the intervened slums, only 1.23% of the Hindu mothers and 2.5% of the Muslim mothers of the sample population do not believe in family planning. No rationale is forwarded to support the negative attitude either. In the non intervened slums, the proportion of non believers is as high as 75.58% and 68.42% in the Hindu and Muslim communities respectively. Social grounds such as apathy towards the concept of family planning, faith in God's blessings and sometimes economic reasons as expenses on contraceptives explain such hostility towards adoption of family planning.

Misconception about adverse effects of male sterilisations prevail both in the intervened and non intervened slums. This has led the women in the families to take recourse to tubectomy.

As in the non intervened slums, choice of family planning methods is literacy neutral.

In the non intervened slums, 86% of respondent mothers have not accepted family planning after the birth of the first child. This is in sharp contrast to the intervened slums, where 76.74% have accepted family planning after the birth of the first child. In the non intervened slums, even after the birth of the third child, 88% have failed to accept contraception. This shows that while there are conscious efforts on the part of the eligible couples of the intervened slum to accept family planning, in the non intervened slums, deep rooted traditional beliefs prevent such scientific and rational thinking.

IMMUNISATION OF CHILDREN

Importance of Immunisation

As in chapter III, this study intends to examine the following in the context of children in intervened slums.

- Proportion of children between 1 to 2 years by religion and literacy
- Proportion of children with complete and incomplete immunisation.
- Social factors influencing knowledge on vaccination.
- Reasons for believing in or not believing in immunisation
- Factors affecting acceptance of specific antigens.

As in the case of the non intervened slums, the number of children of the cohort aged 1 year to 2 years is tabulated in the case of the intervened slums to arrive at the cohort of children eligible for immunisation.

It is seen that 35.31% of Hindu eligible couples and 49.21% of Muslim eligible couples have children in the age group 1 year to 2 years. These constitute 175 eligible couples out of a total of 443, that is, 39.24% of the eligible couples from both religious groups. In the non intervened areas, 27.9% Hindu eligible couples and 63.2% of Muslim eligible couples, that is 34.3% of eligible couples from both religious groups have children in the age group 1 year to 2 years. (See Table 70)

Table No 70

Proportion of mothers having children between 1 to 2 years by religion and literacy.

Religion	Literacy	Illiterate	Read and Write	Primary	Secondary and above	Total
Hindu	Eligible couples with children of 1-2 years	19 (55.88)	5 (31.25)	36 (55.95)	53 (24.09)	113 (35.31%)
Muslim	Eligible couples with children of 1-2 years	17 (60.71)	1 (7.14)	12 (35.29)	29 (51.78)	62 (49.21%)
Combined	Eligible couples with children of 1-2 years	39 (62.90)	6 (37.5)	48 (53.93)	82 (29.71)	175 (39.24%)

Children with complete and incomplete immunisation

It is found from the present study that nearly 94.7% Hindu and 90.3% Muslim children respectively were immunised completely whereas only 2.3% children of the combined religious cohort was incompletely immunised. Only 8 children out of 175 that is 4.57% were left out or not immunised. Of them, 5 were Hindus that is, 4.4% of the total Hindu eligible couples (with the cohort of children aged 1 to 2 years) and 3 were Muslims that is 4.8% of the total Muslim eligible couples (with the cohort of children aged 1 to 2 years). In the non intervened area, none was found in the left out category.

High percentage of complete immunisation in the intervened area indicates that optimum health awareness had been developed overtime amongst eligible couples so that 93.1% of all children of the age group 1 year to 2 years were immunised completely in the intervened slums. This compares favourably with the non intervened slum where only 44.4% of the children of the age group 1 year to 2 years were completely immunised. (See Table 71).

Table No 71

Children with complete and incomplete immunisation

Level of Literacy of the mother.	Hindu					Muslim					Both Religions				
	No. of children (1-2yrs)	Complete		Incomplete		No. of children (1-2yrs)	Complete		Incomplete		No. of children (1-2yrs)	Complete		Incomplete	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
Illiterate	19	15	78.9%	1	5.3%	20	17	85.0%	2	10.0%	39	32	82%	3	7.7%
Can Read and Write	5	5	100%	-	-	1	1	100%	-	-	6	6	100%	-	-
Primary	36	34	94.4%	-	-	12	10	83.3%	1	8.33%	48	44	91.7%	1	2.1%
Secondary and Higher secondary	53	53	100%	-	-	29	28	96.5	-	-	82	81	98.8%	-	-
Total	113	107	94.7%	1	0.09	62	56	90.3%	3	4.8%	175	163	93.1%	4	2.3%

Belief in Immunisation

It is found that nearly all the eligible couples that is almost 100% of all categories of literacy levels are found to be firm believers of immunisation of their children of 1-2 years cohort to protect them from 6 killer diseases. In the non intervened area, the percentage of such belief is to the extent of 26.5 % only for Hindus. No Muslim mother of the non intervened area has supported the belief that immunisation protects their children from 6 killer diseases. (See Table 72)

Table No 72

Reasons for believing in immunisation

Religion	Reasons	Illiterate	Read and Write	Primary	Secondary	Higher secondary and above	Total
Hindu	Protect the children from six killer diseases	93.1	100	97.5	100.0	100	97.8
Muslim	-Do-	98.0	100	93.3	95.6	-	96.0
Combined	-Do-	95.1	100	96.4	98.9	100	97.3

Mothers of both the communities of all literacy levels are found to be well aware of the knowledge of health benefits of immunisation. About 95% of mothers of the intervened area have very good knowledge on immunisation. In actual practice, number of children actually immunised in the non intervened areas is very low in the non intervened area because the hype created by media has failed to translate into actual practice as health facilities are mostly inaccessible and the presence of extension workers is not available to the inmates of the slums. The presence of these two factors, on the other hand, has improved the performance in the intervened slums to an appreciable extent.

Factors influencing vaccinations

An analysis is made of the income effect and the influence of literacy, if any on the respondents of the intervened slums in their beliefs and practices with respect to specific vaccinations such as Polio, Measles, BCG(Bacillae Camitte Guerin) and DPT(Diphtheria Pertussis and Tetanus).

Table No 73

Responses of mothers with respect to specific antigens.

	Polio	Diphtheria	Measles
Hindu			
Affirming(%)	99.7	99.7	95.3
Negating(%)	0.3	0.3	4.7
Muslim			
Affirming(%)	100.0	100.0	99.2
Negating(%)	0.0	0.0	0.8
Combined			
Affirming(%)	99.2	99.8	93.4
Negating(%)	0.8	0.2	6.6

Polio

99.2% eligible couples of all literacy levels of both religion affirmed that Polio could be prevented by immunisation as corroborated by the outcome of actual performance of immunisation. Only 1 illiterate Hindu mother opposed this. This compares favourably with respect to the non intervened area. Mothers of the intervened area affirmed the beneficial concept of Polio immunisation to protect their children. (See Table 73)

In the non intervened areas, however, only 34.28% of the children were administered Polio vaccine as compared to the inmates of the intervened areas. (See Table 73)

Diphtheria

99.8% of eligible couples of both religions have supported the idea that Diphtheria can be prevented through immunisation. In the non intervened area, 55.6% of the children have received Diphtheria vaccinations as compared to 99.8% in the intervened area establishing thereby that the awareness created by media and health extension workers has been translated into practice in the intervened area. (See Table 73)

Measles

About 95.3% of eligible couples of overall literacy level of Hindu religion and 99.2% of Muslim eligible couples affirmed the immunisation benefit of Measles. Only 4.7% of Hindus and 0.8% Muslims in the intervened area rejected the need of Measles immunisation. (See Table 73)

The corresponding overall percentages in the non intervened areas were found to be 65% and 47.4% the Hindus and Muslims respectively, showing low health knowledge of the importance of Immunisation of Measles in the non intervened area. 33.6% and 52.6% Hindus and Muslims (of all literacy combined) in the non intervened area rejected the need of Measles immunisation.

No palpable contribution of the effect of Income has been observed towards immunising the children between the age of 1 to 2 years of the respondent mothers because intervention of prolonged health services and promotion of health awareness has been well generated among the eligible couples in the area of all income groups. This has presumably absorbed the income effect. Hence, it is seen that the level of awareness in the intervened areas is very high with a strong belief in the rationale of immunisation, which has been converted into actual practice. In the non intervened area, certain hype has been created by media but the same has not been translated itself into actual practice as the hype has not translated into the rationale of immunisation. The effect of religion differentials has been established but there is no distinct income effect. In both areas, there are believers of cultural taboos and superstitions in varying degrees. Mothers believe in appeasing Goddess *Sitala* to cure Measles and in tying a thread around holy trees and in praying before tombs and religious symbols to cure disease of children especially Measles.

The overall findings from the present study on immunisation is as follows:

In the intervened slums, the cohort of children aged between 1 year and 2 years is 5% more than the cohort of children in the non intervened slums. The proportion of children who have undergone complete immunisation in the intervened slums is as high as 94.7% among the Hindus and 90.3% among the Muslims. In the intervened slums, only 4.4% of the Hindu children and 4.8% of the Muslim children are incompletely immunised. In the non intervened slums, on the other hand, the proportions of incomplete immunisation among the Hindus and Muslims are 41.75% and 83.3% respectively.

In the intervened area, 100% of the eligible couples of all literacy levels and from both religious groups are found to be firm believers in the immunisation of their children. More than 93% of the mothers of all literacy levels of both religious groups believe that immunisation protects the child from 6 killer diseases. In the non intervened slums, only 26.5% of the Hindu mothers and none of the Muslim mothers believe that immunisation protects their children from the 6 killer diseases.

Analysing antigen wise, 100% of the eligible couples of both religious groups affirm that immunisation protects the child from developing Polio. In the non intervened slums also, there is some belief in the Polio immunisation, thanks to the effect of the media. The reality, is however, is that only 44.4% of the children are immunised completely in the non intervened slums. Hence, possibly there is more hype than rationale in the influence of media in as much as the information generated is not translated into practice in the non intervened slums. Similarly, in the case of diphtheria, awareness has been generated in both areas. In the intervened slums, such awareness has led to complete immunisation of 93% of the infants. In the non intervened slums, 44.4% of the children have received such

complete immunisation. Measles vaccination presents an interesting picture. In the intervened slums, the proportions of actual immunisation in the Hindu and the Muslim community are 95.3% and 99.2% respectively. In the non intervened slums, the proportions are 33.7% and 52.6% respectively.

Even in the intervened slums, however, 15 Hindus and 1 Muslim respondent have refused to immunise their children. 11 Hindu respondent mothers believe in '*Sitala Puja*' (worship of local goddess) along with traditional herbal treatment. Other 4 mothers rely on homeopathy and *kabiraji* (indigenous treatment) treatment. One of the mothers wishes to tie a thread on the holy tree around the tomb of the *Fakir baba* (Holy man of Muslim community).

Hence, it may be concluded that in the intervened slums, extension and outreach services have generated both belief and demand for immunisation and there is almost universal immunisation of children. In the non intervened slums, however, there have been some responses to the initial rounds of immunisation thanks to the effect of media. This influence, however, has not been sustained and the process of immunisation has not been completed for majority of the children. Social beliefs and cultural taboos have held their sway over the mothers of non intervened slums and there has not been much rational thinking in this area. There have been a large number of drop outs among the infants who should have received immunisation in the non intervened slums. Lack of facilities and lack of regular contacts by health workers have led to gradual lack of interest in the immunisation process by the slum households in the non intervened slums.

MALNUTRITION

The malnutrition profile of the children of the non intervened slums has been studied to ascertain the social factors which influence the incidence, causes and knowledge of malnutrition. The present section proposes to conduct a similar analysis into the malnutrition profile of the intervened slums. A comparison of the levels of knowledge, recognition, treatment and incidence of malnutrition between the two categories of slums would follow.

As in the case of non intervened slums, individual growth monitoring has been done for each child under 5 years of age for each household in the intervened slums also. The results have been compared at the end of the section.

The study of intervened slums has looked at the following:

- Knowledge of mothers on malnutrition
- Traditional beliefs associated with malnutrition
- Knowledge of preservation of nutrients in cooking
- Satisfaction with cooking procedures at homes
- Gender bias in feeding children
- Virtual incidence of malnutrition.

Knowledge of mothers about malnutrition

Respondent mothers of the intervened slums have almost universal knowledge about malnutrition of children. This excludes 2 Hindu respondent mothers, 1 illiterate and the other educated up to primary level. The overall percentages of mothers of both religions who know about malnutrition are 99.37% and 99.99% respectively in the intervened area. (See Table 74) This is in contrast with 22.1% and 15.8% of mothers belonging to the two religions in the non intervened area. Out of total 443 respondents of both religions, 0.62% [2 Hindu] respondent mothers have no knowledge about malnutrition in the intervened area. About 79.05% of mothers interviewed in the non intervened area did not have any knowledge on malnutrition.

Table No 74

Knowledge of mothers about malnutrition

Religion	Knowledge Of Malnutrition	Illiterate	Literate	Total
Hindu	Yes	21.98	77.39	99.37
	No	0.31	0.31	0.62
Muslim	Yes	40.83	59.16	99.99
	No	-	-	-
Combined	Yes	31.40	68.27	99.67

Traditional beliefs associated with malnutrition

The hypothesis in this study is that interventions and awareness created through such interventions have developed objective rationale among mothers of intervened slums regarding causes and cure of malnutrition. A further hypothesis is that mothers of intervened area are less influenced by traditional belief than mothers in non intervened slums.

In the intervened area, 2 mothers of which 1 was an illiterate Hindu mother and the other Hindu mother who was educated up to the primary level, gave an indication that malnutrition may be caused by the influence of ghosts and evil spirits. This is only 0.62% of the mothers of both religions out of the 443 total respondent mothers of the intervened area. 6.97% of Hindu mothers in the non intervened area believed in such taboos and superstitions. The other respondent mother of Hindu religion educated up to primary level affirmed the influence of evil-planet for which the mother thought that the planetary influence had to be appeased through various rituals. 99.67% of the mothers of both religions had knowledge of malnutrition in the intervened area.

In the non intervened area literacy appears to have no impact because the literates outnumbered the illiterates in their prejudices and superstitious beliefs. Religion too is not a significant factor influencing respondent behaviour as mothers of both communities have poor knowledge on the causes of malnutrition. Muslim mothers in both areas did not believe in social prejudices and cultural taboos but mothers, irrespective of religious groups failed to relate malnutrition to its actual cause. Hence, religion is not a significant factor in influencing the causes of malnutrition. Comparing the awareness patterns between the non intervened and intervened areas, it is seen that as compared to 6.82% of the illiterate Hindu couples in the non intervened area, 22.7% of illiterate Hindu couples in the intervened area have been made aware by health workers on the causes and symptoms of malnutrition. The corresponding proportions for the Muslim population are 15.38% and 33.0% for the non intervened and intervened areas respectively. 74.9 % of the literate respondent couples of both religions have significant health awareness on malnutrition in the intervened area as compared to 12.5% of the literates in the non intervened area. Hence, the proportion of health awareness of the literates in the non intervened area on the concept of malnutrition is 63% less than that of the intervened area.

In the intervened area, out of 18 Muslim mothers, 14 from the illiterate and 4 mothers from the literate group cited that economic stringencies and lack of purchasing power of nutritious food caused malnutrition in children. No Hindu mother from the intervened area, however, cited economic stringencies as the cause of malnutrition. In the non intervened area, 4 Hindu mothers had stated that the cause of malnutrition is due to economic stringencies. The position is reversed in the intervened area where only the Muslim community and the illiterate couples in particular cited economic factors to be the underlying cause of malnutrition. In the intervened area, 95.92% of mothers were aware of the causes and diagnosis of malnutrition as compared to only 14.14% of mothers in the non intervened area. In the intervened area, 99.37% of mothers, that is almost all the mothers rejected the proposition that ghosts or evil spirits cause malnutrition of their children. This validates our hypotheses that awareness created through interventions has helped in developing rationale thinking in mothers regarding causes and cure of malnutrition. This also validates

the hypothesis that mothers in intervened slums are hardly influenced by traditional beliefs as compared to mothers of non intervened slums who are highly influenced by such beliefs.

Nutrition and cooking procedure:

In the intervened area our hypothesis is that mothers have developed good knowledge in preserving nutrition while cooking for their families.

The present study found that 99.8% of the respondent mothers of the intervened area have good knowledge on the quality and quantity of retaining nutrients of the foodstuff in the procedure of cooking. This compares favorably against 23.8% of similar respondents of the non intervened area. The entire literate group of each religion of the intervened area had good knowledge while only 41.4% and 33.3% of the literate respondents of the two religions of the non intervened area, possessed such knowledge. Only 1.4% of the illiterate Hindu mothers of the intervened area did not have the necessary knowledge. In the non intervened area, 12.3% Hindu and 30.8% Muslim mothers did not know how to preserve nutrition in the cooking procedure. It is found that respondent mothers of the intervened area have acquired almost perfect knowledge on the correct procedure of cooking while retaining nutrients in the foodstuff. This is due to longstanding health interventions by the different health programmes in the intervened area.

Respondent mothers of both illiterate and literate groups of the two religions in the intervened area were found very much satisfied and aware of the cooking procedures so as to preserve the nutrients in the foodstuff, in comparison to the mothers of the non intervened area. This attitude was found common to both religions. The proportion of mothers expressing such satisfaction in the non intervened slums is 45% of the sample population of both religious groups. 64.7% Hindu and 58.0% of Muslim mothers of non intervened slums have expressed dissatisfaction with cooking procedures followed in their households. In comparison only 0.9% of Hindus and 2.6% Muslim mothers of the intervened areas were dissatisfied with cooking procedures followed in their households.

On being asked as to why the mothers were dissatisfied with the cooking procedures, 4 Hindu mothers of the non intervened area stated that directions of mothers in law, lack of money for purchase of good food, and the influence of divine grace were some of the factors which influenced the cooking procedures being followed in their households. In the intervened area, 6 mothers, 3 from each religion were dissatisfied with the process of preservation of nutrition in cooking procedure. 2 illiterate and 1 mother educated up to the secondary level of the Muslim religion stated that the cooking in their homes was being done under directions of their mothers in law and hence there was little scope of preserving nutrition in the food cooked in their homes. Hence directions of mothers in law remain an important influence while deciding the cooking procedure in the households of both categories of slums.

Knowledge regarding presence of nutrients in foods

Knowledge of all the eligible couples of the intervened area about the nutrient value of the food is almost absolute. In the non intervened area only Muslim mothers transpired to be more knowledgeable as compared to the Hindus regarding the knowledge of nutrient value in food. 100% of both Hindu and Muslim mothers of the intervened area have such knowledge. Only 45.4% Hindu and 47.4% of the Muslim mothers in the non intervened area have such knowledge. All the 9 Hindu mothers that is, 100% of mothers educated up to Higher secondary levels and above in the intervened area had this knowledge. The only Graduate Hindu mother of the non intervened area, however, did not have any knowledge of nutrients inherent in the foodstuff. This confirms the hypothesis that interventions have created enough awareness and good knowledge among mothers to preserve nutrition while cooking for their families.

Basic principles of preservation of nutrition in cooking

The hypothesis in the present study is that while cooking for their families in intervened slums, mothers follow the basic principles of preserving starch, mixing of pulses, slicing the pieces of vegetable and chopping vegetables only after washing the same.

Only 23.3% of respondent mothers of both literacy groups of combined religion in intervened slums favoured throwing away starch from boiled rice as against 90% of respondents of the non intervened area. The proportions of mothers of Hindu and Muslim illiterate groups of mothers who favoured throwing away of such starch are 28.4% and 23.4% respectively in the intervened area (Muslim are better placed than Hindus) in comparison to about 92% of both religions of illiterate group of mothers of the non intervened area who show very poor knowledge about preserving nutrition even in cooking basic food items such as rice. 86.2% and 100% of the literate groups of both religions in the non intervened area also had very poor knowledge as compared to mothers of the intervened area. Respondents of both literacy groups of either religion in the two areas were found to be very conscious about the preparation of pulses by mixing two or more varieties, which ensures nutrition. Very high proportions of mothers of the two literacy groups of either religion of the intervened area followed the correct procedure of slicing vegetables before cooking. In the non intervened areas mothers of both literacy groups of either religion show very low proportion of awareness. Nearly 50% mothers are less knowledgeable as compared to mothers in the intervened area.

Excepting 1 illiterate Hindu mother of income level Rs. 1001/- to 1500/- mothers of all literacy levels of both religions of the intervened area opined exclusively for administering "both" varieties – animal proteins and vegetables to their children for nutrition. The comparison of prescribing such mixed nutrients (animal protein and vegetables) to the children of the mothers of different levels of literacy of both religions between the two areas – intervened and non intervened, were found highly significant in favor of the intervened area. (See Table 75)

Table No 75

Proportion of mothers opining on the need to include animal protein and vegetable in food (in %)

Literacy Levels	Hindu			Muslim			Combined Religion		
	Animal Protein	Vegetables	Both	Animal Protein	Vegetables	Both	Animal Protein	Vegetables	Both
Illiterate	-	1.4%	98.6%	-	-	100%	-	0.8%	99.2%
Can Read and Write	-	100%	-	-	-	-	-	-	100%
Primary	-	-	100%	-	-	100%	-	-	100%
Secondary	-	-	100%	-	-	100%	-	-	100%
Higher secondary and above	-	-	100%	-	-	-	-	-	100%
Total	-	0.31%	99.69%	-	-	100%	-	0.2%	99.8%

Figures in brackets indicate absolute numbers.

Gender bias

All the mothers of all literacy levels of the two religions in the intervened area (except 4 of illiterate and 1 of secondary level of Hindu religion) agreed to give nutritious food to their children irrespective of gender. Among the 4 illiterate Hindu mothers, 2 mothers each from the economic groups Rs. 1001/- to 1500/- and above Rs. 2000/- indicated preferences for male and female child respectively. Both in the non intervened and in the intervened area, Muslim mothers were not partial to children of either gender while administering nutritious food to their children. In both areas, however, some Hindu mothers unlike their Muslim counterparts stated that sons deserved more nutritious food as compared to the daughters as they will take care of the family in future.

Attitude to gender bias.

Varied reasons are given by the mothers of all literacy and economic groups for their attitude to gender bias. Out of total respondents in the intervened area 23.5% of Hindu mothers cited social reasons to justify as to why nutritious food is to be given only to their sons. Hindu mothers in the non intervened area stated that the male children will take care of parents in their old age and hence deserved better nutrition in their growing years. 96.6% of the Muslim mothers and 89.6% of the Hindu mothers in the intervened area did not agree to any gender bias in feeding their children, as they were conscious that all children needed to be healthy. Hence, in the intervened area 7% more Muslim mothers disapproved of gender discrimination as compared to the Hindu mothers. Nearly the same proportion of

mothers (2.8% Hindu and 2.6% Muslim) of either religion in the intervened area stated that daughters should be better fed as they will be future mothers. No mothers held such opinion in the non intervened area. Mothers of both religions gave multiple reasons for prescribing nutritious food to their children in the intervened area, which needs to be seen in the light of literacy specific proportions of mothers.

'Health Awareness' influenced about 63.9% of Hindu mothers (all literacy levels combined) and 87.1% of the Muslim mothers, which is 23.2% more than the Hindu mothers. In the non intervened area, no mothers appeared to be influenced by health awareness. Only about 3% [Hindu-2.8%; Muslim-2.6%] of mothers in the intervened area reasoned for 'Preference for the daughter as she would be a future mother'. None of the mothers in the non intervened area supported this view. (See Table 76.)

Table No 76
Reasons for gender bias

Level of literacy	Hindu					Muslim				
	Social	Socio-Economic	Health Awareness	No sex Bias	Preference for daughter as she would be future mother	Social	Socio-Econ	Health Awareness	No sex Bias	Preference for daughter as she would be future mother
Illiterate	17.6% (13)	18.9% (14)	64.9% (48)	94.6% (70)	4.1% (3)	17.0% (8)	17.0% (8)	89.4% (42)	100% (47)	4.3% (2)
CR andW	-	21.1% (4)	73.7% (14)	84.2% (16)	5.3% (1)	-	-	-	-	-
Primary	19.3% (16)	26.5% (22)	66.3% (55)	94.0% (78)	1.2% (1)	-	7.4% (2)	85.2% (23)	88.9% (24)	3.7% (1)
Secondary	33.8% (48)	12.7% (18)	59.9% (85)	86.6% (123)	2.8% (4)	9.5% (4)	4.8% (2)	85.7% (36)	97.6% (41)	-
Higher secondary and above	-	-	77.8% (7)	66.7% (6)	-	-	-	-	-	-
Total	23.5% (77)	17.7% (58)	63.9% (209)	89.6% (293)	2.8% (9)	10.3% (12)	10.3% (12)	87.1% (101)	96.6% (112)	2.6% (3)

Figures in parenthesis indicate absolute numbers

Incidence of malnutrition in the intervened area:

This section analyses the incidence of Malnutrition as actually found in the intervened areas and compares the same with the incidence of malnutrition in the non intervened areas.

Out of 443 eligible couples in the intervened area, there are in all 616 children under the age of 5 years which is in the ratio of 1.39 (children under the age of 5 years): 1 (Respondent mother) corresponding to 1.58 (children under the age of 5 years): 1 (Respondent mother) of the non intervened area. The proportion of children under the age of 5 years per respondent mother in the intervened area is found to be 13.67% lower than of those in the non intervened area. In the intervened area, 616 children of below 5 years of age were available to 443 mothers at the time of survey and amongst them 347 were male and 269 female. Out of 616 children of below 5 years only 102 comprising 59 Males and 43 females had been identified as "Malnourished" by their mothers on the basis of probable prescribed symptoms. Hence the proportion of children under 5 years of age found malnourished in the intervened area is 16.56% which appear to be much higher than the percentage of incidence – 3.125% as affirmed by the mothers in non intervened area. This is because in the non intervened area, respondent mothers had not acquired good

knowledge about the symptoms of manifestation of the malnutrition of their children like the mothers in the intervened area and were not able to correctly identify that their children were actually malnourished.

All the children under 5 years of age in the households interviewed in the intervened and the non intervened areas were actually weighed and their grades of malnutrition, if any, was recorded through growth monitoring charts based on techniques prescribed by World Health Organization.

All the children who had been identified as falling in the category of Grade-I malnutrition by their age and weight may subsequently be upgraded to 'Normal' on maintenance of nutrient and medical treatment very quickly and hence Grade-I may not be considered here as malnourished. Only Grade-II, III and IV together come under malnourished and the Incidence Rate is calculated accordingly.

Incidence of Malnutrition (%) in the Intervened area

Number of malnourished children found in Grade II to IV x 100

Total number of children up to 5 years (Growth chart accounted for up to the age 5 years)

$$= \frac{46}{616} \text{ (only found in Grade - II)}$$

$$= 7.47\%$$

Whereas in the non intervened area it is = $52/166 \times 100 = 31.33\%$ which is nearly 4.19 times higher than that of the covered areas.

As compared to the non intervened area, the respondent mothers of the intervened area were found fairly knowledgeable in offering their views in respect of their children who have suffered or are now suffering from malnutrition based on the prescribed symptoms of the schedule. In the non intervened area, all the 4 malnourished children as identified by their mothers, 2 each of either sex, were of 3rd order while out of 102 malnourished children as identified by the mothers of the intervened area, the number of males and females respectively are 59 and 43. In intervened area, according to the mothers of both religions, sons were more malnourished than their daughters. The income and literacy levels of the respondent mothers have not influenced the incidence, as affirmed by the mothers of malnourished children in the intervened area. The growth chart that establishes the real status of malnutrition firmly proving that the incidence of malnutrition is much higher in the non intervened area as compared to intervened areas. Amongst 102 malnourished children, 38 (37.25%) were of 1st order and 32 (31.37%) children each in 2nd and 3rd order. All the boys, comparing three orders of birth appear more undernourished than their sisters to the extent of 55.6%. No male Muslim child was found undernourished. Even female Hindu children (28% - 44.4%) were more malnourished than that of the Muslim girls. All the 102 malnourished children of both religions were advised for nutrient management by the health

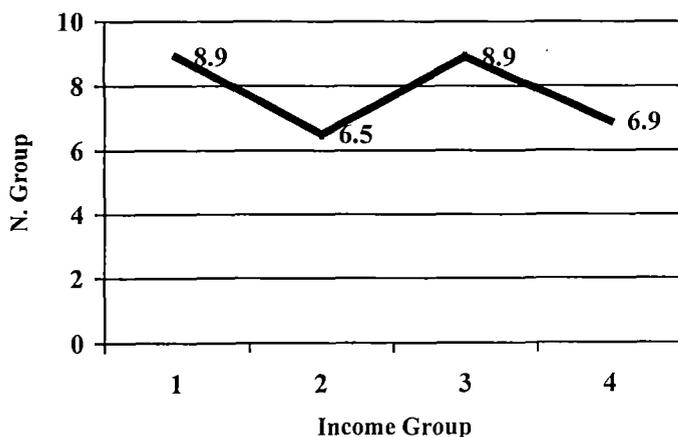
extension workers as reported by the mothers Only 1 illiterate Hindu male child of the highest income group was attempted to be cured by calling for an 'exorcist'. This is similar to the case of alone female child of an illiterate mother of lowest income group in the non intervened area who was attempted to be cured by calling in an exorcist.

An analysis of the nutritional growth chart

The proportional comparison of the nutritional status of the children up to the age of 5 years between the non intervened areas and the intervened areas (combined religion) for different income groups establish the following:

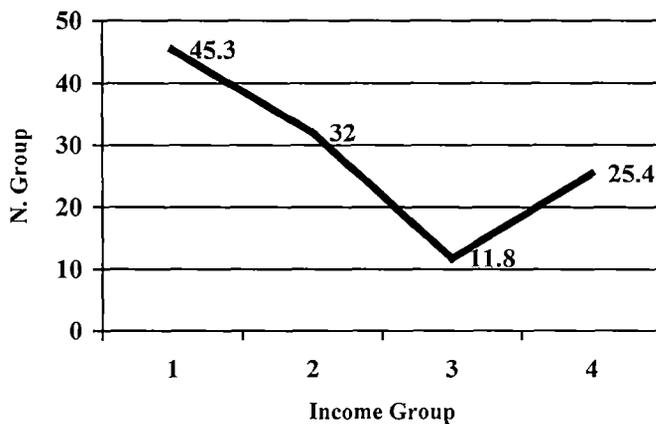
Percentage of undernourished children in the non intervened area is the highest in the 1st income Group. Male and female children are nearly equally placed (44.4% and 46.4%) and about half of children are undernourished and 5 times more malnourished than those of the intervened area. In the 2nd income group, though the percentage of malnourished children in the non intervened area is to the extent of 13.3% as compared to the 1st income group, it is nearly 5 times higher than that of the intervened area. In the 3rd income group, the percentage of the malnourished children in the non intervened area is 1.33 times higher than those of the intervened area. The nutritional growth profile (%) in the non intervened area of the highest income group (Rs.2001 and above) has suddenly increased by an amount of 13.6% with respect to 3rd income group, which seems unexpected for the so-called better off income group. As compared to the non intervened area, the nutritional profile of the children of the intervened area of all income groups at a glance appears to be to some extent erratic in its movement through the 1st to 4th income groups as will be revealed from the following diagrams.

Intervened Slums



1st Income group	- 8.9%
2nd Income group	- 6.5%
3rd Income group	- 8.9%
4th Income group	- 6.9%

Non intervened Slums



1 st Income group	- 45.3%
2 nd Income group	- 32.0%
3 rd Income group	- 11.8%
4 th Income group	- 25.4%

In general the incidence of malnutrition in the non intervened slums is much higher in all income groups as compared to the incidence of malnutrition in the intervened slums. Interestingly, the sudden spurt in the incidence of malnutrition in the children of parents with the highest range of income in the non intervened slums prove that income effect is absorbed by the overall lack of awareness and apathy of the eligible couples towards malnourished children in their households.

In the non intervened area, the nutrition profile is not similar to that of the intervened area with regular declines from the 1st to 3rd income group and a sharp rise in 4th income group by more than double the amount. The children up to the age of 5 years in the non intervened area were found to be 4.2 times more undernourished as compared to the children of the intervened areas. The incidence of malnourishment among the girl children in the non intervened areas is quite severe. It is however, inverse in the intervened area where the extension work of Health Workers and proper care by the mothers found no children in the Grade-III and IV categories due to prolonged and routine interventions. Both male and female children of either religion in the non intervened area are equally deficient in their nutritional growth marked in grade-II, Muslim male children are better nourished than Hindu boys but this is reversed in the case of females. Only 3 Hindu and 1 Muslim child were of Grade-III degree of malnutrition but a lone Hindu girl child was recorded as suffering from Grade – IV degree of malnutrition. Compared to the non intervened area, in the case of the Muslim children of the intervened area, the nutritional growth is better as compared to that of the children in the Hindu families.

Findings in the context of malnutrition

The present study establishes the following findings in the context of malnutrition:

Sample respondent mothers of both the religious groups of the intervened slums have almost complete knowledge of the malnutrition of children under the age of 5 years. About 100% of the Muslim and 99.37% of the Hindu mothers in the intervened slums have this knowledge as compared to 20.95% and 22.1% of the corresponding respondents of the non intervened area.

About 6.97% of the Hindu respondent mothers of the non intervened slums ascribe the causes of malnutrition to the influence of ghosts and evil spirits. In the intervened area, the

proportion of respondents believing in ghosts and evil spirits is 0.62% only. 1 Hindu mother educated up to the primary level and 1 illiterate Hindu mother belonging to the intervened area subscribes to this social taboo.

Upon analysing those factors which have led to the awareness of the respondent mothers regarding knowledge of malnutrition, 74.9% of the literate respondents of the intervened area and 12.5% of the literate respondents of the non intervened area have stated that health awareness is the motivating factor which has helped in developing the knowledge on malnutrition. 11.7% of the illiterate and 1.2% of the literate respondent mothers of the intervened slums and 2.98% of the illiterate and 6.25% of the respondent mothers of the non intervened slums have stated that due to economic stringency, their children could not be administered nutritious food thereby leading to malnutrition.

99.8% of the respondents in the intervened slums have sufficient knowledge of how to retain nutrition in food in the process of cooking as against 23.8% respondents of the non intervened slums who have such knowledge. 76.2% of the respondents have not have any knowledge regarding preservation of nutrients in the cooking process in the non intervened slums.

Nearly 98% of the mothers of both religious groups are satisfied with the cooking procedure followed in their kitchens. In the non intervened area, 45% of mothers have reported that they are satisfied with the cooking procedure in their homes. In the non intervened slums, the reasons for dissatisfaction are mainly on account of social causes, namely, that mothers in law dictates the cooking procedures, there is not enough money to buy nutritious food and a section of the respondents believe that God's grace on the household will prevent malnutrition. In the intervened slums, three mothers of the Muslim community have stated that as the cooking procedure is being followed under the directions of their mothers in law, it is not possible to preserve nutrition in the prescribed fashion.

In the intervened slums, 99.3% of the mothers of all literacy levels and both religious groups have perfect knowledge about preservation of nutrition in foodstuff even after specific methods of cooking. In the non intervened area, only 45.4% of Hindu mothers and 47.4% of the Muslim mothers have this knowledge.

There are four basic cooking procedures which help to preserve nutrition in cooking, namely, retaining the starch of boiled rice, preparing pulses by mixing a few varieties, slicing vegetables in big pieces and chopping vegetables after washing the same. The proportion of respondents in the intervened area who have this knowledge are 76.7%, 86.9%, 89.6% and 93.2% respectively. In the non intervened areas, the proportions are 9.52%, 82.9%, 34.3% and 13.3% respectively, that is, the mothers of the non intervened areas believe in mixing of pulses during cooking but they do not believe in the other nutrition preserving cooking procedures.

In the intervened slums, 100% of the Muslim mothers and 99.69 % of the Hindu mothers, and in the non intervened slums, 89.47% of the Muslim mothers and 75.58% of the Hindu mothers believe that both animal protein and vegetables are to be administered to their children's food to administer nutritious food to their children. 89.5% of the Hindu and 100% of the Muslim mothers in the non intervened slums and 89.6% of Hindu mothers and 96.6% of the Muslim mothers in the intervened slums do not support any "gender discrimination" while administering nutritious food to their children.

Health awareness has influenced 63.9% of the Hindu mothers and 87.1% of the Muslim respondent mothers in the intervened slums who agree to provide nutritious food to their children irrespective of gender. No mother of the non intervened slums, however, agree to the proposition that health awareness is a motivating factor. 3% of the mothers of the intervened slums want to administer more nutritious food to their daughters, as they were the would-be mothers. No mother in the non intervened area subscribe to this view.

In the intervened slums, there are 443 mothers with 616 children under the age of 5 years. The ratio of children under 5 years to mothers is 1.39:1 in the intervened slums as compared to 1.58:1 in the non intervened slums. Hence, the proportion of children under 5 years of age is 13.67% lower than that of the non intervened area. In the intervened slums mothers have identified 59 male and 43 female children as malnourished on the basis of identifiable symptoms. The incidence of malnourished children in the intervened slums among children under the age of 5 years as derived by actually analyzing the growth chart of children is 7.46%. In the non intervened slums, the incidence of malnutrition as derived from an analysis of the growth charts of children under 5 years of age is 31.33%. This is 4.19 times higher than that of the intervened slums. When the mothers of the non intervened slums, however, are asked to identify malnutrition in their children, only 3.125% malnourished children have been identified by the respondent mothers. This is because the mothers of the non intervened slums, having very poor knowledge of malnutrition of children under the age of 5 years, fail to identify the symptoms of malnutrition. The correct incidence of malnutrition could be deciphered from the nutritional growth charts. Hence, it is concluded that the cases of malnutrition is 4.19 times higher among the children under the gap of 5 years in the non intervened slums as compared to the children under the age of 5 years in the intervened slums. The high proportion of malnutrition in the non intervened slums is based on ignorance, lack of health awareness, domination of mothers in law, economic stringency, lack of knowledge of preservation of nutrition in cooking and influence of taboos and superstition.

DIARRHOEA

Knowledge of mothers on diarrhoea

In the non intervened area, the concept of "Diarrhoea" or "Gastro enteritis" was not very clear to the respondents. In the intervened slums, however, there was clear understanding of the malaise, which will be evident from the proportion of knowledge of respondents about diarrhoea.

This study intends to establish the following :

- Knowledge of mothers about the incidence of diarrhoea,
- Knowledge of mothers about the causes of diarrhoea,
- The opinion of the respondent mothers on continuing lactation during diarrhoea,
- Whether mothers opt to fast their children during diarrhoea,
- Knowledge of mothers on the remedial measures to be adopted during diarrhoea,
- The actual practice of withholding breast feeding during diarrhoea during the last three months preceding the survey,
- The actual incidence of diarrhoea,
- Whether mothers resort to social practices and cultural taboos such as exorcism to cure diarrhoea,
- Knowledge of mothers on how to control dehydration during diarrhoea,
- Influence of media in improving knowledge on the treatment of diarrhoea, and analyse the results arrived there from.

More than 40.40% mothers were able to recognise the symptoms of diarrhoea, which compares favourably with the mothers of the non intervened area of whom only 22.9% were able to identify the same. (See Table 77)

Table No 77

Proportion of respondents having any knowledge about diarrhoea

Religion	Passing watery stool 2 or 3 times	Passing watery stool 3 times or more
Hindu	42.72	57.27
Muslim	34.16	65.83
Combined	40.40	59.59

Knowledge of the causes of diarrhoea

Though literacy, as in the case of the non intervened area has some influence regarding the knowledge of the respondents on the causes of diarrhoea, apparently there is not much significant variation in responses of mothers from different literacy levels. In the non intervened area, 7% illiterate Hindus ascribed diarrhoea to drinking water and interestingly 18.2% of secondary level Hindus responded similarly. In the intervened area, the difference between secondary level respondents and the illiterates was 6% as compared to 11% in the

non intervened area. In the non intervened area, 15.4% illiterate Muslim mothers ascribed the cause of diarrhoea to drinking water but none at secondary level could identify the same. In the intervened area, 100% Muslim mothers of both literacy groups responded similarly, ascribing drinking water to be the main cause of diarrhoea. Hence no significant relation could be established even in the intervened area between literacy and awareness.

In an interesting contrast with respondents of the non intervened area, a high proportion of illiterate respondent of both religions (81.42% in the case of Hindus, 100% in the case of Muslims and 89.16% of total respondents) has ascribed the incidence of diarrhoea to drinking water. This indicates the high level of knowledge that the respondents in the intervened area have with respect to the principal source of contamination causing diarrhoea. This is in sharp contrast to the respondents from the non intervened area who could relate diarrhoea to drinking water. Only 9.5% of the total respondents in the non intervened area could associate diarrhoea with the quality of drinking water. Again, none of the respondents believe in the intervened area that God's Wrath or Evil eye/ People's curse causes diarrhoea. In the non intervened area, however, 3.5% of Hindu mothers did ascribe such taboos/superstitions such as "Someone's curse"/ "Evil eye" or "God's Wrath" to the incidence of diarrhoea of children. 80% of Hindu and 90% of Muslim respondents in the intervened areas ascribed contaminated food to diarrhoea. 95% of Hindu mothers and 85% of Muslim mothers in the non intervened areas also hold a similar view. 45% respondents from the intervened areas ascribed dirty environment, open, cut fruit etc. to diarrhoea. (See Table 78) 18% of respondents from the non intervened areas related diarrhoea with seasonal variations.

Table No. 78

**Response of mothers regarding causes of diarrhoea in the intervened area
(In percentage)**

Religion/ Causes	From Drinking water	Evil eye/ People' s Curse	God's Wrath	From Food	Others stale/cu t fruit etc.	Indigestion/ seasonal effects	No knowledge
Hindu	81.42	-	-	80.00	27.14	5.71	-
Muslim	100.00	-	-	90.00	70.00	-	-
Combined	89.16	-	-	84.16	45.00	3.33	-

Hence, it is concluded that in the intervened areas, the respondents of all literacy and religion are well informed and correctly aware of the causes of diarrhoea. Particularly speaking, mothers of the Muslim community seemed to have complete knowledge of the causes as compared to their Hindu counterparts.

Breast-feeding during diarrhoea

In the non intervened area, 15% of the Hindu mothers and 5% of the Muslim mothers did not support breast feeding during diarrhoea. The following response has been ascertained from the intervened slums.

Mothers of both religions irrespective of their levels of literacy are highly aware of the necessity of breastfeeding their children during diarrhoea. The Muslims are better exponents among the illiterate group especially as 98% Muslims support this view as compared to 84.28% of Hindus.

To ascertain the literacy effect on the Hindu mothers for continuance of breast feeding/other food to the ailing children up to the age of 5 years, a statistical T test is resorted to and it is found that the effect of literacy is insignificant that is breastfeeding of children during diarrhoea is universally accepted in the intervened area by both literate and illiterate groups of mothers. The same insignificance of literacy effect was also observed in the cases of Hindu mothers in the non intervened area.

Similarly for Muslim mothers in the intervened area, a significance test was conducted to ascertain the influence of literacy and it was found that literacy effect is insignificant. It is hence concluded that in both areas that is intervened as well as in non intervened areas, the mothers universally advocated breastfeeding and administration of other food to children during diarrhoea. For the combined religion also, $T = 1.2141$ and p is greater than 0.05. This indicates that the significance test failed between literate and illiterate mothers indicating that mothers of all literacy levels uniformly advocated breastfeeding.

The same process has been adopted between the two broad literacy groups (eliminating income levels) to examine the behaviour of mothers in their proportion of advocating "colostrums" to newborn babies just after birth. Colostrums available in the breast-milk of mothers with newly born children are vital to the immunity of infants. In many societies, however, tradition and social customs dictate that mothers reject these colostrums as polluted and unhealthy for their children. It is seen that more than 80% of the mothers of the intervened slums, irrespective of their religion and literacy levels, have advocated administration of colostrums to their infants. The rationale of such behaviour is analysed below. 95.65% of literate Hindu mothers had advocated administration of colostrums because it is the only nutritious food for the child and another 82% advocated it on grounds of immunity. 100% realized that it was easily available. Among Muslims, 90% agreed on its nutrition content and 3 were advised lactation. The awareness of illiterate mothers of both the religions, even in the intervened areas, however, was poor. In the intervened area, however, 27% Hindu mothers and 18.7% Muslim mothers associated colostrums to the occurrence of diarrhoea in children and 4.2% illiterate Hindus to indigestion. Most interestingly, in the non intervened area, 70% of all 86 mothers of both religions refused to suckle their newborns as they had traditionally acquired wrong perceptions that such yellow milk, which has bad odor, is indigestible and hence breast milk is pressed out for the first few days after the birth of their children. This traditional misconception however has not influenced the behaviour of mothers in the intervened areas.

Fasting during diarrhoea

In the non intervened area, nearly 40% of the Hindu mothers and 48% of the Muslim mothers supported fasting of their children during diarrhoea.

Among illiterate Hindus, awareness is 2.88% more than in the intervened area as compared to that in the non intervened area. Among the Muslim illiterates, in the intervened area, however, the percentage of awareness is 15.85% more than in the non intervened area. Literate Hindus in intervened areas, however, surpass their counterparts in non intervened areas by 13% whereas the Muslims do so by nearly 26.18%. Hence the level of awareness in the non intervened areas among the Muslim population compares rather unfavourably with that of the intervened area. Upon comparing with practices on lactation during diarrhoea, the responses on lactation were stronger for Hindu and Muslim illiterates. Muslim literates exhibited better awareness in not fasting their children during diarrhoea. As expected, literates, irrespective of religion, have exhibited strong awareness as compared to their illiterate counterparts. This awareness is about 60% stronger for Hindus and 35% higher for Muslims respectively when they have rejected the traditional concept of fasting during diarrhoea.

Incidence of diarrhoea

In the non intervened area, the incidence of diarrhoea had affected 48% of the children among the Muslim households and 27% of the Hindu households.

In intervened areas the proportion of children suffering / suffered from diarrhoea is only 18.57% and 17.78% in the case of illiterate and literate Hindus respectively. In the case of Muslims, the proportions are 22% and 24.85% respectively. These percentages are considerably lower in the intervened areas as compared to non intervened areas. The proportion of incidence of diarrhoea was 24% more in non intervened area, as far as illiterate Hindu respondents are concerned. Similarly for illiterate Muslims, in the non intervened area, 22% of respondents reported attacks of diarrhoea as compared to 30% in the non intervened area. Treating statistically the occurrence of ailments by religion (overall) on the total of each, it is found that the disease occurrence among the religions is significant at 95% confidence limit. The proportion test yields $T = 3.508$ which is much higher than 1.96 hence $p < 0.05$. There is thus strong evidence that there is significant occurrence of diarrhoea among the Muslim community in the non intervened area. In the intervened area the disease occurrence is non-significant between both communities.

Upon studying the methods of treatment of diarrhoea by different religious groups based on the overall literacy of mothers whose children had suffered from diarrhoea, it is obvious that the mothers are well-equipped and knowledgeable enough to resort to home treatment. A very high proportion of 91.83% for Hindus and 66.03% Muslims have resorted effectively to treatment at home. This is followed by local treatment and as a final recourse, the hospital. Only 0.98% of Hindu mothers have relied upon "praying to God". 3.77% of Muslims reported to have faith in "exorcism". In the non intervened area, however, only 17.1% of Hindu mothers and 50% of Muslim mothers were competent enough to cure diarrhoea through

home treatment. A majority of 51.4% Hindus and 50% Muslims resorted to hospital treatment which may only happen when the basic treatments of diarrhoea have not been resorted to and the patients are so neglected that patients have to be rushed to hospitals for administration of Intra venous fluids. 5.7% Hindus prayed to God and 16.7% of Muslims as well as 5.7% Hindus believed in "Exorcism" to cure diarrhoea. It may be concluded that as a result of health interventions, the households have acquired enough expertise to competently conduct diarrhoea treatment at home. Households restoring to socio cultural practices are very few in number. Respondents of both religions in the intervened area have mostly adopted the scientific approach.

Impact of literacy in administering home made remedies during diarrhoea

Literacy has been an important determinant in creating knowledge in the respondents to diagnose and treat diarrhoea in the intervened slums. (See Table 79)

Table No 79

Different methods of treatment of diarrhoea in the intervened slums

Management of dehydration	Hindu			Muslim		
	Illiterate	Literate	Total	Illiterate	Literate	Total
ORS etc.	19.0	59.30	78.30	25.0	50.0	75.0
Soaked rice etc.	6.58	30.62	37.20	35.41	52.29	87.70
Mixture of common salt etc.	17.44	75.96	93.40	31.23	58.76	89.99
Breast milk	-	33.48	33.48	25.0	25.0	50.00
Green coconut	7.36	30.23	37.59	19.11	55.05	74.16
Private practitioner/hospitals	-	-	-	-	-	-
No conception	-	-	-	-	-	-
No action taken	-	-	-	-	-	-
No opinion	-	-	-	-	-	-

ORS:-Oral re-hydration solution

In the intervened area out of 323 Hindu respondents, all mothers possessed very good knowledge of taking recourse to appropriate measures to control dehydration caused by diarrhoea. Among them 78.30% of mothers had given ORS/Glucose/Electoral water. 37.20% mothers gave water of soaked puffed / pressed rice or barley water. 93.40% dispensed with solution of mixture of common salt, sugar or molasses as alternative to ORS. 33.48% mothers relied on breast milk. 37.59% mothers relied on tender coconut water. None resorted to the private practitioners or hospitals. No mothers have a misconception nor failed to adopt corrective measures. This shows that Hindu respondents have proper conception on the cure of diarrhoea. Similarly for Muslim mothers, 75% resorted to ORS, 87.70% to soaked rice in various forms, 89.99% upon mixture of common salt etc. as alternative to ORS, 50.00% on breast milk and 74.16% on tender coconut. As in the case of the Hindu mothers, Muslim mothers did not take recourse to hospitals and were able to treat the affected children adequately at home. Hence, both Hindus and Muslims irrespective of literacy had perfect knowledge of the home-based remedies to cure diarrhoea and, it may be concluded that an environment of health awareness had developed overriding all traditional concepts in the intervened areas.

Influence of media in creating awareness.

The analysis of this section deals with various types of communication media, which influenced the respondents in acquiring knowledge of treating diarrhoea at home. In contrast with the non intervened areas, wherein only 69% of Hindu mothers and 100% all Muslim mothers had responded, all the mothers in the intervened slums responded. All respondents had offered multiple choices of media. 100 out of 323 Hindu mothers had stated that radio was their first choice. This shows a fair level of preference for this popular and easily available means of communication. 77 out of 120 Muslim respondents had favored this media that is, 64% of Muslim mothers had favored this media as compared to 31% of their Hindu counterparts. 224 mothers watched and viewed that the television was the most popular media indicating that television is an important source for educating respondents from varied literary levels and income. 118 out of 120 Muslims that is nearly 100% favored television as their favorite media as compared to 34% of Hindus. 32 out of 323 that is 10% Hindu respondent opted for the newspaper – this is possibly because of illiteracy and poor level overall literacy of the respondents. Further, although a television may be viewed in common by slum dwellers, affording newspaper by individual slum dwellers is a luxury. Further it is the men folk who have the advantage of reading newspapers at their places of work – women do not have that opportunity. 61 % of Hindus and only 24.16% had opted for this media among the Muslim population.

236 out of 323 households have stated that their source of awareness have been the Health Workers. The Health workers visit every household to spread awareness on hygiene and preventive health. This house-to-house contact, according to the respondents, has had the greatest impact. 119 out 120 that is, nearly 100% of Muslim found the influence of extension workers to be effective. Hence, we may conclude that in the non intervened areas, television and radio are the limited sources of awareness created in the areas; in the intervened areas health workers and televisions are the important sources of awareness.

Findings on diarrhoea

The present study has found the following while studying the issue of diarrhoea in the two categories of slums:

Undoubtedly, awareness is greatly developed in intervened areas as compared to the non intervened areas. Mothers, irrespective of religion, are mostly able to diagnose diarrhoea correctly in intervened areas as compared to non intervened areas. Mothers, irrespective of religion, are absolutely competent in curing diarrhoea at home with home made solutions unlike their counterparts in non intervened areas who have to rush to hospital for treatment because of serious condition of their children. Mothers in intervened areas are also aware of the benefits of colostrums. Those of non intervened areas have a very poor knowledge. Mothers of intervened areas have derived their awareness from health workers visiting their households and media such as television and radio. Those in non intervened areas rely mostly on television and radio and whatever awareness has developed is on that account. Income effect has not been established as a determining factor in respondent behaviour. Literacy effects have been found of importance in influencing knowledge of recognition and treatment of diarrhoea. The influence of social factors is high in non intervened slums, but these do not have much perceptible influence in the intervened slums.