

CHAPTER III

HEALTH PRACTICES IN NON INTERVENED SLUMS

REPRODUCTIVE HEALTH

Relevance of Reproductive Health:

Reproductive Health Care covers a wide range of issues: pregnancy and childbirth, protection of women, children and adolescents from physical and sexual abuse, family planning counselling and services to prevent unwanted pregnancies, the sequel to unsafe abortion, treatment and prevention of sexually transmitted diseases and the discouragement of harmful traditional practices. Provision of reproductive health services would be based on the needs of the population, with particular attention being paid to the vulnerable groups, such as women and children. The social and cultural values of the community should be respected and the reproductive health for communities experiencing the trauma of displacement such as migrant families to urban slums need to be considered to be as much as a human right as the basic essentials of shelter, food, water and sanitation.

For a better understanding of women's health and ill health, there is a need to explore systematically the social and cultural determinants of reproductive health. Although several studies have highlighted the relevance of reproductive health in community settings, few have explored the social context of reproductive health. Relatively little light has been shed on the ways in which women seek treatment for gynaecological problems, or on the consequences and implications of gynaecological morbidity in women's daily lives. Drawing on a variety of reviews, Jeejeebhoy and Koenig (2002) have developed a conceptual framework that identifies a range of immediate and background factors that affects the gynaecological morbidity patterns of women.

Some of the background factors so identified are as follows:

Gender power imbalances and lack of autonomy have been identified as underlying factors for women's vulnerability to ill health. Women's limited control over resources in many settings compounds their lack of decision making and makes them socially and economically dependent on their husbands and partners in matters of sex and reproduction as well in the area of health care, including care during pregnancy and childbirth. Poor communication with the partner, cultural norms emphasizing on female chastity are some other socio cultural factors which affect reproductive health behaviour especially of women from the economically disadvantaged class.

Community attitudes often reinforce adverse reproductive health behaviour. Inequalities of age and gender make young women vulnerable to gynaecological morbidity. Reproductive failure itself has many social consequences, such as disruption of women's domestic and economic activities, verbal and physical abuse, fear of childlessness, abandonment and threat of actual divorce, and damage to psychological and emotional well being.

A range of factors inhibit appropriate health seeking behaviour. Even if reproductive health demands attention, it is perceived as normal as a woman's lot and is therefore ignored.

Reproductive morbidities are either not considered serious, or are considered self limiting or a simple consequence of marriage and childbearing, and for all these reasons not severe enough to warrant attention. Another factor affecting reproductive health is the “Culture of Silence” that surrounds women’s lives. Women consider any morbidity relating to the reproductive system a matter of shame and may not discuss it within the family, let alone seek care for it. Women’s reluctance to undergo a clinical examination, especially by male doctors, poor quality of care, high costs and inaccessibility of services also pose social and economic barriers to reproductive health behaviour.

It is against this background that an attempt has been made to conduct further research to explore the social, cultural and behavioural factors that affect reproductive health behaviour among women in the urban slums in the Kolkata Metropolitan Area. This study attempts a contrast of factors that influence health especially for reproductive health in slums that have received no intervention and those slums that have received intervention to draw attention of policy makers, programme planners and managers to critical areas in this sector.

Reproductive health Behaviour of women:

This section looks at the reproductive health behaviour of the respondent women dwelling in slums that have not received any systematic preventive health inputs in the area of antenatal care, delivery, post-natal care, contraception and institutional services such as hospital facilities. This section would look at the existing systems, examine beliefs and cultures associated with conception, antenatal and post-natal care, actual childbirth, taboos related to institutional deliveries, deliveries by male doctors, contraception and family planning. This section would also look at the social causes for permanent sterilisations in women as compared to the men. The three important social parameters, which serve as bases of classification, are income, literacy and religion. In this sample there are 105 households in these non intervened slums, comprising 268 men and 273 women.

Research Findings in the non intervened slums:

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

Respondent mothers and their income, religion and literacy:

Among the respondent mothers Hindus and Muslims have been considered for the study. Of these 68.60% Hindus and 68.42% Muslims are illiterate. Only 25.71% are educated up to the secondary level and above, comprising 25.58% Hindus and 26.32% Muslims. 6.97% of Hindus and 5.26% of Muslims are educated up to the primary level. Examining the distribution of illiterate Hindu respondents of different income levels, it is found that the highest income level contains 69.23% of illiterate Hindus. Among the Muslims, illiteracy is found more in the income group Rs 1001/- to Rs.1500/- and in the highest income group. Interestingly, the same number of Hindus educated up to the secondary level and above, is found in the lowest and highest income groups. (See Table 22)

Table No 22

Distribution of respondents according to monthly income, religion and literacy

Level of monthly income of the family (in Rs)	Religion	Level of literacy			
		Illiterate	Primary	Secondary and above	Total
Up to Rs 1000/	Hindu	15 (60.0)	2 (8.0)	8 (32.0)	25 (100.0)
	Muslim	2 (50.0)	-	2 (50.0)	4 (100.0)
	Total	17 (58.62)	2 (6.89)	10 (34.48)	29 (100.0)
Rs 1001/ -Rs 1500/	Hindu	9 (81.8)	1 (9.09)	1 (9.09)	11 (100.0)
	Muslim	5 (100.0)	-	-	5 (100.0)
	Total	14 (87.5)	1 (6.25)	1 (6.25)	16 (100.0)
Rs 1501/ -Rs 2000/	Hindu	6 (54.54)	-	5 (45.45)	11 (100.0)
	Muslim	1 (100.0)	-	-	1 (100.0)
	Total	7 (58.33)	-	5 (41.66)	12 (100.0)
Rs 2001/- and above	Hindu	27 (69.23)	3 (7.69)	8 (20.51)	39 (100.0)
	Muslim	5 (55.5)	1 (11.11)	3 (33.33)	9 (100.0)
	Total	32 (66.66)	4 (8.33)	11 (29.91)	48 (100.0)
All income levels	Hindu	57 (68.60)	6 (6.97)	22 (25.58)	86 (100.0)
	Muslim	13 (68.42)	1 (5.26)	5 (26.32)	19 (100.0)
	Total	70(66.66)	7(6.66)	27(25.71)	105(100.0)

(Figures in parenthesis indicates % of literacy levels)

It is seen that in contrast with the level of education of the females, the male counterparts have higher percentages of levels of education. For the Hindus, 39.53% husbands are educated up to the secondary level as compared to 25.58% of their wives. There are no wives in the read and write category but 2 husbands of the first income strata do belong to this group. Only 1.16% of wives have qualified up to the Higher secondary and above standard, whereas 10.46% of the husbands are educated up to the Higher secondary and above standards. In the Muslim community, similar characteristics may be traced. 68.42% of the wives and 42.10% of the husbands are illiterate. 5.26% of the wives and 10.57% of the husbands are educated up to the primary level. 26.3% of the wives and 42.10% of the husbands have studied up to the secondary level and 5.26% of the husbands alone qualify for Higher secondary levels and above. There are no wives in this group. In general, educational accomplishments of the Hindus are marginally better than that of the Muslims. For all communities, however, education of women have suffered and it is possible to

establish gender bias in the female education in the slums under survey, as it is seen that the women members of the households are much less educated than their husbands. 68.60% of Hindu wives are illiterate as compared to 32.55% of illiterate Hindu husbands. Similarly, 68.42% of the Muslim wives are illiterate as compared to 42.10% of the Muslim husbands. (See Table 23)

Table No 23
Level of education of wives as compared to that of the husbands

		Level of Education of the husband of the respondent						(Eligible Couples)					
Level of monthly income of the family (Rs.)	Level of Education of the wife (respondent)	Illiterate		Can read and write		Primary (Class I-IV)		Secondary (V-X)		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	7	1	2	-	2	-	3	1	1	-	15 (17.44%)	2 (10.52%)
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	1	-	-	-	-	-	1	-	-	-	2 (2.32)	-
	Secondary (V-X)	1	-	-	-	2	-	4	2	1	-	8 (9.30%)	2 (10.52)
Rs.1001 to Rs.1500	Illiterate	3	4	-	-	-	-	5	1	1	-	9 (10.46%)	5 (26.31%)
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	1	-	-	-	-	-	-	-	-	-	1 (1.16%)	-
	Secondary (V-X)	-	-	-	-	-	-	-	-	1	-	1 (1.16%)	-
Rs.1501 to Rs.2000	Illiterate	2	-	-	-	1	1	3	-	-	-	6 (6.97%)	1 (5.26%)
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	-	-	-	-	-	-	-	-	-	-	-	-
	Secondary (V-X)	-	-	-	-	-	-	3	-	-	-	3 (3.45%)	-
Rs.2001 and above	Illiterate	12	3	-	-	5	-	9	2	1	-	27 (31.39%)	5 (26.31%)
	Can read and write	-	-	-	-	-	-	-	-	1	-	-	-
	Primary (I-IV)	1	-	-	-	-	-	-	-	1	1	3 (3.48%)	1 (5.26%)
	Secondary (V-X)	-	-	-	-	1	1	6	1	1	1	8 (9.30%)	3 (15.78%)
All income Group	Illiterate	24	8	2	-	8	-	20	4	3	-	59 (68.60%)	13 (68.42%)
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	3	-	-	-	-	1	1	1	2	1	6 (6.97%)	1 (5.76%)
	Secondary (V-X)	1	-	-	-	3	-	13	3	5	1	22 (25.58%)	5 (26.31%)
All levels of Education of Husband	Higher secondary and above	-	-	-	-	-	13	-	-	1	-	1 (1.16%)	-
		28 (32.55%)	8 (42.10%)	2 (2.32%)	-	11 (12.77%)	2 (10.57%)	34 (39.53%)	8 (42.10%)	9 (10.46%)	1 (5.26%)	100%	100%

NOTE :- H -- HINDU, M - MUSLIM

Hence the following observations emerge with regards to education from an analysis of Table 22 and 23.

- Male counterparts have higher level of education than their female counterparts.
- Gender bias exists in terms of education in the slum areas.
- The level of education in the Muslim community is lower than that of Hindus.

The present study looks at the two sets of slums, those that have received health interventions through programmes and projects and those, which have not received any such inputs. The purpose of the study is to establish the following:

- Social factors and social beliefs considerably influence and dominate the reproductive and child health seeking behaviour and other significant factors such as age at marriage, beliefs and understanding of conception, beliefs associated with pregnancy, age at first child birth and allied concerns in the non intervened slums as compared to the intervened slums.
- Social factors and customs have dominant influences on the practices regarding pregnancy, family planning, conception and preference of place of delivery.

Accordingly in this section, the study intends to establish that the knowledge regarding reproductive health practices emanate from socially dominant factors and beliefs (varying according to religion) 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 and
15. Factors influencing women to take recourse to permanent family planning methods.

Age at Marriage:

Age at marriage is an important determining factor in the area of reproductive health, especially in deciding the total fertility rate and the condition of the health of both the mother and her children. Bhargava's (1984) study among the slum dwellers of Mumbai have established that variations occur in fertility levels due to changes in the ages at marriage among the females. This has been further corroborated by Jayshree's (1989) study on religion, social change and fertility behaviour based in the Travancore region in Kerala.

The hypotheses that have been examined are:

- Individuals prefer to solemnise marriage at a higher age but are governed by social and cultural norms in reality.
- Individual preferences for higher age at marriage are dominated by dictates of the community.

The present study has found that the respondent mothers prefer that the ages at marriage should be within the range of 19.77 years to 20.75 years. This is at variance with the actual age at marriage of the respondent, which closes around 17.9 years. This clearly validates the hypothesis stating that the age at which individuals prefer to be married differs significantly from the actual age of marriage.

Table 25 contrasts individual opinion regarding suitable age of marriage as against that of the community. The separate findings for both the religious groups classified according to literacy (clubbed to get significant figure for estimation) indicate that although the age at marriage of the daughters as preferred by the mothers and the community's dictum are placed within the range 18.66 years to 22.33 years, the preference of the respondents place the suitable age at marriage at a level higher than that by the community. The age limits as expressed both by the respondent and the community, however, are in conformity with the legally prescribed age at marriage. The age levels as suggested by the Muslims both as individual respondents as well as the community places the suitable age of marriage at a higher level than placed by the Hindus. This trend, however, is reversed in the case of the illiterate respondents. The above clearly establishes the hypothesis that individual preferences gives way to the dominant societal/community view. This also establishes the hypotheses that though individuals prefer to get married at a higher age, the factors deciding the actual age at marriage are social and cultural practices.

Table No 25

Table contrasting the Individual opinion with that of the community on the age at marriage suitable for girls

Religion	Literacy of respondent	Community's dictum	Opinion of the Respondent
Hindu	Illiterate	19.53 yrs	19.89 yrs
	Primary to Higher secondary and above	18.66 yrs	20.17 yrs
	All educational levels Combined	19.23 yrs	19.98 yrs
Muslim	Illiterate	19.15 yrs	19.77 yrs
	Primary to Higher secondary and above	21.00 yrs	22.33 yrs
	All educational levels Combined	19.74 yrs	20.58 yrs

Beliefs associated with Pregnancy

It has been seen from the previous findings that girls in the sample selected in the non intervened slums get married at a young age averaging at 17.9 years. This has obvious implications for conception, childbirth and size of the family. The hypotheses that have been considered here are:

- Social values and cultural beliefs dominate the beliefs regarding pregnancy.
- Education and literacy have limited influence on the belief associated with pregnancy in slum areas with little or no interventions.

Reproductive health is guided by knowledge and awareness of the process of conception and fertility. In most tradition-ridden societies, however, where education is not encouraged in women, a number of superstitions, beliefs and taboos guide the individual's mindset on conception.

It is observed that nearly 90% of the eligible couples of both the communities (88.37% of Hindus and 89.47% of the Muslims) have the firm belief that pregnancy occurs due to God's blessings, whereas the proportion of respondents rationally planning for children is only 8.14% for the Hindus and none for the Muslims. The influence of others that is the desire of husbands and other inmates seems to have very little effect on the respondents' conceptions for childbearing. Upon trying to analyse the effects of literacy, of those who ascribe God's blessings to successful childbirth consequent upon conception, 84.21% are Hindu illiterates and 100% are Muslim illiterates. Subscribing to the same theory are 95.23% of secondary educated Hindus and 80% of secondary educated Muslims. 10.52% of illiterate Hindu mothers believe in self-planning for children as compared to about 1.16% of mothers educated up to the secondary level. There are none in this category among the Muslims. (See Table 26)

Table No 26

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

Classification of beliefs on causes of pregnancy												
Levels of Literacy	God's blessings			Self planning			Without planning			Desire of husband/ in laws		
	H	M	T	H	M	T	H	M	T	H	M	T
Illiterate	48 (84.21)	13 (100.00)	61 (87.14)	6 (10.52)	-	-	-	-	-	3 (5.26)	-	3 (5.26)
Read and write	-	-	-	-	-	-	-	-	-	-	-	-
Primary	6 (100.00)	-	6 (87.50)	-	-	-	-	-	-	-	1 (100.00)	1 (100.00)
Secondary	20 (95.23)	4 (80.00)	24 (92.30)	1 (1.16)	-	1 (0.95)	-	1 (5.26)	1 (0.95)	-	-	-
Higher secondary and above	1 (100.00)	-	1 (100.00)	-	-	-	-	-	-	-	-	-
Total	76 (88.37)	17 (89.47)	93 (88.57)	7 (8.14)	-	7 (6.66)	-	1 (5.26)	1 (0.95)	3 (3.40)	1 (5.20)	4 (3.80)

H - Hindu; M - Muslim; T - Total
(Figures in brackets indicate % to total house holds)

Hence the following emerge from above analysis:

- Nearly 90% of the eligible couples believe that pregnancy occurs due to blessings of God.
- Only a low proportion of eligible couples plan childbirth.
- Education and literacy have little influence on planning for children and beliefs regarding conception.

The data clearly establishes that both the hypotheses postulated hold good in the case of non intervened slums.

Influence of social and cultural norms on conception

The following hypotheses have been postulated and tested using logical inference from data:

- Traditions guide individual beliefs
- Social and cultural influences lead to 'faith' based practices to beget children.

Associated closely with the traditions guiding individual beliefs towards conceiving children, are social and cultural practices that are often practised in many societies to beget children. The followers of such practices actually believe that such rituals are actually required to be followed in order to beget children. In the following Table 27, respondent mothers have been classified according to such beliefs.

Table No 27

Distribution of respondents classified according to her opinion as to whether it is necessary or not to follow cultural norms or social dictum to beget a child (in %)

Level of literacy	Whether respondent agrees to follow cultural/social norms				If yes, nature of norms to be followed									
	Yes		No		To pacify influence of evil planet		Pray to God		Exorcism		Superstition		Doctor's advice along with socio-cultural taboos	
	H	M	H	M	H	M	H	M	H	M	H	M	H	M
Illiterate	55.81	57.89	10.46	10.52	-	-	52.32	10.52	1.16	-	3.48	10.46	2.32	-
Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Primary	6.97	-	-	25.0	-	-	5.81	-	1.16	-	1.16	-	-	-
Secondary	20.95	21.0	-	25.0	-	-	24.41	5.26	-	-	-	15.28	5.26	-
Higher secondary and above	1.16	-	-	-	-	-	1.16	-	-	-	-	-	-	-
Total	89.53	78.94	10.46	21.05	-	-	83.72	15.78	7.32	-	4.65	63.15	3.48	-

H-Hindu, M-Muslim

The findings reveal that mothers of both communities believe very strongly in social and cultural rituals. About 89.53% of the Hindu respondents along with 78.94% of the Muslim

respondents believe that it is necessary to practise some kind of social and cultural rituals to beget children. The illiterate groups dominate the composition of such believers, the break up being 55.81% of the Hindus and 57.89% of the Muslims respectively. 20.95 % of Hindus and 21% of the Muslims belonging to the secondary educated group also subscribe to such theories. The respondents irrespective of their literacy levels prefer to rely on praying to God and following other rituals. 2 mothers, 1 each of the primary level and 1 illiterate Hindu believe in exorcism to conceive a child. Those adhering to social and cultural rituals are 94.5% of Hindus and 78.93% of Muslims irrespective of their literacy levels.

3 Hindu mothers, 2 illiterate and 1 of the secondary level would like to seek doctor's advice and prescriptions despite their social and cultural convictions. These three cases illustrate the combination of scientific thinking with extremity of social and cultural prescriptions.

Reddy(1984), in his study of the Chittoor district of Andhra Pradesh, inhabited by the Reddys, Kammas and others belonging to the scheduled castes and scheduled tribes, has confirmed the hypothesis that rational approach of women towards family planning is positively associated with literacy of women. This is borne out by our findings also, where the illiterate mothers dominated the believers of rituals to beget children.

The following observations may be summed up from the findings of the present study:

- The inmates of the non intervened slums actually believe that such rituals are to be followed in order to beget children.
- Strong beliefs of social and cultural rituals exist across different communities regarding conception.
- Since lack of education seems to dominate the proportion of believers, it can be concluded that literacy and education can influence the modification and change in these beliefs.

These observations validate the hypotheses.

Size of the Family

Average size of the family is dependant on the age at marriage and attitudes to planning for children. Having established that the age at marriage is low in the non intervened slums and also the eligible couples resort little to self planning to beget children, it is necessary to ascertain the average number of living children in the family.

The following hypotheses have been tested:

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

The present study finds that the average number of living children born to illiterate Hindu mothers of different income levels ranges from 3.3 to 3.7, higher proportions contributed mostly by the Hindus in the income group Rs. 1001/- to Rs. 1500/-. The range narrows down in the case of Muslims where the range is between 2.0 to 3.75, the lowest proportion being contributed by Muslims in the lowest income group. Hence low age of marriage of mothers has contributed to a high number of children per family validating the hypotheses.

The average number of children born to each mother is highest in both communities to the highest income groups, namely, 3.4 for Hindus and 3.7 for Muslims respectively. Again, in both communities at every income level, there is more number of living children in the eligible couples in the illiterate groups than in the literate groups combined, excluding illiterate Muslims of the income group Rs. 2001/- and above. (See Table 28)

Table No 28

Number of living children per eligible couple classified by income and religion.

Income levels	Religion	Illiterate	Literate	All
Up to Rs 1000	Hindu	3.5	2.0	2.9
	Muslim	3.0	1.5	2.25
Rs.1001-Rs1500	Hindu	3.7	1.0	3.2
	Muslim	-	-	-
Rs.1501-Rs.2000	Hindu	3.3	2.6	3.0
	Muslim	2.0	-	2.0
Rs. 2001 and above	Hindu	3.6	2.75	3.4
	Muslim	3.4	3.75	3.6
All income groups	Hindu	3.6	2.3	3.2
	Muslim	3.0	3.0	3.0

As the number of children per family is directly correlated with level of literacy and education, the hypotheses holds good in the non intervened slums.

It is expected that women marrying at an early age will have a larger number of living children. The present study has further found that nearly 72% of (194/270) that is, the highest number of children were presently living to Hindu mothers, 70% of whom were mostly married below the age of 19 years. The corresponding proportion of Muslim mothers married below the age of 19 years is 68.4% and the proportion of children born to them is 75.4%. Hence the average number of children born to the Hindu and Muslim mothers are 3.2 and 3.3 respectively. Nearly three fourths of the children born to the Hindu mothers have been born to the mothers of the illiterate group (74.4%). For the Muslims, the corresponding proportion is 68.4%. The average number of living children in the two communities of the illiterate group are 3.5 and 3.0 respectively that is the illiterate Hindus have more children on an average than their counterpart Muslims. The next high average number of children is born to mothers of secondary level of education. The majority of these mothers have been married within the age group of 15 to 18 years. 20% of the children have been born to Hindus with an average of 2.5 children. The Muslims, on the other hand, have 19% of the children with an average of 2.2 living children. 97.7% and 94.7% of the Hindu and Muslim mothers respectively out of a total sample of 105 eligible couples have married below the age of 23 years. The Hindu mothers of this group have an average number of 3.2 living children borne by about 98.1% of Hindu mothers. The Muslim mothers, on the other hand, have an average of 3.0 children contributed by 94.7% of the Muslim mothers.

The following observations have therefore been established:

- Higher the income bracket, the higher is the average number of living children irrespective of the community.
- Levels of literacy and education influence the number of children.
- The age at marriage considerably influences the average number of living children across communities/religions.
- The higher the number of male children, the higher is the desired potential to increase the income levels especially among the illiterate.
- The above analysis of data clearly establishes the validity of the hypotheses. It also points to the importance of creating awareness through communication when planning for a family.

Age at first childbirth

When interviewed, respondent mothers have opined as to what they considered to be the suitable age for giving birth to the first child. The hypothesis that has been postulated for testing is as follows: that social, cultural and religious beliefs influence the age at first childbirth.

The Mean age computed for literacy and religion differentials as to the age when a mother may get her first child oscillates within the age group 19-22 years. The Standard Deviation swings within 1.9 to 3.0. The Mean age at which the first child would be born to future mothers of the Hindu is 22.07 years with a Standard Deviation of 2.55. The rationale put forward in justifying the age of childbirth is as follows: 39.5% and 34.9% of the Hindu mothers opine in favour of the physiological and health grounds and social and religious issues respectively. 11.6% have ascribed it to the postnuptial agreement between couples to delay childbirth on an average by 2-4 yrs. A similar proportion has stated that the media on family planning influences them. As there is a preponderance of illiterate mothers among the Hindus, the proportion ascribing the views mentioned above reads as 40.4%, 35%, 10.5% and 12.3% respectively. In the secondary group, however, better educational standard has had its effect in raising the proportion to 45.5% when ascribing to physiological and health grounds, conjugal understanding was ascribed to by 18.2%, media impact by 4.5% and social and religious taboos by 27.3% respectively.

In case of the Muslims, the proposed Mean age of motherhood is computed at 21.63 years with a Standard Deviation of 2.68 as suggested by all mothers irrespective of literacy levels. This Mean age is lower than that of the Hindus. Regarding the causes put forward by the Muslims, 47.4% have suggested the physiological and health grounds as well as social and religious grounds. Of this opinion group, 45.5% formed the proportion of illiterate Muslims. In the secondary group, 60% have opined in favour of the physiological grounds and the rest on social grounds dictated by religious dogmas. Only 2 mothers have ascribed the conjugal agreements and media influence to be influencing their decisions to defer conception by a few years after marriage. Hence, 34.88% of the Hindu respondents and 47.36% of the Muslim respondents believe that social and religious taboos should decide the age at which mothers should have their first child.

This proves the prevalence of social, cultural and religious influences in both communities. The data clearly validates the hypothesis. It points to the requirement of awareness rising through communication, which is essential to increase the age of first childbirth.

Spacing between two successive childbirths

Respondent mothers also opined on the interval that should be maintained between two successive births of children. The Mean of the interval (in years), (combined religion/combined literacy) between the two consecutive births of babies is computed at 3-4 years with Standard Deviation ranging from 1 to 2. The Mean interval among the secondary level mothers is 4.1 years with a Standard Deviation of 1.3 (See Table 29).

Table No 29

**Mean, Standard Deviation and Median interval between two successive childbirths.
(In years except for Standard Deviation)**

Religion	Statistic	Illiterate	Primary	Secondary	Combined literacy
Hindu	Mean	3.6	3.7	4.0	3.7
	Standard Deviation	1.9	0.9	1.3	1.4
	Median	3.5	4.0	3.9	3.6
Muslim	Mean	4.3	-	4.5	4.4
	Standard Deviation	1.1	-	1.3	1.2
	Median	4.25	-	45.5	4.4
Combined religion	Mean	3.7	3.9	4.1	3.82
	Standard Deviation	1.4	1.05	1.3	1.35
	Median	3.6	4.2	3.9	3.75

Among the Hindu mothers, the Median of the interval between two consecutive births of babies has a range of 3.5 years to 4.0 years. 49.1% of the Hindu illiterate mothers have stated physiological and health grounds, the rest 51% have stated that there were domestic advantages for taking proper care of the child. Primary level Hindu mothers, however, do not ascribe the health and physiological grounds to justify spacing. The entire primary educated group believe in domestic advantages for the purpose of spacing. This group opines that a Mean interval of 4.3 years with a Standard Deviation of 1.1 ought to be maintained between two consecutive births. Unlike the illiterate Hindu mothers, 25% of the secondary level Hindu mothers opines that Mean interval of 4 yrs (Standard Deviation = 1.3) should be maintained between two consecutive child births. They ascribed physiological and health grounds towards this purpose. The overall responses of the Hindu mothers of different educational standards, according to the reasons of their preference, are as follows: 39.3% have supported reproductive physiology along with maternal and child health care and 60.7% supported on grounds of domestic convenience allowing the first child to become a toddler.

Among the Muslims, 26.3% prefer the health grounds; 31.6% wished to wait for the first child to reach a pre school age and 73.68% cited grounds of domestic advantages. In case of the Muslim mothers, the Mean interval is to the extent of 4.3 years which is about 8.5 months more than the Hindus and hence Muslim mothers appear to be better exponents of birth spacing as compared to their Hindu counterparts. Of this, 38.5% have ascribed physiological grounds to such spacing. 30.8% have ascribed spacing to domestic convenience and the other cited personal reasons. None of the Muslim respondents, educated up to the secondary level, however, subscribe to this view. The Muslims of this group favour a Mean interval of 4.5 yrs (Standard Deviation = 3); 40% wish that the first child should become a toddler to facilitate bringing up of the second child. The balance 60% ascribed this entirely to domestic advantages.

It is obvious, therefore, that in both religious communities, there is not much awareness of the necessity to have adequate spacing between the births of two children in the interest of the physiological and health ground of the mother. Domestic convenience, which is more of a social issue, clearly takes the precedence here. Further, while looking at the actual sequence of childbirth, the frequency of childbirth clearly belies the theory put forward by these mothers regarding birth interval of their consecutive children. This also points out that women have a very weak position in determining their family size and spacing of their children. Sivaraju (1987) has studied the influence of vital socio economic status variables on the family size and spacing of successive childbirths of two extreme cultural groups in Andhra Pradesh (scheduled castes and caste Hindus) and has concluded that knowledge and attitude towards family planning is stronger among developed communities.

The data clearly establishes the following:

- Awareness regarding the requirement of spacing of children on the ground of preserving mother's health is low.
- Mothers have low awareness and have very little role to play in determining family size and spacing of children.

Relationship between age at first pregnancy and religion of both communities.

The age at first pregnancy was compared through means of two characteristics classified by religious community through a test of significance. Only 2 out of the 86 Hindu mothers had had their first pregnancy below the age of 16 years, 1 at the age of 13 and the other at the age of 15 years. 1 illiterate Muslim mother was married at the age of 12 years but conceived at the age of 15 years. The Hindu mothers have delayed their conception by nearly 3 years and the Muslim mothers by 2.5 years. Upon conducting a T test of significance, high degrees of significance is established at 5% level with 103 degrees of freedom. Hence, it is concluded that there is close association between the Mean ages at marriage between the two religious groups and there is also close association between ages at pregnancy between the two groups.

Antenatal Care

Quality of reproductive health depends much on the kind of antenatal care received by the pregnant mother. After registering within 12 weeks of pregnancy, the mother should have a minimum of 3 check ups of antenatal care, comprising 2 doses of Tetanus Toxoid injection, iron folic acid and regular check ups on blood pressure, foetal status, anaemia and weight of the mother. Proper antenatal care controls maternal and infant mortality. The respondents interviewed are requested to opine on their perception as to the need for antenatal care. 90.7% of the Hindu mothers and 68.4% of the Muslim mothers respectively prefer to avail of antenatal check ups. Among the 78 Hindu mothers who have assented to the necessity of antenatal care, 32.05% and 7.69% have respectively wanted to ascertain blood pressure, weight, foetal position and wish to receive nutrients, vitamins, iron tablets and Tetanus immunisation respectively. Of the 13 Muslim mothers desirous of availing of antenatal care, 53.8% sought for antenatal care to ascertain blood pressure, weight, foetal status etc. and 23% desire to avail of nutrients as well as immunisation. Hence, while a greater proportion of Muslim mothers sought assistance on ascertaining blood pressure, weight and foetal status, and a lower proportion have wished to avail of immunisation etc as compared to the Hindus. (See Table 30)

Table No 30
Distribution of respondent mothers supporting the need for antenatal care.

Level of Monthly Income of the Family	Level of education of the wife (respondent)	Number of respondent Eligible Couples															
		Whether ANC is to be sought				Causes for seeking antenatal Care											
		Yes		No		Awareness of Health		BP weight foetus position (Antenatal care)		Medical check up and nutrition, stool, urine, blood.		Traditional belief		Fatalism		No reasons given/No Knowledge	
H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M
Up to Rs. 1000	Illiterate	13	2	2	-	11	0	2	1	0	1	1	0	-	-	1	0
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	2	-	-	-	1	0	1	0	-	-	-	-	-	-	0	1
	Secondary (V-X)	8	1	-	1	4	0	3	1	1	0	-	-	-	-	-	-
	Higher secondary+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1
Rs. 1000 to Rs. 1500	Illiterate	7	3	2	2	4	0	2	2	1	1	1	0	0	1	1	1
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	1	-	-	-	-	0	1	0	-	-	-	-	-	-	-	-
	Secondary (V-X)	1	-	-	-	1	0	-	-	-	-	-	-	-	-	-	-
	Higher secondary+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rs. 1501 to Rs. 2000	Illiterate	5	-	1	1	3	0	2	0	-	-	1	0	-	-	0	1
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Secondary (V-X)	5	-	-	-	5	0	-	-	-	-	-	-	-	-	-	-
	Higher secondary+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rs. 2001 and above	Illiterate	24	4	3	1	10	2	10	1	4	1	2	0	-	-	1	1
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	3	1	-	-	2	0	1	1	-	-	-	-	-	-	-	-
	Secondary (V-X)	8	2	-	1	4	1	3	1	-	-	-	-	-	-	1	1
	Higher secondary+	1	-	-	-	1	0	-	-	-	-	-	-	-	-	-	-
Total of all income groups	Illiterate	49	9	8	4	28	2	16	4	5	3	5	0	0	1	3	3
	Can read and write	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Primary (I-IV)	6	1	-	-	3	0	3	1	-	-	-	-	-	-	0	0
	Secondary (V-X)	22	3	-	2	14	1	6	2	1	0	-	-	-	-	1	2
	Higher secondary +	1	-	-	-	1	0	-	-	-	-	-	-	-	-	-	-
	Total	78	13	8	6	46	3	25	7	6	3	5	-	-	1	4	5
(%)		90.7	68.4	9.3	3.5	58.97	23.07	32.05	93.84	7.69	23.07	1.08	0	0	12.5	50.0	83.3

H: Hindu, M:-Muslim, ANC:-Antenatal Care, BP:-Blood Pressure

8 Hindu mothers have not wished to avail of antenatal care and of them, the response of 5 mothers is based on traditional beliefs and taboos while 3 mothers are ignorant of the facilities available for antenatal care. Similarly, in the case of Muslim mothers who have rejected the need to avail of antenatal care, 1 mother relied on 'fate' while the rest 5 had no knowledge of such specific antenatal care. The economic status of the respondents had no effect on the respondent behaviour on antenatal care. 90% of the Hindu mothers of all categories supported such care except those belonging to the income category of Rs 1001/- to Rs 1500/-. The Muslims in all categories responded poorly, as compared to the Hindus, with a proportion of affirmation varying from 60% to 78.8% respectively. Trying to assess the education effect, all Hindu mothers educated at the primary and secondary level have agreed on the need for antenatal care. Among the secondary level Muslim mothers, only 50% and 66.7% (at the highest and lowest levels of income) support this view.

Hence the need for antenatal care is literacy and income neutral in the non intervened slums.

Management of High risk pregnancies

The hypothesis tested here is that the traditions and beliefs dominate the process of management of high- risk pregnancies. One of the major causes of maternal deaths is non-availability of proper referral and treatment of high- risk pregnancies. One of the factors leading to maternal mortality is eclampsia which leads to epileptic outbursts from would be mothers. This manifestation is often associated in tradition-ridden societies with the superstition of evil influence. The households sometimes resort to exorcism resulting in great peril to the lives of the mother and the child. Respondents of non intervened slums were interviewed to obtain their views about this illness. The lone graduate mother has no knowledge of eclampsia of pregnancy. Similarly, as it appears from the present study, nearly 75.6% of the total respondent Hindus have no idea of this obstetrical complication. In the case of the Muslims, 73.7% have no idea of eclampsia of pregnancy either.

It is very important to note here that 5 Hindu mothers (4 illiterate and 1 secondary level educated mother) have conceded that eclampsia of pregnancy is caused by the influence of the evil spirit. They further believed that it is necessary to exercise exorcism to remove the same. It is also of interest that none from the Muslim community held such a view. Hence, one may conclude that the influence of taboos as well as ignorance prevails in the non intervened area in the context of knowledge and treatment of eclampsia during pregnancy especially in the Hindu community. This confirms the hypothesis.

Safe Deliveries

As home deliveries continue to dominate childbirth in urban slums, maternal and infant mortality may be suitably controlled by arrangement of trained birth attendants. Respondents were accordingly asked as to whether they felt the need of trained *dais* to attend to deliveries or not.

Among all the respondents 32.55% of the Hindus and 26.31% of the Muslim mothers have supported the idea that a *dai* (local birth attendant) should conduct domiciliary deliveries. The lone Hindu Graduate mother, however, did not support the services of a *dai* even for

home delivery. The proportion of Hindu mothers is higher than that of the Muslims in confirming the services of a trained *dai*, at all levels of literacy. Surprisingly, the proportion of secondary level educated Hindu and Muslim mothers supporting this idea is only 22.72% and 0% respectively. Compared to this, the proportion of the illiterate mothers is much higher, namely, 77.27% and 100% respectively. In all, 25.58% of the Hindu mothers have stated that the *dai* conducting home delivery should be trained. 15.78% of Muslim mothers have agreed that the *dai* should be trained. (See Table 31)

Table No 31

Respondents supporting delivery by trained *dais*(local birth attendants)

Literacy	Number of Respondents justifying delivery by a <i>dai</i>				Number of Respondents supporting services of a trained <i>dai</i>				
	Yes		No		Yes		No		Total
	H	M	H	M	H	M	H	M	
Illiterate	20 (71.4)	4 (80.0)	37 (63.7)	9 (64.28)	17 (77.27)	3 (100.00)	3 (50.00)	1 (50.00)	24 (72.72)
Read and Write	-	-	-	-	-	-	-	-	-
Primary	2 (7.1)	-	4 (6.89)	1 (7.14)	-	-	2 (33.3)	-	2 (6.06)
Secondary	6 (21.4)	1 (20.00)	16 (27.58)	4 (28.57)	5 (22.72)	-	1 (16.66)	1 (50.00)	7 (2.12)
Higher secondary and above	-	-	1 (11.72)	-	-	-	-	-	-
Total	32.55	26.31	67.44	73.68	25.58	15.78	6.97	10.52	31.42

H—Hindu M—Muslim
(Figures placed below indicate % of respondents to total households)

While explaining the reasons behind home delivery, 8.77% of the Hindu illiterate mothers have reported that development of sudden labour pain had prevented them from availing of hospital services; 14% of the Hindu mothers have stated domestic difficulties especially the non availability of escorts to hospitals at the time of acute labour pain to be a primary cause of home delivery. 5.26% mothers have gone to their native place in Bihar for delivery and remoteness of hospitals have compelled them to resort to home delivery. 1.75% of the illiterate Hindu mothers, 33.3% of the primary level educated mothers and 33.3% of the secondary level educated mothers have fear of surgeries (Caesarean sections) being conducted at the hospitals. About 23% of the Muslim mothers preferred domestic reasons to be the primary causes leading to such home deliveries. The rest declined from giving reasons as to why they did not avail of hospital services. This reveals that lack of hospitals, fear of hospitals, lack of timely admission in hospitals and lack of escorts has prevented access to hospital deliveries and the household has been compelled to take recourse to home deliveries. Hence, policy makers designing health interventions for the urban poor should pay attention to extensive out-reach, well equipped Public Health Centre/First Referral Unit, train birth attendants and arrange for referral transports as and when required. Upon summarising the above, the following emerge:

- 32.55% of the Hindu and 26.31% of the Muslim mothers supported the idea that a *dai* should conduct domiciliary deliveries. Of this group, 66.7% stated that the *dai* should be trained.
- The proportion of Hindu mothers confirming the services of a trained *dai*, at all levels of literacy, is higher than that of the Muslims.
- The reasons ascribed for preference to home deliveries is that there are no proper escorts to accompany them to the facilities, sudden development of acute labour pain, remoteness of the facilities, fear of having to undergo surgeries and apathetic attitude of hospital staff.
- Respondents in both communities concur that trained *dais* are preferred for deliveries
- The lengthy process of getting admitted into the facilities (if they are available) and the possible delays that this may cause are the factors deterring institutional attendance for deliveries.
- One of the important urban health design inputs that can be drawn out of this are that it should have extensive outreach, well-equipped Public Health Centre/First Referral unit, train birth attendants and arrange for referral transports when it is required.

Acceptability of Male doctors

Male doctors mostly provide hospital services. Social permissiveness and conventions often prevent women from approaching male doctors for antenatal care and actual delivery. Mothers of the non intervened slums were interviewed on their views on conducting of deliveries by male doctors.

It is seen that about 79.04% women agreed to deliveries by a male doctor and 20.95% disagreed. Hindus were mostly assenting and they formed 82.55% of the total respondents, 63.15% of Muslims agreed, while 36.84% disagreed to allow male doctors to conduct deliveries in their families. Of the social and economic causes forwarded as to why the services of male doctors were not supported, personal and social hindrances were stated to be the main cause. Two of the respondents, though refusing, did not advance any reason for such refusal (See Table 32).

Table No 32

Opinion of respondent mothers regarding delivery by male doctors with reasons

Level of literacy of the respondent mother	Number of respondent mothers									Reasons for Negative Opinion					
	Yes			No			No response			Personal shyness		Social hindrance		No response	
	H	M	T	H	M	T	H	M		H	M	H	M	H	M
Illiterate	44	7	51	13	6	19	-	6		11	5	-	-	2	-
Can read and write	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Primary (V-X)	5	-	5	1	1	2	-	1		1	1	-	-	-	-
Secondary (V-X)	21	5	26	1	-	1	-	-		1	-	-	-	-	-
Higher secondary and above	1	-	1	-	-	-	-	-		-	-	-	-	-	-
Total	71	12	83	15	7	22	-	7		13	6	-	-	2	-
%	82.55	63.15	79.04	17.14	36.84	20.95	-	36.84		15.17	31.57	-	-	2.32	-

NOTE: - H – HINDU, M-MUSLIM, T-TOTAL

The overall findings are hence as follows:

- There seems to be a general acceptability of male doctors conducting deliveries across the respondents of the two communities.
- Hindus are more willing to accept services of male doctors during deliveries as compared to Muslim respondents.
- Personal shyness and social hindrances are some of the dominant reasons for not accepting the services of a male doctor.

Post Natal Care

A large number of maternal deaths take place on account of lack of postnatal care. This very important element of reproductive health, however, is rejected in most societies as unnecessary, more so, when slum women have to go back to work after delivery of their children. M.E. Khan (1987), in his study on the complexities of relationships between productive and reproductive roles has advocated that more information be generated on the dynamics through which these linkages work in different socio-economic systems. It appears from the present study that all mothers have sufficient awareness about the necessity of availing of postnatal services in the areas of mother's and infant's care, child's development, immunisation, growth monitoring and administration of nutritious food. Of the illiterate Hindu mothers agreeing to the concept, 50% sought medical advice during convalescence after labour. 30% illiterate Muslim mothers also sought for this service. 50% illiterate Hindu mothers and 70% illiterate Muslim mothers wished to avail of infant's care services such as immunisation, nutrition, etc. 20% of the illiterate Hindu mothers did not agree to the necessity of post natal care, ostensibly on the ground that no post delivery complications had developed either to them or their babies. All 3 illiterate Muslim mothers also denied the need to avail of postnatal care. Mothers educated up to the primary level had assented to the need for postnatal care on grounds of infant's growth monitoring, supplementary nutrition, and immunisation against the 6 killer diseases. Of the secondary level mothers, while all the mothers felt the need for postnatal consultations, 54.5% advocated the same on grounds of mother's care, and 45.5% advocated entirely on grounds of infant's care. 1 Muslim mother in this group declined the need as according to her both she and her child kept well after the birth. An overall proportion of 85.7% of the mothers were found agreeing with this concept. (See Table 33)

Table No 33

Proportions of responses towards post natal care by religion and literacy

Literacy	Hindu	Muslim	Combined
	Proportion affirming	Proportion affirming	Proportion affirming
Illiterate	80.7	76.9	80.0
Primary	100.0	100.0	100.0
Secondary	100.0	80.0	96.3
Higher secondary	100.0	-	100.0
Total	87.2	78.9	85.7

Though most of the mothers agreed to the requirement of postnatal services, it is essential for them to realise that it is not only for their infant's health but for both the mother's and child's health. A study conducted in 1983 in Bijnour has similarly looked at the work patterns of women presenting data on childbearing and delivery and changes in women's work

patterns during these periods and has confirmed the negligent attention paid to the post natal needs of women among the urban poor families.

Reproductive Health Services actually availed of by mothers in the non intervened slums

When interviewed a large proportion of mothers did desire to avail of antenatal services in the pre delivery period. This study tried to ascertain what the reality was, that is, whether the aspiring mothers were actually able to take recourse to antenatal care. It is seen that 87.2% of Hindus and 78.9% of the Muslims have availed of the antenatal care services. Mothers of the Hindu community have availed of more of the facilities as compared to the Muslims but Muslim mothers from the primary and secondary group have all availed of such facilities (Table 34). Nearly 87.2% of the illiterate Hindu mothers have sought hospital services while seeking antenatal check up and 12.2% could afford to visit the private doctor. 77.8% and 22.2% were the proportions of Muslim mothers who have visited the hospitals and private practitioners respectively. Among the primary level mothers 5.81% Hindu mothers have gone to the hospitals and 5.26% Muslim mothers have sought advice of the private doctor. Of the secondary educated group, 85% have gone to the hospital and 15% have visited private doctors. Interestingly, 1 mother has stated that she has consulted the local *dai* because she is scared of the apathetic attitude meted out to patients in hospitals. Considering all groups of literacy, 88% and 12% of the Hindu mothers have visited hospitals and private doctors respectively during their last pregnancies. The proportions of their Muslim counterparts are 66.7% and 33.3% respectively.

Analysing the behaviour of the mothers refusing to avail of such care, 12.8% mothers of the Hindus and 21.05% of the Muslim mothers have not availed of such antenatal care. Of the Hindu negating respondents, 45.5% are non responsive, 18.2% were confined to their native home and 18.2% have consulted *dais* on account of difficult atmosphere experienced at the hospitals. The remaining 2 mothers are too poor to pay for conveyance to hospitals or visit the private doctors, Similarly, the Muslim mothers who have refrained from availing of antenatal care also have cited economic stringencies as the cause of not availing of antenatal services.

Table No 34

Proportions of mothers who availed of antenatal care during the last pregnancy

Literacy	Hindu	Muslim	Combined
Illiterate	86.0	69.2	82.9
Primary	83.3	100.0	85.7
Secondary	90.9	100.0	92.6
Higher secondary	100.0	-	100.0
Total	87.2	78.9	85.7

Coverage by Tetanus Toxoid:

One of the important components of antenatal care is the administration of Tetanus Toxoid immunisation to the pregnant mothers. The profile is obtained from mothers of the slums under study. Of the illiterate and secondary group 50% of the Muslim mothers have been covered by the second doze, but overall proportion is 47.1%. Regarding the Hindu mothers, however, the overall coverage is only 25%. Hence, although a very high percentage of mothers have received the first doze of immunisation of Tetanus Toxoid, very few could complete the immunisation process. Of the 4.7% Hindu and a single Muslim mother who have not availed of any doze of immunisation, the former have pointed out that want of escort to the hospital has prevented such access. The Muslim mother has stated that she is ignorant of the need for such immunisation. Hence it is seen that very few mothers have completed the process of immunisation diluting thereby the intended quality of health care as required by complete immunisation process.

Places of delivery

The illiterate respondents had clearly articulated the desire to have deliveries in the hospital even if the attendance was by a male doctor. This attitude was not very clear in groups with higher levels of education. The analysis presented below captures the situation where the deliveries actually took place.

Nearly 25% of the deliveries up to the third order of the birth of the babies have occurred at homes and 57.4% have taken place in the hospitals. Among the Muslims, up to the third order of birth, 56.1% of the deliveries have taken place in hospitals and 47.4% of such births have taken place at homes. For the Hindus, 67.4% of deliveries up to the third order of births have taken place at hospitals and 33.3% at homes. 8% of the deliveries (up to the fourth order of births) have taken place at homes. 10% of the births (up to fourth order of births) have taken place in hospitals respectively. Hence, the Hindus have preferred hospital deliveries more as compared to the Muslim households.

It is found that 79.06% of the Hindu mothers have been admitted to the hospitals for delivery of 67.4% of the total births. For Muslim mothers the corresponding proportions are 63.15% and 56.14% respectively. Another feature is that, equal proportion of confinements have occurred to each of the mothers of both religious groups at hospitals, that is, 76.19% of total mothers have attended the hospitals for giving birth to 65.44% of the children (Table 35).

Table No 35

Places of deliveries of mother by religion

Place of delivery	Hindu			Muslim			Total		
	No. of mothers	No. of deliveries	Prop. of confinement	No. of mothers	No. of deliveries	Prop. of confinement	No. of mothers	No. of deliveries	Prop. of confinement
Hospital	68 79.06	182 67.40	2.68	12 63.15	32 56.14	2.67	80 76.19	214 65.44	2.68
Home	18 20.93	88 32.59	4.89	7 36.84	25 43.85	3.57	25 23.80	113 34.55	4.52
Total	86 100	270 100	3.14 100	19 100	57 100	3.00 100	105 100	327 100	3.11 100

Figures below indicate percentage of confinements

Table No 37**Factors leading to home confinements**

Factors	Proportion of mothers	
	Hindus (%)	Muslim (%)
Apathetic attitude of family members	11.1	20.0
Domination by mother in law	11.1	12.9
Sudden labour pain	11.1	24.2
Lack of money and escort	66.7	42.9
Total	100.0	100.0

Family Planning practices

Current literature has studied and explored adoption/non-adoption of family planning methods and practices by different social and economic groups. Reddy (1984), in his study of Andhra villages has found that literacy, occupational mobility, socio economic variations of communities and attitudes of husbands and wives are the important social factors influencing acceptance of family planning methods in backward communities. Kar(1993), found that Nocte women in Arunachal Pradesh are deeply influenced by their value systems and cultural traditions in their reproductive health Behaviour. Chatterjee(1983), has stated that evidence of conflict between traditional norms and practices and state policies is most obvious in the area of family planning. Singh (1984), in his study on the Ranchi town found that most women had little knowledge, if not none, on reproductive health and birth control methods. Our findings on the faith and belief in family planning methods between the Hindu and Muslim respondents are interesting.

The present study wished to test the social factors affect family planning behaviour. It is found that only 31 out of 86 Hindu respondents (36.04%) and 6 out of 19 Muslim respondents (31.57%) have any belief in family planning. The majority of the respondents, namely 65 Hindus (75.58%) and 13 Muslims (68.12%) stated that they did not believe in family planning.

Reasons were forwarded to explain why 36.04% of Hindu respondents and 31.57% of the Muslim believed in family planning. Only 19.35% of Hindus relied on family planning to adopt the small family norms. 48.38% Hindus and 10.52% Muslims used family planning to maintain space between childbirths. 19.35% of Hindus and 10.52% of Muslims wanted to adopt the permanent method to prevent further childbirth (See Table 38).

A very large proportion of the respondents, namely 75.58% of Hindus and 68.42% of Muslims did not have faith in family planning. Of the varying reasons advanced behind such non-belief, the majority that is 32.30% of Hindus and 38.46% of Muslims did not advance any reason. 4.61% of Hindus stated that there was objection from in laws. 16.92% Hindus and 15.38% Muslims thought that use of family planning methods affected health 16.12% Hindus and 21% of Muslims were clearly opposed to the use of family planning methods. 20% of Hindus considered that as children were God's blessings, no artificial methods should be used. 1.52% Hindus and 7.68% Muslims were concerned with the costs involved in purchasing contraceptives (See Table 38).

Table No 38

Respondents relying on Family Planning programmes with reasons according to literacy

Level of literacy of the respondent mothers	No. of respondent mothers having reliance on Family Planning Programmes or not.		Reasons for reliance on Family Planning Programmes.						Reasons for not believing in the F.P. Programme.																	
	Yes		No		Small family norm desiring of child according to choice of time in need.		Maintaining space between two births.		Better permanent method of stopping of further birth.		No appreciation affirmation on the reliance of methods		In-law's objection belief/husband's discard.		Reluctant use/hostile attitude towards methods,		Methods affect health.		Issues being the God's blessings should not be forbidden.		Habitually less number of issues..		Economic reasons – no further requirement of methods		No answer given.	
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M
36.04	31	-	8	1	-	5	0	10	0	5	2	2	1	-	4	4	6	1	7	0	-	-	1	1	15	5
31.57	6	-	3	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75.58	65	1	14	5	1	4	1	2	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
68.42	13	0	2	1	-	1	0	1	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
19.35	6	-	1	-	-	4	1	2	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
0	0	-	0	-	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-
48.38	15	-	4	1	-	1	0	1	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
10.52	2	-	2	0	-	2	0	2	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
19.35	6	-	1	-	-	1	0	1	0	1	0	1	1	3	0	0	1	0	0	0	1	0	-	-	1	1
10.52	2	-	0	-	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-
6.13	4	-	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.58	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.61	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.12	5	-	1	-	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
21	4	-	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
16.92	11	1	4	-	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4
5.38	2	0	1	-	-	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
20	13	-	3	3	-	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
0	0	-	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.52	1	-	0	1	-	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
7.68	1	-	1	0	-	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
1.52	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.68	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32.3	21	-	5	1	-	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5
38.46	5	-	0	1	-	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0

Note:- H means Hindu, M means Muslim, T means Total, CRW means Can Read and Write, , HS+ means Higher secondary and above., F.P.: family planning

Hence the following conclusions may now be drawn on the belief patterns of the respondents of the non intervened area.

1. There is generally opposition to the family planning methods, especially from the illiterate groups. 75.58% of the Hindus and 68.42% of Muslims did not believe in the necessity to adopt family planning.
2. Belief that family planning adversely affects health is another significant reason.
3. As has been stated in the section on beliefs regarding conception as blessing of God and hence family planning is seen as opposing the blessing of God.
4. Economic reasons also stood in the way of obtaining contraceptives, nutrients etc and families did not wish to incur expenses on the same.

Position of women in accepting permanent methods.

Our hypothesis was to test the influence of social and cultural practices on the actual practice of family planning. One important social factor that influences family planning behaviour is that it is mostly the women who are compelled to adopt family planning methods and this is so especially in the case of sterilisation methods such as tubectomy.

In the present study, it was attempted to ascertain the opinion of the respondents as to whether it is the wife or the husband who should adopt family planning methods. It was found that 70% of Hindu illiterate and 50% of Muslim illiterate respondents supported that wives should accept permanent methods. 26.7% of Hindus and 50% of Muslims educated up to the secondary level supported this view. (See Table 40)

Table No 40

Proportions of wives agreeable to adopt permanent methods of family planning

Literacy	Hindu Proportion	Muslim Proportion	Combined Proportion
Illiterate	70.0	50.0	66.7
Primary	3.3	-	2.8
Secondary	26.7	50.0	30.5
Total	100.0	100.0	100.0

Out of the Hindu mothers, (excluding the lone respondent who despite supporting ligation, was discouraged by the elderly relatives), 67.7% stated that if husbands were sterilised, there will be potential loss of family income as husband's working abilities may be affected. 9.7% relied on the advice of mother in law, and 12.9% were compelled to undergo ligation due to too many child births.(See Table 41)

Table No 41

Reasons influencing wives to take recourse to permanent methods of family planning

Reasons	Hindu	Muslim
	Proportion	Proportion
Husband's working capacity may be affected	67.7	83.30%
Mother in law's desire	9.7	-
Small family desired	6.5	-
Too many childbirth compelled ligation.	12.9	16.66%
Elderly relative's advice	3.2	-
Total	100	100

It is of interest, however, to note that, although 34 mothers had more than 3 living children, only 11.76% (4/34) resorted actually to ligation. For the rest, the belief was not translated into practice.

Among the Muslim respondents, a vast majority of 83.3% was concerned about husband's capacity to earn income in case he underwent vasectomy. 16.66% was compelled to undergo ligation due to too much childbirth. Hence it is clearly established that women in these non intervened slums are compelled to adopt permanent methods doing to social and economic pressures. Either the husbands potential to work or the fear of too frequent childbirths becomes the overriding cause. This proves our hypothesis that the actual practice of family planning that is, adoption of permanent methods by women is influenced by social factors.

Actual contraception practices

In our present study, in order to prove the hypothesis that social practices affect contraceptive practices, an analysis was made to ascertain the proportion of contraception users after birth of the first/second/third child and underlying causes towards the same. Hence, contraceptive users among the Hindus have improved after the third child by 13%, with respect to the practice prior to birth of the first child. Among the Muslims, it has regressed by 16.3%. The percentage of the Hindu acceptors has gone up from 1st to the 3rd conceptions, that is, from 11.6% to 14.6% to 24.6%. Among the Muslims, the percentage has varied from 26.3% to 11.85% to 10.0%. The reluctance to adopt family planning after the birth of the first child has been the result of social and cultural pressures such as domination of the mother in law, cultural taboos of the population migrating from Uttar Pradesh, Bihar and Andhra Pradesh. The second child is born due to a few social causes. 66.3% are due to conjugal understanding, but 32.5% thought that it is God's blessings, which causes childbirth and not conscious human choice. Especially interesting is that 50% of the primary and secondary educated mothers subscribe to this view. In the case of the Muslims, the proportion is even higher, with nearly 60% of the samplé mothers ascribing cultural beliefs to consecutive births of their children. Very important social influences, namely, desire for a son and god's blessings play an important role among the sample population while conceiving for a second child. Out of 76 eligible couples, 34.2% have stated that they are blessed with a second child on account of God's grace. The proportions contributing to this idea among the illiterate, secondary and primary groups are 27.8%, 44.4% and 75% respectively. In the case of the Muslim couples the proportion is almost 19% higher than the Hindus while ascribing to this cultural belief. 3 Hindu couples desire a second child on account of preference for a son. No Muslim respondents, however, subscribe to this view. Hence, there is some element of gender bias in the sample of Hindu respondents from the non intervened area.

The deep-rooted traditional belief that children are given by God has prevailed over the sample respondents in the non intervened area. This is irrespective of religion, caste, creed or levels of education. This is found present in the situations of having the first, second, third and even more children. In case of the Hindus, the proportion of those ascribing childbirth to God's blessings has moved from 32.5% to 34.2% to 29.5% according to the orders of birth. Among Muslims, the percentages have moved from 57.9% to 52.9% to 70.0% according to the orders of birth. Regarding the desire for a son, eligible Hindu couples have shown their preferences for at least two male children in the family. This corroborates the previous finding on gender bias.

43.7% of all eligible couples have had the third child on the basis of self-planning and 56.3% of the eligible couples have been influenced by social factors while having the third child. 15.5% have the third child without planning; a very significant proportion of 35.2% of the eligible couples ascribe the birth of the third child to God's blessings. The desire for a son has been the main motivation for 2.8% of eligible couples. (See Table 42)

Table No 42
Factors leading to third conceptions

Religion	Literacy	Couple's desire	Without planning	God's blessings	Desire for son	Total Respondents
Hindu	Illiterate	47.9	20.8	22.9	4.2	48
	Primary	50.0	0	50.0	4.2	2
	Secondary	45.5	0	54.5	0	11
	Total	47.5	16.4	29.5	3.3	61
Muslim	Illiterate	25.0	0	75.0	0	8
	Primary	0	100.0	0	0	1
	Secondary	0	0	100.0	0	1
Combined	All literacy	43.7	15.5	35.2	2.8	71

Findings on reproductive health from non intervened slums:

The tabulations and analyses of the foregoing chapter are intended to examine the reproductive health behaviour of the slum dwellers wherein preventive health interventions have not been introduced systematically and to ascertain to what extent social factors such as religion, literacy, influence of laws and income as well as cultural taboos such as superstitions, faith in spirits, exorcism and other prescriptions have influenced such behaviour.

The following conclusions are drawn from the same:

In the representative sample behaviour analysed so far, a very high level of illiteracy has been detected, amounting to 68.60% among the Hindu and 68.42% among the Muslim respondents.

Wives are much less educated than their husbands, namely, 32.55% of Hindu males are illiterate as compared to 68.60% of their wives. Among Muslims, the proportions of illiteracy among males and females are 42.10% and 68.42% respectively.

The Mean age of marriage of combined religion is 17.9 years, which is less than the minimum age of marriage as laid down by law. While the respondent mothers have opined that the Mean age of marriage should be between 18.5 to 22.5 years, the actual Mean age is fixed at 17.9 years, which is less than that desired. This proves that the opinion of the mothers is subdued and that of the society prevails.

90% of the eligible couples believed that children are the result of God's blessings. Those advocating self-planning for children are only 18.4% for Hindus and none from among the Muslims. The average number of living children per eligible couple is 3.2 for Hindus and 3.0 for the Muslims. The number of children is highest for the illiterate group whose average number ranges between 3.4 and 3.7 respectively. It has been statistically proved that literacy has a direct association with the determination of the family size.

The average number of children desired as against living, is 2.53 for both religions. The variability of choice for desired number of children as against actually living is 15% for

Hindus and 23% for Muslims. Gender bias is present especially among the Hindu eligible couples who have desired to have sons on grounds of future income, security and social status. There is strong adherence to socio economic dicta by mothers of both communities, which they believe are necessary to be observed to beget children. The proportions are 90% among Hindus and 79% among the Muslims. As the Mean age of marriage is lower than that prescribed, the average number of children likely to be born to mothers of this area would be fairly high, defeating the norms of a small family.

Mothers opined on the suitable age of marriage for girls on the basis of health grounds, social and religious grounds, conjugal agreement and media impact. 39.5% and 34.9% of the Hindu mothers favoured the first two grounds while advocating the suitable age of marriage; 47.4% of the Muslim mothers opined similarly. Hence, social and religious influences continue to be predominant in the thinking of the others of the sample population. 87% of the eligible couples agreed on the necessity of antenatal care. Eligible couples who negated this idea did so on the basis of traditional beliefs and the inevitability of fatalism.

75.6% of Hindus and 73.7% of the Muslim mothers have no knowledge of eclampsia of pregnancy. 5 Hindu mothers actually believed that the symptoms were created by the influence of evil spirits and exorcism was required to drive away the same. 32.6% of Hindus and 26.3% of the Muslims supported the idea of home delivery by a *dai* in contrast to hospital delivery. Of this group, only 66.7% agreed that the *dai* should be a trained one.

Of the respondents who negated home delivery by a *dai*, only 82.6% of Hindus and 63.2% of the Muslims supported the idea of hospital delivery by a male doctor. This indicates high level of permissiveness in society that disapproved of pregnant mothers being attended to by male doctors. 88% and 12% of Hindu mothers and 66.7% and 33.3% of Muslim mothers visited the hospitals and private doctors respectively to avail of postnatal care. In the case of Tetanus Toxoid immunisation, however, while about 83% of mothers availed of the first doze, only 25.6% of Hindu mothers and 47.1% of Muslim mothers availed of the second doze. 25% of the births up to the third order took place in homes for Hindus and 33.3% for the Muslims respectively. Family apathy, domination of mothers in law, absence of money and escort were some of the social and economic causes, which prevented access to hospitals for delivery.

It was statistically tested that literacy had no influence on the family planning belief of the respondent mothers. 64% of the Hindus and 69% of the Muslims had no faith or belief in family planning methods to restrict their family size. Discouragement by husband and in laws, reluctance to use family planning methods, belief that children are the result of God's blessings and avoidance of likely costs were some of the social, cultural and economic factors, which led to such poor response to family planning. Literacy again, had no influence while deciding on the family planning methods by the acceptors. 11.76% of mothers resorted to family planning after the birth of the third child. 86% of the families did not take recourse to family planning after the birth of the first child or even the second child. 77.5% did not use family planning devices after the birth of the third child. About 38% of the non-acceptors had a deep-rooted traditional belief that children were the gifts of God. Consequently, they failed to limit their family size by using family planning devices even after the births of consecutive children.

IMMUNISATION OF CHILDREN

Importance of Immunisation

Child health and survival are important aspects of the Family Welfare Programme in India. The National Health Policy (1983) and the National Health Policy (2002) had set the goals of reducing the Infant Mortality Rate to 60 by the year 2000 and 45 by the year 2010. Immunisation is one of the important programme interventions, which aims at reduction in mortality and morbidity due to preventable causes among young children.

Recent surveys and studies UNICEF (United Nations Children Emergency Fund) 1998, RCH (Reproductive and Child Health) Household Survey 1998-99 in India have brought out that only about 50% of the children born each year are fully immunised in the first year of life and are therefore unprotected during their most vulnerable months and are susceptible to disease for which they have not been immunised. Further there are significant drops from the highest to the lowest covered dose. Drop out rates varies from about 6% in Goa to 33.8% in Meghalaya leading to low overall coverage. Measles has come out to be the lowest covered antigen.

In this background, the implications for immunisation profile of the children under 5 years of age in the non intervened slums of the Kolkata Metropolitan area has been studied and analysed to ascertain the beliefs and practices associated with the same. This study wishes to study the following in the context of children in non 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.

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

At the outset, while examining the immunisation profile of children of the age group 1 year to 2 years against the six killer diseases of 4 types of vaccines (BCG*, DPT*, Polio, Measles) the proportions of eligible couples who have the cohort of children need to be identified for demographic value. It is seen that there are only 36 eligible couples (34.3%) out of 105 of both religious groups with children between 1 year and 2 years. Of them 24 (27.9%) are Hindu and 12 (63.2%) are Muslim eligible couples who have children between 1 year to 2 years (both inclusive in the cohort). (See Table 43)

Table No 43

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

Religion/Literacy		Illiterate	Primary	Secondary and above	Total
Hindu	Eligible couples with children of 1-2 years	16 (28.1%)	2 (33.3%)	6 (27.3%)	24 (27.9%)
Muslim	Eligible couples with children of 1-2 years	8 (61.6%)	-	4 (80.0%)	12 (63.2%)
Combined	Eligible couples with children of 1-2 years	24 (34.3%)	2 (28.6%)	10 (37.0%)	36 (34.3%)

*DPT—Diphtheria, Pertuissis and Tetanus

*BCG—Bacillae Camette Guerin after the name of the inventor of the Vaccine of Tuberculosis

Children with complete and incomplete immunisation

As an alternative approach of inference, outcome of immunisation would be said to be complete when the child receives Measles vaccine on or before attaining the age of 24 months. The data shows that the Hindu children have been administered with higher proportion (58.3%) of complete immunisation as compared to those of the Muslims (16.7%). Muslim parents either do not have the requisite information on immunisation or have failed to participate in the immunisation programme as would be evident from the very high percentage of incomplete immunisation of Muslim children that is, 83.3%, as compared with 41.7% of the Hindus. From this glaringly low profile of immunisation of both the communities it may be inferred that a proper and enabling environment for complete immunisation has not been established and consequently the community at large has failed to come forward to derive the benefits of the programme. No child is found to be "Non Immunised." This implies that at least 1 antigen has been administered to all the children but a very few have completed the profile of all antigens and hence the children have failed to be covered with the desired immunity. Overall proportion of incomplete immunisation is to the extent of 55.6%. (See Table 44)

Table No 44

Children with complete and incomplete immunisation

Levels of Literacy of respondent mother	No. of children (1-2y)	HINDU				No. of children (1-2years)	MUSLIM				No. of children (1-2years)	BOTH THE RELIGIONS			
		Complete		Incomplete			Complete		Incomplete			Complete		Incomplete	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
Illiterate	16	10	62.5	6	37.5	8	1	12.5	7	87.5	24	11	45.8	13	54.2
Primary	2	1	50.0	1	50.0	----	----	----	----	----	2	1	50.0	1	50.0
Secondary	6	3	50.0	3	50.0	4	1	25.0	3	75.0	10	4	40.0	6	60.0
TOTAL	24	14	58.3	10	41.7	12	2	16.7	10	83.3	36	16	44.4	20	55.6

Social factors influencing mother's knowledge of vaccination

The hypotheses that were tested are as follows:

- The economic status of the family of respondent mothers has no direct relation with the access to the immunisation centres.
- Literacy may have some minor influence on the mother's knowledge of the importance of immunisation.

An analysis has been made of the social factors influencing the knowledge of the respondent mothers about the facilities offering immunisation services through different organisations in the area. It is seen that the economic status of the family of the respondent mothers has no direct relation with the location of the immunisation centres. Literacy may have some minor influence on the mother's knowledge of the importance of immunisation activities as conducted by the various facilities of this area. The State General Hospital is the most popular where most of the mothers take their children for immunisation. However, a large number of mothers have gone to the General Hospital or Municipal hospitals or even the centers run by the Non Government Organizations. A very small percentage of the mothers have visited the Integrated Child Development Centers to immunise their children.

Table No 45

Respondent mothers attending different immunisation centers by literacy

	Illiterate (%)	Primary (%)	Secondary (%)	Higher secondary and above (%)	Total (%)
State Govt. hospital	48 84.2%	5 83.3%	17 77.3%	1 100%	71 82.6%
Municipal hospital	36 63.2%	6 100%	13 59.1%	1 100%	56 65.1%
Non Govt. treatment centre	5 8.8%	3 50.0%	4 18.2%	1 100%	13 15.1%
NGOs	4 7.0%	- 0%	2 9.1%	1 100%	7 8.1%
ICDS	7 12.3%	1 16.7%	2 9.1%	- 0%	10 11.6%

Note: Figures below indicate the proportion of respondent mothers taking their children to various facilities,

The above (See Table 45) configuration of percentages in respect of literacy of the respondent mothers establishes very poor association both with the knowledge as well as availing of services from the different centres. This is true in the case of both religious groups. The highest percentage of mothers has mentioned the name of the State General Hospital and the second highest preference is for the Municipal Hospital. Attendance to the other three centres has not been given any importance by the respondent mothers.

Because most (60%) of the 1st to the 3rd births are being delivered in the hospitals and BCG vaccines are to be given to the new born in the Maternity wards, awareness of immunisation has developed only among those mothers who have delivered their children in the hospitals. This is possibly because very little extension work has been done by Health workers among the urban poor in this non intervened area.

The following conclusions emerge from the above.

- There is very poor association of knowledge and accessing of services from different sources with levels of economic status and literacy.
- Awareness of immunisation had developed only among those mothers who had delivered their children in the hospitals. This could probably be because health-workers in the non intervened slums have done very little extension work.

The above validates both the hypotheses tested.

Belief in Immunisation:

Apparently a high percentage of mothers affirm the belief in prevention of the 6 killer diseases by immunising their children between the ages of 1 year to 2 years. This apparent picture of awareness created, however, is contradicted by a staggering 55% of children who have been only partially immunised. Such incidence of incomplete immunisation has been found amongst 20 out of a cohort of 24 children in the sample of 105 respondent mothers. This is quite an indication of the non-application of the awareness into actual practice by the respondent mothers and points to the social reality that mere awareness is not a sufficiently strong motivating factor to ensure that families take resort to the scientific methods of preventive health care. Social inertia overcomes the short-lived euphoria created by awareness generation.

Of the mothers interviewed, only Hindu mothers educated up to the secondary level has objected to the practice of immunisation to prevent 6 killer diseases. Hence, literacy of the mothers have no significance in the decision of the respondent mothers to immunise their children. Especially, the reluctance of the mothers educated up to the secondary level to believe in immunisation corroborates this. Almost all the respondent mothers believe in immunisation. About 60% of mothers with a cohort of children of 1 year to 2 years of age have not immunised the children. Hence there is an apparent contradiction in the awareness as stated by the mothers and the actual application of such awareness.

Reasons of believing in immunisation

Respondent mothers having faith in immunising their children either have ascribed such faith due to the reason that they actually believe that such immunisation provides immunity to their children. Alternatively media influences them more by its hype rather than the depth of the messages advocated by such publicity.

The data show that 26.5% of the Hindu mothers have agreed that there is a necessity of immunising their children of ages between 1 year and 2 year for the prevention of Tuberculosis, Diphtheria, Tetanus, Polio and Measles. None of the Muslims mothers, however, prefer such an opinion. It is hence therefore seen that the awareness of protecting

their children from the 6 killer diseases by immunisation has been created more in the Hindu respondent mothers.

Development of health awareness of the respondent mothers on the aspect of the importance of immunisation has been deeply influenced by the media. 75% of the Hindu mothers and 100% of the Muslim mothers have stated that, on being influenced by the media, they have become aware of the need to immunise their children. Despite such awareness, however, 41.7% of Hindu Children 83.3% of the children are only partially immunised. This possibly leads us to believe that extension work, as well as suitable health infrastructure, is vitally necessary to translate awareness into actual practice.

The following conclusions emerge;

- The literacy of mothers has no significance in the decision of the respondent mothers to immunise their children. The reluctance of the mothers educated upto the secondary level to believe in immunisation corroborates this.
- Almost all the respondent mothers believed in immunisation, but about 55% of mothers with a cohort of children of 1 to 2 years did not immunise their children completely. Hence, there is an apparent contradiction in the awareness as stated by the mothers and the actual application of such awareness.

Factors influencing vaccinations

The income status of the family to which the respondent mothers belong does not reflect much on the responses to specific vaccinations; religion, however, does have some influence as will be apparent from the percentage of respondent mothers opining about the prevention of three diseases by immunisation. (See Table 46)

Table No 46

Responses of mothers with respect to specific antigens

Hindu	Polio	Diphtheria	Measles
Affirming (%)	96.5%	96.5%	65.1%
Negating(%)	2.3%	2.3%	33.7%
Muslim			
Affirming (%)	100%	94.7%	47.4%
Negating(%)	0%	5.3%	52.6%
Combined Religion			
Affirming (%)	97.1%	96.2%	61.9%
Negating(%)	1.9%	2.9%	37.1%

Polio

A very high proportion of mothers of both the religious groups indicate that nearly all of them know that Oral Polio Vaccine prevents polio. This mere statement of knowing seems inconsistent with the actual coverage of immunisation wherein only 36 mothers out of a total of 105 eligible couples have completely immunised their children. The balance 68 mothers who have not immunised their children of the age group 1 year to 2 years have only partial knowledge of the Oral Polio Vaccine to combat polio on account of the hype created by the media.

Diphtheria

Exactly the same picture prevails as in the case of polio vaccination in the case of Hindu mothers. The same two mothers, 1 illiterate and the other educated up to the secondary level negated the necessity of immunising their children. The extent of knowledge of immunisation to protect the children against Diphtheria is about 97%. Media has contributed to creating partial awareness among 74% of the respondents, comprising 27% of the Hindus and 100% of the Muslims. Once again, the respondents of both religious groups have not translated this awareness into practice as the actual coverage of complete immunisation by DPT(Diphtheria, Pertussis, Tetanus) vaccinations remains low. It appears that media has created an overall image but the rationale of immunisation not having been understood, and most mothers have remained content with single but incomplete doses of immunisation only.

Measles

In the case of Measles, 39 mothers of both the communities, namely 29 Hindus (33.7%) and 10 Muslims (52.9%) have mostly negated the necessity of Measles immunisation. Again the proportion of affirmation by both the communities was inconsistent as Hindus acknowledged 65% of the need and Muslims acknowledged 47.4% of the same. 62% and 37% of the mothers affirmed and negated the need for immunisation respectively.

Examining the traditional beliefs of the respondents, it is seen that, certain beliefs, such as offering puja to *Sitala Mata*(Local Goddess) to keep Measles at bay, application of a balm of

mustard oil, tamarind powder and bay leaves to appease the Goddess is prevalent. Even the Muslims of the area offer puja to *Sitala Mata* for prevention of Measles.

Findings on immunisation from non intervened slums:

Upon summarising the findings of the present study, it is seen that there is a very high proportion of incomplete immunisation in these non intervened slums and 55.6% children have received partial immunisation only. 41.7% of the Muslim respondents and 83.3% of the Hindu respondents have immunised their children. There is practically no association among literacy levels, knowledge of health facilities and actual immunisation. The decision to immunise children is found to be neutral to income effect. Mothers who have given birth to children in hospitals have developed some awareness due to BCG vaccinations, which is administered to children at birth. Limited awareness as created by the media has not been translated into actual practice as evidenced by the low proportion of completely immunised children. 26.5% of Hindu mothers and none of the Muslim mothers have agreed that immunisation would protect their children from the 6 killer diseases. Deep-rooted social and cultural beliefs have pervaded both communities. Members of both communities have believed in appeasing goddess *Sitala* and offered mustard oil, bay leaves and tamarind powder to the goddess to protect their children from Measles.

MALNUTRITION

The concept and causes of malnutrition

Nutrition is important for proper growth and development of the child. The term “malnutrition” is defined by the Oxford Dictionary as “insufficient nutrition”, a condition where diet omits some of the foods necessary for health.

The prevalence of malnutrition varies from country to country. The developing countries have very high prevalence, ranging from 52% in Nepal to 84% in Bangladesh. This load of malnourished children has been labeled as “silent emergency”. Malnutrition is estimated to claim 2,80,000 lives of children every week. The UNICEF (United Nations Children’s Emergency Fund) report for India mentioned malnutrition for children below 5 years of age to be estimated at 38% with severe malnutrition estimated at 5%.

The recent trend of urbanisation had also contributed to the increased prevalence of malnutrition. Low socio economic status, slum inhabitations, broken homes or overcrowded families have very high prevalence of malnutrition. Adopting new habits and depending mainly on staples may lead to malnutrition. The rapid growth of slums and the shanty towns may be associated with problems of sanitation, water supply and other demands are leading to rapid increase of children with malnutrition.

Coming to the factors influencing malnutrition, different classes of mothers, depending on their educational and economic status as well as diverse socio cultural milieu have different problems in identifying and treating malnutrition. Some of the factors are poverty, lack of proper knowledge, apathy to complementary food and pressures of daily domestic chores and performance of certain religious ceremonies before administering solid food to children. Individual growth monitoring of each child below 5 years of age has been done for every household interviewed and recorded in a chart prescribed by the World Health Organization. In this present study of non intervened slums the following has been studied.

- 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

At the very outset, mothers in the non intervened slums were interviewed to ascertain the level of their knowledge in recognizing malnutrition in their children below 5 years of age. A fundamental requirement in the treatment of malnutrition is that mothers must be aware of the symptoms of malnutrition in their children. This is vital so that the children suffering from severe malnutrition is recognized and is provided with proper referral treatments. The hypothesis that has been posed for the study is that the awareness regarding malnutrition is low among the mothers in the non intervened slums. From the present study, it is observed that mothers of both religious groups irrespective of the levels of literacy have very poor knowledge about malnutrition of children. 79.08% of the mothers have no knowledge about the symptoms of malnutrition which has affected children. Of this 77.9% of mothers belong to the Hindu community while 84.2% of mothers are from the Muslim community. Hence,

ignorance is more intense in the latter community. This ignorance is also literacy neutral, as almost similar proportions of mothers, irrespective of literacy levels are unaware of the symptoms of malnutrition in their children. Further, a lone graduate mother of the highest income group has also stated that she is completely ignorant about the symptoms of malnutrition (See Table 47).

Table No 47

Knowledge of mothers about malnutrition

Religion	Knowledge of malnutrition	Illiterate	Literate	Total
Hindu	Yes	19.3	27.6	22.1
	No	80.7	72.4	77.9
Muslim	Yes	23.1	0	15.8
	No	76.9	100.0	84.2
Combined	Yes	20.0	22.9	20.95
	No	80.0	77.1	79.05

The following conclusions emerge:

- It is observed that mothers of both religions irrespective of the levels of literacy have very poor knowledge about the malnutrition of children. 79.05% of the mothers have no knowledge about the symptoms of malnutrition, which has affected their children.
- This ignorance is also literacy neutral, as almost similar proportion of mothers; irrespective of levels literacy levels are unaware of the symptoms of malnutrition in their children.

This confirms the hypothesis. It is essential however that the awareness be increased regarding symptoms of malnutrition among the mothers of non intervened slum.

Traditional beliefs associated with malnutrition

It has been hypothesised in this study that lack of proper awareness of the causes of symptoms of malnutrition are often due to ignorance and influence of social prejudices as well as cultural taboos.

Lack of proper awareness of the causes and symptoms of malnutrition are often due to ignorance and influence of social prejudices as well as cultural taboos among the respondents of this slum. 6 Hindu mothers, that is 6.97% of the total of 86 Hindu respondents believe that ghosts or evil spirits led to malnutrition of children. Of these 6 mothers, 3 are illiterate and 2 are educated up to the secondary level. They further believe that an exorcist is required to drive away the evil influences caused by the spirits. 1 mother of the primary level believes that displeasure of the God's causes malnutrition of children. Of the mothers believing in evil spirits 2 were from the lowest income group and 1 was from the highest income group. The other 2 mothers were educated up to the secondary level

and belonged to the third income group. 1 mother who believed in the wrath of God is educated up to the primary level and belongs to the lowest income group. These mothers also advocate the use of exorcism to drive away the evil influences. Among the Muslim mothers, none has supported beliefs in cultural taboos, but only 15.8% had any awareness on malnutrition.

Other causes of malnutrition

1 illiterate and 2 literate mothers stated that disease causes malnutrition. 2 literate and 2 illiterate mothers stated that poverty and inability to feed the family with adequate food causes malnutrition. Disease and poor intake of food are indeed significant contributory factors towards malnutrition. It is seen, however, that only 10(9.52%) mothers out of a sample of 105 could identify such factors. None of the respondent mothers could relate malnutrition to the lack of essential nutrients in diet. In all, 20% of Hindu mothers and 10.53% of Muslim mothers believed that disease economic stringencies and recurrent illness caused malnutrition. This comprises 18.18% of the sample population. Again, 6.25% Hindu mothers from the above category did not have any knowledge of factors, which caused malnutrition. The balance 82% of the respondents of both religion ascribed superstitious factors and evil influence to be the cause of malnutrition in children. Hence respondent mothers hardly have any knowledge on the causes of malnutrition. Surprisingly, none of the mothers could associate malnutrition to the lack of food items in the diet.

The following conclusion emerge

- Beliefs that malnutrition is caused by evil influences exist among Hindu mothers.
- Hindu mothers also believe in exorcism to get rid of evil influences.
- No such beliefs exist in Muslim community
- Only 18% of the mothers who did not believe in exorcism could rationally explain the causes of malnutrition.

This further confirms the hypothesis.

Nutrition and cooking procedure

Nutrition may be considerably preserved through appropriate cooking procedures. Mothers, however, need to know whether the procedures they adopt for cooking is appropriate in preserving nutrition. The opinion of the respondent mothers has been taken to ascertain the appropriateness of the cooking procedure in preserving nutrition in the non intervened slums. The data shows very poor level of knowledge of mothers of both religious groups about the preservation of nutrients through the cooking procedure. Only about 23.8% of the respondents had any knowledge on the same. Again the illiterate Hindus seem to have little or no knowledge at all, with 67% of them pleading ignorance to the preservation of nutrition through cooking. It is not only enough to know that appropriate cooking procedures can help to preserve nutrition but mothers should actually be satisfied that such cooking procedures are being followed in households under survey.

It is seen that 58.6% of the Hindu literate mothers are happy with the nutrient preservation in food items as cooked in their households. 38% of illiterate mothers are satisfied with the cooking procedure in their households. In the case of the Muslims, 46.2% of the illiterates have reported satisfaction with the cooking procedure as compared to the literates. The overall proportion of satisfaction is recorded as 45% of the sample population. 7% of the Hindus and 5.3% of the Muslims have not answered the specific question. 61.4 % and 41.4% respectively of the Hindu and Muslim mothers have answered with a definite no. 64.7% and 58% of the Hindus and Muslims respectively have stated that they are not satisfied with the process by which food was cooked in their households.

The dissatisfied mothers replied as follows:

1 illiterate respondent mother has cooked under the directions of her mother-in-law and hence has no idea of preservation of nutrients while cooking. 1 mother, each from the illiterate and secondary group, think that it is necessary to spend more money to cook food while preserving nutrients and lack of purchasing power prevent them from purchasing more expensive food items. 1 mother educated up to the primary level has stated that she is guided by divine grace while cooking food for her family. Belief in social factors such as the domination of the mother in law and cultural factors such as divine influence have influenced mothers while preparing food for the family irrespective of the preservation of nutritional contents in the food. It can be concluded that there is poor knowledge among mothers of both religions about the preservation of nutrients through cooking procedures. Only 23.8% of the respondents had any knowledge of the same.

Knowledge regarding the presence of nutrients in food

To be able to prepare nutritious meals and enable their children to have simple, homemade, yet nutritious food, mothers need to have knowledge about inherent nutrients in various items of food. Interview with mothers with varying educational backgrounds and different religious groups tried to ascertain this knowledge. It appears that the Muslim mothers appear to be marginally more knowledgeable as compared to those of the Hindus. On the whole, however, only about 45.4% of the Hindus and 47.4% of the Muslim mothers of the non intervened slums seem to have some knowledge about inherent nutrients in foodstuff.

Basic principles of preservation of nutrition in cooking

There are certain basic principles of preservation of nutrition in cooking, namely, preserving the starch after boiling of rice, mixing of pulses, slicing of vegetables in big pieces and chopping of vegetables only after washing the same. The mothers of non intervened slums were interviewed to opine as to whether such basic rules are followed in their everyday cooking. Nearly 90%(comprising 92% of illiterate mothers of each religious group and 86.2% of Hindu literates and 100% Muslim literates) mothers of each of the literacy groups of each religion supported decanting of starch. This proves gross ignorance of this simple and effective home-based method of preservation of nutrition. Regarding mixing of pulses, however, 81.40% and 89.47% of the Hindu and Muslim mothers respectively support this method of cooking which help preservation of nutrition. 66% of the mothers did not agree to chop vegetables into big pieces prior to cooking, 26.32% Hindus and 46.15% of the Muslims only agree with this procedure. This shows ignorance of this method of preservation of nutrition while cooking at home. 87% of the respondents do not agree to chop vegetables

after a thorough wash. This further indicates the lack of knowledge of the respondent mothers of the area about the fundamentals of how to preserve nutrition in everyday cooking process at home.

Opinion of respondent mothers on Nutritious food items

There is often a misconception that only expensive food items such as fish, meat, eggs, ghee and fruits provide nutrition to children. This is largely misconceived as simple cereals and pulses can be sufficiently and equally nutritious. Among 86 Hindu mothers, 2 illiterate and 3 secondary educated mothers have not answered. Mothers mostly reply on the first 2 priorities and thereafter the scope of answers decrease. Ranking is done in decreasing order of proportions of mothers selecting different food articles in each level of priority. Fish and meat are preferred by about 20% of the respondent mothers among the first four order of preferences with minor variations in ranking orders. (See Table 48)

Table No 48

Prioritisation of nutritious food items (percentage) in proportions of responses

Rank	1 st	2 nd	3 rd	4 th	5 th
1	Fish 27.2	Meat 23.5	Fish 18.2	Pulses 20.0	Eggs 28.6
2	Rice and roti 21.0	Pulses 18.5	Meat 16.9	Meat 18.6	Rice etc 17.9
3	Meat and milk 12.3	Fish 16.0	Pulses and eggs 15.6	Fish 17.1	Pulses and fruits 10.7
4	Pulses 11.1	Rice and milk 14.8	Milk 10.4	Milk 15.7	Meat and fish 7.1
5	Fruits 8.6	Fruits 4.9	Fruits 9.1	Eggs 10.0	-
6	Veg 6.2	Egg 3.7	Rice etc 5.2	Rice 8.6	-
7	Egg 1.2	Curd and ghee 2.5	Chhana 3.9	Veg 5.7	-
No. of mothers opined	81	81	77	70	28

All the respondent mothers of either religious groups agree that there is a need to give either animal protein or vegetables to their children for the purpose of nutrition. Nearly 10% and 5% of the Hindus and the Muslim mothers respectively advocate that meat and fish should be given to their children. Of these, 9%, 16.67% 13.64% and 7.69% belong to the Hindu illiterate, Hindu primary, Hindu secondary and Muslim illiterates respectively. None of the Muslim mothers agree to administer only vegetable products to their children but 5.81% of the Hindu mothers agree to the same. More than 75% of mothers of each religious group, that is 75.58% of the Hindus and 89.47% of the Muslims prescribe balanced combination of both animal protein and vegetables for the growth of their children.

Gender bias

Except 1 Hindu mother of the primary level of education, who has a distinct preference for the male child, all other mothers agree to give balanced food to their sons and daughters without any discrimination. The lone Hindu mother of the primary level belong to the lowest level of education and desires to feed the male child with more nutritious products as the son will grow up to take care of the family in future.

Virtual Incidence of malnutrition in the non intervened slums

It has been earlier seen that a very few mothers have any knowledge on the causes and symptoms of malnutrition. This has been evidenced in the actual replies of mothers interviewed during the survey. The proportion of knowledge about malnutrition of children is very low, only 25% in all religion and literacy groups combined. Among the Muslims, the proportion is only about 16% and it is about 27% among the Hindu mothers. It is hence, proved that about 84% Of the Muslim and 74% of the Hindu mothers have no knowledge of this significant factor which affect the health of the children.

Incidence of malnutrition in the non intervened slums

Some of the features in children under the age of 5 years, which prove that such children are suffering from malnutrition, are as follows:

There would be retardation in the growth of the child, the child would suffer from recurrent illness, the children would have rickets, and the belly of the child would bulge. The children suffer from weight losses, loss of appetite and would be crying frequently. When the mothers of the non intervened slums were questioned, only 23 Hindu mothers and 3 Muslim mothers, that is, a total of 26 mothers could identify the above symptoms of malnutrition.

Out of 128 children, 68 were male and 60 were female. Among them, only 4 children were identified as malnourished by the mothers according to their knowledge manifestations of symptoms in their children.

Hence, the proportion of malnourishment, as stated by mothers is:

$$\frac{\text{No. of malnourished children below 5 years of age identified}}{\text{Total No. of children below 5 years of age}} \times 100$$

$$= \frac{4}{128} \times 100$$
$$= 3.125\%$$

Of these malnourished children, 1 male child belong to a illiterate mother belonging to the income group Rs 1001/ - Rs 1500/-. The other 2 belong to mothers educated up to the level of secondary standard belonging to the income group of Rs 2001/- and above. The 3rd child is a female belonging to parents of the lowest income group. All these children are of the third order of birth in their families.

An exorcist is treating the female child belonging to the Muslim family to cure the symptoms of malnutrition.

Findings on malnutrition from non intervened slums:

Summarising the results of the present study the findings on the malnutrition profile of the non intervened slums is quite interesting. The mothers have a very poor knowledge of the concept of malnutrition itself. Nearly 80% of the mothers have no knowledge at all, irrespective of religion and literacy levels. 6 Hindu mothers believe that malnutrition is caused by the influence of evil spirits and 1 mother thinks that it has resulted out of God's wrath. Those that do not believe in evil spirits and other cultural taboos also cannot furnish coherent and correct replies to the causes of malnutrition. This indicates that in the community, in general, there is very little scientific thinking on the concept of malnutrition. On the other hand, social and cultural influences are quite strong, along with faith in taboos and superstitions. The mothers of the non intervened area also have a very poor knowledge of preservation of nutrients prior to the actual cooking process. Only 24% of the mothers demonstrate any awareness towards the same. Dictation by mothers in law towards cooking processes, economic hardships and a sense of fatalism prevents the negating mothers from associating cooking with preservation of nutrition. Only 45.71% of the mothers have any knowledge about the inherent nutrients in foodstuff. Only 18% of the mothers have any knowledge of preservation of nutrients in food items even after specific cooking preparations. 90% of mothers are unaware of the necessity to preserve the starch after boiling rice, 66% of the mothers do not agree to slice vegetables in big pieces. 87% mothers rejected the idea of chopping vegetables after washing the same. 1 Hindu mother while apportioning nutritious food to her son exhibits minor gender preferences. Only 25% of the mothers have any knowledge about malnutrition of children below 5 years of age. According to the mothers' statements, percentage of undernourished children of the area is 3.125%. This is an understatement as because the mothers do not have a clear conception of malnutrition in general and malnutrition of their under 5 children in particular.

On actually conducting the growth monitoring exercise among the under 5 children, the following has transpired: 68 children, namely 37 males and 31 females suffer from Grade 1 malnutrition. Of these, 52 are from the Hindu and 16 from Muslim families respectively, 47 children suffer from grade II Malnutrition comprising 24 males and 23 females, 37 of these children are Hindus and 10 are Muslims. Shockingly, 4 children suffer from Grade III Malnutrition, comprising 1 male and 3 females. Of these, 3 are Hindus and 1 is a Muslim. Findings reveal that in this slum area, there is a lone Hindu girl suffering from Grade IV Malnutrition. Thus, the percentage of undernourished children in the non intervened slum area is as high as 31.32%. This is much higher than 3.125% as projected by the mothers of the children because the mothers are unaware of the symptoms of malnutrition.

DIARRHOEA

The concept of diarrhoea

Each year, more than 11 million children die from the effects of disease and inadequate malnutrition. In some countries more than 1 in 5 children die before they reach their fifth birthday, and many of them who do survive are unable to grow and develop to their full potential. 7 out of 10 childhood deaths in developing countries can be attributed to 5 main causes or often to a combination of them; of these, 2 primary causes are diarrhoea and malnutrition. About 2 million children die each year in developing countries from diarrhoeal diseases making it the second most serious killer of children below 5 years of age worldwide. Diarrhoea in most cases, however, may be prevented or treated. Correct management of diarrhoea could save lives of up to 90% of children who currently die from the effects of the disease. Some of the effective methods are prompt recognition and treatment of conditions that occur in association with diarrhoea and improved home management.

This chapter is based on the studies conducted in the non intervened slums on the behaviour patterns of the respondent mothers on diarrhoea. The study intends to establish the following:

- Knowledge of the mothers about incidence of diarrhoea,
- Knowledge of the 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.

Knowledge of respondent mothers on diarrhoea

Diarrhoea is very rampant in the slum areas on account of the poor hygienic conditions that prevail in such slums. Unplanned shanties, congestion, lack of potable drinking water, open drains, lack of proper system of disposal of garbage as well as lack of sanitation facilities leading to open defecation by children are some of the important environmental factors that lead to the high incidence of diarrhoea in the slums. The most important factor causing diarrhoea is the quality of drinking water. It is important that mothers of young children understand this to ensure recognition and treatment of diarrhoea most of which is curable through home treatment. When questioned specifically, none of the respondent mothers have used the term diarrhoea or gastroenteritis. They have judged the malaise according to the number of times watery stool is passed. The study reveals that only 22.9% of mothers could identify the occurrence of diarrhoea. (See Table 49)

Table No 49

Proportion of respondents having any knowledge about diarrhoea

	Passing water stool	Passing water stool
Religion	2 or 3 times	3 times or more
Hindu	24.4	75.6
Muslim	15.8	84.2
Combined	22.9	77.1

The study has further found that 95% of the Hindus and 85% of the Muslim mothers related the incidence of diarrhoea to food. On the other hand, a very small percentage, namely, 9.5% could associate diarrhoea to its actual cause that is, drinking water. Between the two religious groups, however, more mothers of the Muslim community are able to relate drinking water as the cause of diarrhoea. About 18% of the respondents of both communities associate diarrhoea with indigestion due to seasonal variations. Analysing the influence of cultural taboos and social beliefs, 3.5% attribute the occurrence of diarrhoea to people's curse and God's wrath proving thereby that these cultural taboos do have an influence in the thinking of respondent mothers when they try to ascertain the causes of diarrhoea. Interestingly, however, none of the respondent mothers relate the cause of diarrhoea to the lack of personal hygiene.

Breast feeding during diarrhoea

It is known that diarrhoea is treated best by home treatment. The World Health Organization prescribes that infants suffering from diarrhoea must be breast fed at all times. Social practices, direction of mothers-in-laws, ignorance as well as the work pressure of domestic chores as well as jobs that slum women do outside their homes often stand in the way of mothers breast feeding infants suffering from diarrhoea. The responses received from the mothers of the non intervened slums are here as follows:

It appears that mothers of both religious groups, irrespective of their levels of literacy are highly aware of the need to continue the breast-feeding of their children during diarrhoea. This awareness appears to be more pronounced in the case of the Muslims as 95% of the Muslim mothers appear to be aware as compared to 85% of the Hindu mothers. Another way of interpreting the findings is that 72.22% of the Muslim Mothers are better placed as far as actual practice is concerned as only 67.12% of the Hindus mothers support the process. About 15% of the Hindu mothers and 5% of the Muslim mothers do not support continuing lactation during diarrhoea. These respondent mothers are mostly influenced by the social prejudice that lactation is harmful during diarrhoea not realising that the colostrum is a beneficial remedy. This ignorance indicates the influence of social beliefs in withholding breastfeeding during diarrhoea.

Fasting during diarrhoea

Social practices often dictate that infants suffering from diarrhoea should be kept on fast. This goes against all good health practices because the resultant dehydration caused by diarrhoea and accentuated by fasting will have fatal consequences for the infants.

Unlike the findings on breast-feeding, the proportion of mothers who do not wish to fast their children during diarrhoea is more among the Hindus than among the Muslims the proportions being 60.46% and 52.63% respectively. In this section the analysis concludes that the Hindu mothers, in general, are more aware than their Muslim counterparts of the necessity to feed their children during diarrhoea. Nearly 40% of the Hindu mothers support fasting whereas only 15% have negated the need of breast-feeding. The corresponding proportions among the Muslim community are 48% and 5% respectively. The findings of this section may be summarised to conclude that mothers of both religious groups are not significantly aware of the need to protect their children from dehydration during diarrhoea. This is the result of the influence of social beliefs as opposed to rational thinking.

Incidences of diarrhoea

It is expected that given the unhygienic conditions and the prevalence of social practices in the non-intervened slums, the incidence of diarrhoea may be quite high.

Among the Muslims, 48% has occurred on an average and 66% of diarrhoea has occurred to children in the higher income group. Among the Hindus, however, there is an average of nearly 27% occurrence in both income groups. Amongst the Hindus, the incidence of diarrhoea is consistent with the income status being higher in the lower income groups. The incidences are higher in the cases of mothers with 1 child rather than those with two or more children. This is true when considered separately for each religious group. Lack of health awareness combined with dirty environment and hazardous living conditions are perhaps responsible for such high incidence of diarrhoea among the children in these slums. This establishes that the role of social factors such as lack of civic consciousness and economic factors such as poverty leads to hazardous and unhygienic living conditions in creating situations leading to diarrhoeal incidences among the inhabitants' especially young children.

Impact of literacy in home treatment of diarrhoea

In this section, an attempt has been made to analyse the influence of literacy, if any, on the use of remedies, especially home based, during diarrhoea of the children. The proportion of mothers who have resorted to treatment with decanted water, rice and pulse mandi, green banana and normal diet evidence poor knowledge of diarrhoea control. Especially damaging are the opinion of 23.1% and 16.7% of illiterate and literate Muslims as well as 4.8% and 3.7% of illiterate and literate Hindus respectively who have offered to treat their children with normal diet during diarrhoea. This application of inappropriate diet during diarrhoea establishes conventional behaviour on part of the respondents as opposed to rational thinking (See Table 50). Hence the incidence of home treatment of diarrhoea is literacy neutral.

Table No 50

Effect of literacy in administering home made remedies during diarrhoea.

Prescription	Hindu			Muslim		
	Illiterate	Literate	Total	Illiterate	Literate	Total
Salt and sugar solutions	83.3	92.6	87.0	84.0	100.0	89.5
Decanted water	7.1	-	4.3	7.7	-	5.3
Rice and pulse mandi	11.9	3.7	8.7	7.7	-	5.3
Oral Rehydration Solution	33.3	44.4	37.7	15.4	-	10.5
Green banana	2.4	3.7	2.9	7.7	16.7	10.5
Normal diet	4.8	3.7	4.3	23.1	16.7	21.1

Impact of media in creating awareness

This section tries to assess the influence of various forms of communication, which have influenced the respondents to resort to varying forms of diarrhoea control. Out of 86 respondents, 80.23% mothers have responded while 19.77% have failed to relate influence of any medium of communication in influencing their responses to treatment of diarrhoea. Of the 69 mothers who have responded 48 mothers have offered multiple choices of communication. Out of respondents offering single choice, 2.08% have referred to the radio, 35.42% to the Television, and 10.42% to ICDS (Integrated Child Development Scheme) workers, 2.92% to neighbours, 27.08% to local doctors and 2% to the hygiene education received at schools.

Upon analysing literacy wise responses on their first choice, the radio has been preferred by 6 illiterate Hindu mothers of the highest income group as a part of their multiple choice. 1 single mother of the illiterate and 1 mother of the second income group have referred to the radio as their only choice of the media of influence. 19 mothers, comprising 12 illiterate, 1 primary, 5 secondary and 1 graduate mother prefer television. 17 mothers chose the radio as their single choice. 3 mothers have preferred the newspaper as their chosen medium of communication, 2 mothers belonging to the lowest income group and 1 graduate mother of the highest income group. The local doctors have advised 3 mothers 1 each of the 3 literacy groups on the treatment of diarrhoea. Coming to the second level of choice, the radio is chosen by 1 illiterate mother of the second income group, the television is chosen by 17 mothers, 9 illiterate and 8 of the secondary level. The local doctors have advised 13 mothers, 9 illiterate and 4 of the secondary level. Only 1 mother of the secondary standard have stated that she has learnt about diarrhoea from the hygiene studies at school.

In the Muslim community, 19 mothers have responded. Of this, 14(26.3%) have preferred single choice and 5(75.7%) have preferred multiple choice. The proportion of single choice is 35.7% for Television, 7.1% for ICDS, 42.9% for the information received from the neighbours and 14.3% have received advice from the local doctors. The first choice is television for 4 mothers and local doctor's advice for 2 illiterate mothers. Upon summarising the ladder of choice, the highest priority has been accorded to television, followed by the local physician, neighbours. Integrated Child Development Scheme workers are of the least influence in this area where health interventions are yet to be institutionalised.

Findings on diarrhoea from non intervened slums

Upon summarising the findings of this study, it is seen that there is no conception of diarrhoea among the mothers of the non intervened slums. Only 9.5% of the respondents relate diarrhoea to drinking water and none to the lack of general hygiene. 3.5% respondents relate diarrhoea to People's curse and God's wrath. 15% of the Hindu mothers and 5% of the Muslim mothers do not support breastfeeding during diarrhoea. 82% of the mothers of all religion have no knowledge on the benefit of administering colostrum to their newborn babies. 70% is influenced by the social practice to press out such milk for the first few days when in reality such milk is vital for immunity and good health of the infants. The incidence of diarrhoea in the non intervened slums has been estimated at 25.30%. The prevalence is higher in the case of lower income groups for Hindus and high-income groups among Muslims. Literacy wise, prevalence rate is high in the case of illiterate Muslims and literate Hindus. 2 illiterate Hindu mothers think that only worship will cure diarrhoea and 1 Muslim mother has resorted to exorcism. All mothers irrespective of income, religion and literacy have very poor knowledge of home treatment of diarrhoea. Whatever little knowledge is there on account of media and television proves to be the most popular source, followed by advice of local doctors and neighbours.