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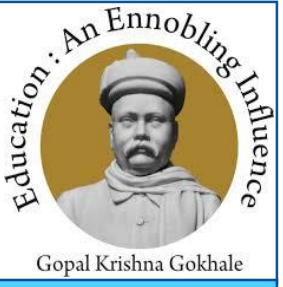

Mother's Knowledge and Behaviour on Child Feeding and Childcare Practices and Impact on Child Health Outcomes: A study in Pune Slum in Maharashtra.

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Population Research Centre

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Abbreviations

UNICEF – United Nations International Children's Emergency Funds

IYCF – Infant and Young Child feeding

WHO – World Health Organization

NFI - Nutrition Foundation of India

BFHI - Baby friendly Hospital Initiative

LWB – Low Birthweight

MNH – Maternal and Newborn Health

NHM – National Health Mission

NUHM – National Urban Health Mission

JSY – Janani Suraksha Yojana

ULBs – Urban Local Bodies

NFHS – National Family Health Survey

DLHS – District Level Household Survey

PMC – Pune Municipal Corporation

EBF – Exclusive Breastfeeding

BMI – Body Mass Index

ANM – Auxiliary Nurse Midwifery

ASHA – Accredited Social Health Activist

ANC – Antenatal Care

PNC – Post-natal Care

ARI – Acute Respiratory Infections

IFA tablets– Iron Folic Acid tablets

PDS – Public Distribution System

TPDS – Targeted Public Distribution System

RCH – Reproductive Child Health

MTLs - Mesial Temporal Sclerosis

Chapter 1:

Introduction

1.1 Background

The mother is the prime caregiver to the children at home. The health status of a child depends on the complex process with a set of indicators ranging from social, economic, environmental and individual factors. Indeed, proper child care practices in the early ages minimize the adverse effect of these indicators on child health outcomes. Mother, being a primary caregiver to the child, has several roles in child care practices such as timely initiation of breastfeeding, complementary feeding practices, child immunization, hygienic and sanitation practices, diet diversity and the diet adequacy of the children etc. All these child care practices have a positive impact on child health status. Immunization protects the child from many vital diseases, timely breastfeeding among children enhance the immunity power of the children. Poor diet quality causes micro-nutrient deficiency and invites malnutrition for the rest of the life. Thus, knowledge of proper and accurate childcare practices among mothers is very relevant for better practices and better health care seeking behaviours and hence for better child health outcome. Infant and young child feeding practices directly affect the nutritional status of children under two years of age and, ultimately, impact child survival. Improving infant and young child feeding practices in children 0–23 months of age is therefore critical to improved nutrition, health and development of children.

Children in urban areas are often better off than their rural counterparts thanks to higher standards of health, protection, education and sanitation. But urban advances have been uneven, and millions of children in marginalized urban settings confront daily challenges and deprivations of their rights (UNICEF, 2012). Even though children living in urban areas have better access to educational, medical, and other infrastructure than their counterparts in rural areas, they also have to deal with the daily struggle of overcrowded cities such as congested space, pollution, access to clean water, poor quality sanitation and health care. Further, children staying in overcrowded settlements are vulnerable to disease and disaster. Access to quality living is much more severe among children belonging to the poor socio-economic background. Many poor and marginalized groups live in slums and informal settlements, where they are subjected to a multitude of health threats. Children from these communities are particularly vulnerable because of the stresses of their living conditions. As the prevalence of physical and social settings of extreme deprivation increases, so does the risk of reversing the overall success of disease prevention and control efforts (UNICEF, 2012).

A healthy diet along with healthy lifestyle safeguard the children from vulnerable diseases. Availability of nutritious food, not only depends on the ability to buy, but also depends on the awareness and feeding pattern. In rural areas, the availability of nutritious food is much better than in urban areas. Urban settings offer diversity in terms of food habits and the adoption of the different type of food which further influence the food habits.

According to the United Nations Human Settlements Programme (UN-Habitat), one city dweller in three lives in slum conditions, lacking security of tenure in overcrowded, unhygienic places characterized by unemployment, pollution, traffic, crime, a high cost of living, poor service coverage and competition over resources (UNICEF, 2012).

1.2 Review of Literature

1.2.1 Breastfeeding benefits for community

Nutrition is one of the very basic necessities for each species to live, survive, sustain as well as essential to grow, develop and to lead a productive life. The word 'nutrition' has been derived from the word 'nutricus' which means to 'suckle at breast'. During pregnancy the placenta is the main source of nutrition to the growing foetus. After delivery one of the first gifts or boon received by a baby is from the mother, which is a promise by her to her baby to provide everything needed for this little Considering a life course perspective, it can be seen that nutrition to the baby is a very important and effective link which will cater to many issues like mal-nutrition, mortality, morbidities which may have debilitating effects on not only on the individual but also on the society as a whole (Dey , 2017, August).

Breastfeeding has many benefits for the community, including: 1) breast milk contains no waste or pollution; 2) food support programs, such as the WIC program could reduce costs by Encouraging breastfeeding and decreasing formula use; 3) breastfeeding mothers will have Healthy babies, therefore they will have less absence from work, because they do not have to stay Home as frequently because their children are healthier (Breastfeeding Moms,Hadeel Adnash Tanash. 2012). In addition, one study found that the United States government could save about 4 million dollars from the cost of the formula use, if 50% of infants were exclusively breastfed for the first three months of life. Exclusive breastfeeding decreases the demand on formula use; therefore, the government could spend this money on formula support programs (Montgomery & Splett, 1997).

Practicing breastfeeding helps mothers lose weight after pregnancy and stimulates the uterus to return to its previous position before pregnancy (The Office on Respondents's Health, 2012). Specifically, these

studies concluded that the respondents who breastfeed had 21% less risk of ovarian cancer compared to mothers who never breastfed (Stanley et al., 2007, Tanash, 2014).\

Breastfeeding practices were better in children born in government institutions, highlighting the Role of health facilities in improving IYCF practices. Similarly the only factor related to exclusive Breastfeeding was family income and pre-lacteal Feeding while for artificial feeding family income and working status of the mothers were found to be significant. (Gupta A., et al., 2016)

WHO recommends exclusive breastfeeding until a baby is six months old and continued Breastfeeding with the addition of nutritious complementary foods for up to two years or beyond. In addition, Infants can absorb and digest breast milk more easily than baby formula (The Office on Respondents's Health, 2012). Breastfeeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections (Iskandar M.B., et al., 1990). The WHO has identified “poor infant feeding” as a risk factor for the survival of the child. It also estimates that 53 percent of pneumonia and 55 percent of diarrheal deaths are attributable to poor feeding practices during the first six months of life. Several studies have shown that initiation of breast-feeding within the first hour of birth decreases neonatal deaths by 22%.

Exclusive breastfeeding (EBF) is recommended as the optimum method of feeding for the first 6 months of life and semi-solid foods are to be introduced after 6 months while continuing breastfeeding to meet the physiological requirements of the infants(Akra, 1989). Adequate nutrition during infancy and early childhood are fundamental to the development of each child’s full human potential. It is well recognized that the period from birth to two years of age is a “critical window” for the promotion of optimal growth, health and behavioural development. Following the 2001 expert consultation and the 2002 publication of a WHO commissioned systematic review, the global recommendation is that exclusive breastfeeding is now recommended for the first 6 months of life with the introduction of complementary feeds thereafter and continued breastfeeding for the first 2 years. However, very few infants worldwide are exclusively breastfed during the first 6 months of life and complementary feeding begins either too early or too late with foods which are often nutritionally inadequate and unsafe. The concerned areas being the changes in feeding practices of infants and small children that occur as a precondition for improved nutritional status.

Studies have reported that the practices of early introduction of top feeds and late introduction of semi-solids are widely prevalent, more so in urban slums(Ghosh and Shah, 2004). As there are many unusual breastfeeding practices prevalent in the urban slum area such as delay in initiation of Breastfeeding even in a normal delivery, pre-lacteal feeding in the form of honey or sugar syrup, restricting feeding of

Colostrum etc. (Gaikwad & Haldkar, 2014). Studies by the Nutrition Foundation of India (NFI) in urban slums of three major cities (Mumbai, Kolkata, and Chennai) revealed a serious erosion of breastfeeding practices. Other studies from urban slums repeatedly documented that exclusive breastfeeding was practised in only 30-40% of infants, colostrum was discarded in up to 90%, use of prelacteal feeds was almost universal, use of feeding bottles, animal milk, and commercial milk formulae was very common. Also, it was found that the introduction of complementary foods is markedly delayed and the foods lack the consistency, energy density and are fed in inadequate amounts and in unhygienic ways. (Ghosh and Shah, 2004)

Several professionals, civil society groups and international agencies have signed up a call to Action to Government of India to take action to bridge the gaps, including development of plans of action that are monitored and coordinated sanctioning budget, reviving the Baby friendly Hospital Initiative (BFHI) enforcing the IMS ACT, and implementing maternity entitlement for all respondents (WBTi, 2015). As per RCH Module for medical officers in the Primary health centre, good nutrition forms the basis for the good health of a child. Nutrition is required for a child to grow, develop, stay active, and to reach adulthood as well. (Akra, 1989) States need to conduct refreshers training program on IYCF counselling skills for both MTLs and FLWs at regular intervals and orientation training for the new staff. 2. Frontline health workers need to be reoriented on Appropriate IYCF practices, aids and counselling Skills with a special focus on complementary Feeding practices (food frequency, consistency and Diversity). 3. Regular monitoring and evaluation of all the FLWs is required to reinforce the counselling skills and to improve the quality of services they provide in the Community. 4. State governments should conduct impact Assessment studies to improve and excel the skills of their health system staff (Gupta A., et al., 2015).

1.2.2 Maternal Nutrition

(i) In India, 22% babies born each year have low birth weight (LBW), which has been linked to maternal under-nutrition and anaemia among other causes. Half of adolescents (boys and girls) have below normal body mass index (BMI) and almost 56% of adolescent girls aged 15-19 years have anaemia.

(ii) Optimal nutrition of adolescent girls, pre-pregnant respondents and pregnant mothers is critical to intrauterine growth, fetal well-being and to prevent malnutrition in the postnatal period.

(iii) There is growing evidence that maternal nutritional status can alter the epigenetic state (stable alterations of gene expressions through DNA methylation and histone modifications) of the

fetal genome. This may provide a molecular mechanism for the impact of maternal nutrition on both fetal programming and genomic imprinting. Just as the damaging effects of malnutrition, pass from one generation to the next, so can benefits of good nutrition.

(iv) The maternal nutrition should also be balanced, fresh and preferably home-made and there should not be any unscientific restrictions (Tiwari et al., 2016).

1.2.3 Child Health

Five countries - China, India, Indonesia, Mexico, and Nigeria - account for over 2, 36,000 child deaths every year because of inadequate breastfeeding. These countries are together estimated to incur an economic cost of $119 billion every year due to mortality and cognitive losses, says the report by UNICEF and WHO in collaboration with the Global Breastfeeding Collective.

India is among the world's five largest emerging economies where investment in breastfeeding is significantly low, resulting in an annual economic loss of $14 billion due to child deaths and cognitive losses caused from poor breastfeeding practices, says a report.

In India, less than 50% of children are breastfed within an hour of birth, whereas the rate of exclusive breastfeeding in the first six months stood at 55%. Early initiation of breastfeeding and exclusive breastfeeding can prevent nearly 99,499 deaths of children every year due to diarrhoea and pneumonia.

Infant and young child feeding (IYCF) activities are important to reduce malnutrition. In this activity the mother is counselled regarding early breast feeding, exclusive breast feeding for first six months and initiation of complementary feeding.

The slum population in Indian cities is rapidly expanding (25.1% decadal growth – Census 2011). This urban poor population offers complex challenges of vulnerability for adverse maternal and newborn health (MNH) outcomes. Public health care provisioning for MNH in urban slums is mostly unstructured, fragile and with almost non-existent outreach. Health service utilization is compromised due to limited capacity for decision making, negligent and delayed care seeking, issues of access and affordability and the plethora of unorganized private providers. This is compounded by socio-behavioral, spatial and economic inequities that define the context of disempowerment and constraint for this population. The National Urban Health Mission (NUHM), launched in 2013, advises for improving the health of the urban slum populations through a need-based city-specific urban health care system that includes a refurbished primary care system, targeted outreach, equitable access, and involvement of the community and urban local bodies (ULBs). The lack of formative information and disaggregated data impede efficient urban health policy-making and programming.

1.2 Need for the Study

Recently published NFHS-4 data shows that only 6.5 percent of children aged 6-23 months in Maharashtra have received an adequate recommended diet, which is a clear indication of very poor diet practice among children. Diet diversity is also very poor. Only 29 percent of all children aged 6-23 months have received a minimum meal frequency per day and only 22 percent children consume 4+ food groups out of eight food groups. Similarly, lower intake of iron-rich food and vitamin-A-rich food among children, which are 17 percent and 45 percent, respectively, shows a positive relation between micro-nutrients deficiency and higher prevalence of anaemia (54 percent) in the state. Not only in dietary consumption, but full immunization practices (56 percent), exclusive breastfeeding (57 percent) and complementary feeding practices (43 percent) are significantly low in Maharashtra. These childcare practices are even much lower among socially and economically marginalized groups and among illiterate households, which may occur due to lack of awareness and knowledge.

The Pune Municipal Corporation is the civic body that governs Pune, the second largest city of Maharashtra. It is in charge of the civic needs and infrastructure of the metropolis, which is spread over an area of 331.26 sq. km and has 3.4 million residents. In July 2017, eleven villages surrounding the city were merged in PMC bringing an additional area of 80.7 sq. km and a population of 278,000 under the civic body's jurisdiction. PMC now governs a total area of 331.26 sq. km. The city is divided into 41 multi-member wards; fourteen areas of these wards are having a slum population of 803705. There are 14 broad areas where slum exists in the Pune municipal corporation area. These areas are as follows: Bhavani Peth, Bibwewadi, Dhankawadi, Hadpsar, Kasba Vishrambag, Nagar Road, Sahakarnagar, Sangamwadi, Tilak Road, Aundh, Dhole Patil Road, Ghole Road, Kothrud and Warje. There are total 477 slums of which 240 are notified and 237 are not yet notified.

Nearly 30 percent of the population of Pune city lives in the slum covering across 477 slums pockets in the city. As the inherent nature of the slum, the slum dwellers are deprived in many folds such as in the health facility, education, hygiene and sanitation, and housing, etc. In nutshell, they are marginalized and may lack accurate knowledge of child nutrition and child care practices which make their child vulnerable to adverse health outcomes. With ever-growing population combined with limited infrastructure the children living in cities often struggle to lead a quality life. Hence, the study tries to understand the knowledge and feeding practices of Mother to children and the scale and nature of poverty affecting children in Pune urban slums. This we believe will help policymakers who are engaged in urban planning, infrastructure development, service delivery meet the quality of life of children. In this context, it is very relevant to assess the mother's knowledge and practice behaviour on infant and young child feeding and

association with child health outcomes in a marginalized population group like slum dwellers in Pune Maharashtra.

1.3 Objective of the study

1. To assess mother's knowledge and practice behavior on infant and young child feeding (IYCF) and child care among slum dwellers in Pune.
2. To assess childhood morbidity and child health status among under-five children in the Pune slums
3. To find out the association between mother's knowledge and practice behavior on IYCF and child health outcomes.

This report focuses on children in Pune urban slums

Chapter 2 looks at the Methodology;
Chapter 3 gives the socio demographic characteristics of the mother's interviewed;
Chapter 4 examines the awareness level of respondents in terms of feeding practices and child care;
Accordingly, **the final chapter** of this report suggests policy actions that

Chapter 2:

Methodology

The purpose of the study was to assess the current infant feeding practices in children up to 6 years of age and to assess the knowledge of mothers regarding child feeding. A cross-sectional survey of 390 mothers in Pune urban slums was conducted. A semi-structured questionnaire was used to collect data on respondent characteristics and child feeding knowledge.

2.1 Pune Demographic

Table 2.1: Demographic profile of Pune District

Population	Persons	Males	Females
Total	3,274,923	1,684,558	1,590,365
In the age group 0-6 years	351,575	184,154	167,421
Scheduled Castes (SC)	443,103	222,974	220,129
Scheduled Tribes (ST)	36,159	18,931	17,228
Literates	2,622,734	1,387,449	1,235,285
Illiterate	652,189	297,109	355,080

Source: Census 2011

2.2 Key Health Indicators of Pune District DLHS-4

Table 2.2: Antenatal Care (Respondents who had last live/still birth during reference period (%)

Antenatal Care (Respondents who had last live/still birth during reference period) (%) Pregnant respondents who received any antenatal check-up	97.2
Pregnant respondents who had antenatal check-up in first trimester	82.0
Pregnant respondents who had three or more ANC visits	87.9
Pregnant respondents who had blood tested (Hb)	92.9
Pregnant respondents who consumed 100 or more IFA Tablets/Syrup equivalent	53.0
Pregnant respondents who had full antenatal care	49.0
Child Immunisation	
Received full vaccination	85.4

Continue…

Child feeding practices (based on last-born child in the reference period) (%)	
Children age 0-5 months exclusively breastfed	84.8
Children age 6-9 months receiving solid/semi-solid food and breast milk	40.0
Children age 12-23 months receiving breast feeding along with complementary feeding	62.2
Children age 6-35 months exclusively breastfed for at least 6 months	46.4
Children under 3 years breastfed within one hour of birth	73.9
Birth Weight (%) (age below 36 months)	
Percentage of Children weighed at birth	96.3
Percentage of Children with low birth weight (out of those who weighted) (below 2.5 kg)	15.0
Awareness about Diarrhoea (%)	
Respondents know about what to do when a child gets Diarrhoea	83.3
Awareness about ARI (%)	
Respondents aware about danger signs of ARI	72.0
Treatment of childhood diseases (based on last two surviving children born during the reference period) (%)	
Prevalence of Diarrhoea in last 2 weeks for under 5 years old children	4.2
Children with Diarrhoea in the last 2 weeks and received ORS	82.4
Children with Diarrhoea in the last 2 weeks and sought advice/treatment	70.6
Prevalence of ARI in last 2 weeks for under 5 years old children	3.2
Children with acute respiratory infection or fever in last 2 weeks and sought advice/treatment	76.9
Children with Diarrhoea in the last 2 weeks given Zinc along with ORS	47.1

2.3 Data and study area

The study used a cross-sectional design and interviewed 390 mothers. This sample size was adequate to detect the prevalence of maternal knowledge with a confidence level of 95 %. A face to face interview was conducted using structured and semi-structured questionnaires for both quantitative and qualitative interviews.

Table 2.3: Following are the list of notified and non-notified slums in various areas of Pune Municipal Corporation

Sr. No.	Name of the Area	Notified Slums	Non-Notified Slums	Total Slums	Population
1	Bhavani Peth	38	25	63	60615
2	Bibwewadi	8	3	11	15725
3	Dhankawadi	4	1	05	5260
4	***Hadpsar***	19	37	56	84465
5	Kasba Vishrambag	3	9	12	8880
6	Nagar Road	7	6	13	29775
7	***Sahakarnagar***	20	7	27	70900
8	Sangamwadi	19	34	53	116390
9	Tilak Road	20	22	42	83595
10	***Aundh***	20	14	34	41475
11	Dhole Patil Road	25	36	61	72040
12	Ghole Road	33	17	50	80995
13	***Kothrud***	12	11	23	81045
14	Warje	12	15	27	52545
	Total	**240**	**237**	**477**	**803705**

Sample: The sample size was estimated considering the current prevalence rate of any of the IYCF indicators of the Pune district (exclusive breastfeeding). For this survey, mothers having children of less than 06 years were interviewed.

2.4 Sampling Procedure

Probability Proportion to Size (PPS) sampling techniques has been used for the selection of six slum area of the Pune Municipal Corporation. Selected Slum has been stratified as Notified and Non-Notified slum. Simple Random Sampling has been used for the selection of one slum area from each notified and non-notified slum area of the selected slum area of the PMC. A complete list of respondents of age 15-49 years old who had children under 5 years will be collected from the Anganwadi Centre of that particular Slum or Ward. Simple random sampling was done to select the respondent if the list of the respondent is more than the target sample size of the area, else complete enumeration was done on the basis of the list provided by Anganwadi Centre.

The study was conducted at the six slums areas i.e. Hadapsar, Sahakarnagar, Sangamwadi, Aundh, Ghole Road and Warje of Pune Municipal Corporation (PMC) area. Hadapsar is situated at the east of Pune city with population 46385 whereas Aundh with population size 8735 is situated in the north-west of the city. Similarly, the Sangamwadi with population size 58480 and Sahakarnagar with population size 4060 is situated in the north and south of the city respectively, while Ghole Road with population size 14525 at centre of the city and Warje with population size 36360 at the west of the city.

2.5 Sample Size determination –

The Sample size has been calculated by using the formula –

$$n = \frac{\frac{Z^2 \times p(1-p)}{e^2}}{1+\left(\frac{Z^2 \times p(1-p)}{e^2 N}\right)}$$

Where:

n – Sample size

p – Proportion of mother's breastfeeding exclusively to their child in urban of Pune (in this case 81% of the respondents having children under five year's breastfeed exclusively during 2015-16: NFHS - 4 factsheet).

Z-score - Confidence interval at 95% (standard value – 2.576).

e – Margin of error (5%)

N – Total population of the Pune City (8, 03,705)

Calculation of sample size

$$n = \frac{\frac{(2.576)^2 \times 0.81(1-0.81)}{(0.05)^2}}{1+\left(\frac{(2.576)^2 \times 0.81(1-0.81)}{(0.05)^2 * 803705}\right)}$$

= 360.29

= 360

Considering the non- response rate as 10%, the adjusted sample size is calculated to be 380.

- For the study purpose Malwadi Janata Vasti, Sadhana Vidyalaya, Bhimnagar, Shirake Vasti, Mundwa are notified slums and Annabhau Sathe Nagar, Ram Tekadi, Ramnagar,Ram Tekadi are non-notified areas selected from ***Hadpsar***.
- Indira Udyogik Vasahat, Ambedkar Vasahat, Gultekadi, Taljai, Paravati are notified slums and Mahatma Phule Vasahat are non-notified areas selected from ***Sahakar Nagar***.
- Ambedkar Nagar, Aundh Road, Indira Vasahat, Aundh, Kasturba Vasahat, Aundh are notified slums and Chikhalwadi, Aundh Road, Adarsh Nagar, Bopodi are non-notified areas selected from ***Aundh***.
- Kelewadi Erandwana, Jai Bhavani Nagar, Kothrud are notified slums and Sutardara Kothrud Sagar Colony, Krushana Nagar are non-notified areas selected from ***Kothrud***.

2.6 Study focus

Mother's knowledge and child care practice behavior were assessed using Infant and Young Child Feeding (IYCF) guideline as recommended by UNICEF and WHO. In addition, mother's social network with other health service providers (like ASHA, Doctors, SHG members, other health personals and other relatives and friends) were assessed in terms of the source of information in child feeding practices. Child health outcomes are assessed in terms of morbidity prevalence (i.e fever, diarrhea, other morbidities) and malnutrition (i.e. stunting, wasting and underweight)

2.7 Study Population

The study population included the respondents of age 15 – 49 years, having children less than 6 years old.

Inclusion Criteria –

The inclusion criteria of the study population were;

Respondents of age 15 -45 years, having children under6 years of age and living in the selected slum area.

Exclusion Criteria

The exclusion criteria of the study population were;

The respondent (respondents) who are not available at the time of the survey were not included.

Study questionnaire

Chapter 3:

Socio Demographic Characteristics of Respondents

Data was collected by interviewing the mothers on a predesigned, semi structured proforma with specific questionnaires on child's age, order of birth, number of children in the family, place of the delivery, timing of initiation of complementary feeding, mode of feeding the child, advice received from for feeding, problem faced when introduced complementary feeding.

3.1 Socio Demographic Characteristics

Table 3.1: Percent Distribution of Sample of Pune Slums, Maharashtra

Background characteristics	%	Sample
Respondent's age		
18-19 years	2.1	8
20-24 Years	33.3	130
25- 29 Years	46.2	180
30 and Above	18.5	72
Years of schooling		
Illiterate	3.6	14
<5 Years	2.6	10
5-7 Years	14.1	55
8 - 10 Years	49.5	193
11 -12 Years	18.7	73
13-15 Years	9.0	35
15 and Above	2.6	10
Marital Status		
Currently married	98.2	383
Widowed	1.0	4
Separated	0.8	3
Age at marriage		
<18 Years	11.3	44
18-19 Years	38.5	150
20-24 Years	44.1	172

Background characteristics	%	Sample
25 and Above	6.2	24
Age at first delivery		
<18 Years	1.5	6
18-19 Years	22.1	86
20-24 Years	60.0	234
25 and Above	16.4	64
Religion		
Hindu	62.8	245
Muslim	15.1	59
Buddhist/Neo Buddhist	18.7	73
Others (Christian, Sikh, Jain etc.)	3.3	13
Caste		
Scheduled caste	38.2	149
Schedule tribe	3.3	13
Other backward caste	10.3	40
Open	41.3	161
Others	6.9	27
Have BPL/Ration card		
Yes	61.5	240
No	29.7	116
Can't say	8.7	34
Respondent's occupation		
Not working/Housewife	86.2	336
Domestic worker	5.9	23
Self employed	2.8	11
Skilled work	3.1	12
Class II (Pvt.) Service	0.3	1
Class III (Govt./Pvt.) Service	0.5	2
Class IV (Govt./Govt. contra. /Pvt./Pvt.	1.3	5
Type of Family		
Nuclear Family	46.2	180
Joint Family	53.8	210
Average household monthly income		

Background characteristics	%	Sample
<5000	4.6	18
5001 - 10000	36.4	142
10001-15000	32.3	126
15000+	25.1	98
Don't Know/Not Specified	1.5	6
Have Bank account		
Yes	58.5	228
No	41.5	162
Total	**100**	**390**

Table 3.1 gives the background characteristics of respondents with children less than 5 years of age in the selected urban slums of Pune. Background characteristics are primarily useful to understand the socioeconomic background and its impact on the child feeding practices. The majority of the respondents are in the broader age group 20 to 29 years of age with 46% of respondents in the age group 25-29 and 33% of respondents in the age group 20-25 years of age. About 18 % of the respondents are in the age 30 and above, whereas it is a matter of concern that there are 8 respondents who are in the age group 18-19 years. This implies respondents were not only married below the legal age for marriage but also had a much earlier child birth.

Education is an important determinant in knowledge and practices of child feeding. It is expected a woman with higher levels of education have better and knowledge of child feeding practices. Nearly half of the interviewed respondents (49.5) have completed 8 to 10 years of education; followed by 18% of respondents with 11-12 years of education and 14% of respondents with 5 to 7 years of education. Only 9% of respondents have completed 13-15 years of education and merely 25 number respondents are with educational level 15 and above. However, there are 3% of respondents who are illiterate and 2% of respondents who are having education with less than 5 years of completed education.

Age at marriage is a proximate determinant as the age of marriage increase the fertility level decreases. Even though the legal age of marriage is 18 years, 11% of the interviewed reported age at marriage as less than 18 years of age and a further 38% of the respondents reported the age at marriage at 18-19 years of age. However, the maximum number of the respondents (44%) was in the age group 20-24 years at the time of marriage.

The majority of the respondents belong to Hindu religion (66%), followed by Buddhism (18%) and (15%) from Muslim religion. Whereas 41% belongs to open caste followed by 38% belonging to scheduled caste and 10% belonging to caste OBC.

Occupation of the respondents, although not directly, but respondents who are employed and spent the majority of the time at work place may feel the constraint in terms of feeding her child in time. Employed mothers, especially in informal sector may not have a conducive atmosphere and timing for breastfeeding or providing food in intervals which is very much required for a growing child. However, the majority of the respondents are not working and are housewife (86%). A very small percent of respondents (5%) is working as a domestic worker.

The knowledge and feeding practices may or may not directly related to the type of family. For example, in nuclear family setting the mother may be less influenced by other members in terms of feeding practices as compared to mother living in a joint family. Further, if a woman is working the joint family can be her supportive in terms of providing timely food to the children. Further, if a child is sick or experiences any sudden illness the mother can easily seek the support and advice of the joint family. In joint family the elderly respondents often guides and support the new mother with her experience in child care and feeding practices. Although the resource constraint is comparatively more in a joint family as compared to nuclear family in urban slum setting, it also compensates in terms of support system. Nuclear family is the identity of urban settings, however, in our sample a slightly more than half the respondents (53%) are from the joint family.

Respondents were asked about the monthly average income and 36% reported their monthly average income in the range of 5000 to 10,000 Rs. a slightly lesser number of respondents (32%) reported the monthly average income in the range of 10,000 to 15,000 and near about quarter number of the respondents (24%) reported the average monthly income to be greater than Rs 15,000. Overall the majority of the respondents were from a relatively poor background based on their reported average monthly income.

Although having a bank account is not directly linked to the feeding practices this was asked primarily to know whether she received any subsides or benefits of any government schemes as most of the benefits/subsidies are directly transferred to the bank accounts. The majority of the respondents (58%) reported to be having a bank account.

3.2 BPL/Ration Card

According to the Planning Commission's survey report, only about 57% of the BPL families were being covered by the targeted PDS. Errors in identification exist both in inclusion as well as exclusion with many "ghost" BPL cards going around. As a remedy to the targeting problems the Government came up with the

latest legislation in 2013, increasing the coverage of TPDS to 70% of the income distribution in the rural areas and 50% in the urban areas. Each household will be entitled to 5 Kgs of grains per month at very subsidised prices for the next three years. India's child malnutrition levels have been and are still comparable to those in the poorest regions of the world (Gragnolati, 2005). Recently the government introduced the Food Security Bill 2013. This bill enhances the coverage of the public distribution of subsidised food (PDS) from about 30% of the population to 70%. However, the question arises is whether the impact of this program on food security and malnutrition meets its size and expense.

Table 3.2: Distribution of household having ration card and the type of ration card by SLI, religion and caste

Characteristics	Type of ration card				
	No Card	White	Orange	Yellow/ Antyoday	Number of HH
SLI					
Low	26.24	3.85	77.88	18.27	**104**
Medium	17.19	5.66	73.58	20.75	**106**
High	17.36	7	77	16	**100**
Religion					
Hindu	21.22	4.66	79.79	15.54	**193**
Muslim	27.12	6.98	69.77	23.26	**43**
Buddhist/neo Buddhist	10.96	6.15	69.23	24.62	**65**
Others (Christian, Sikh, etc.)	30.77	11.11	77.78	11.11	**9**
Caste					
Scheduled caste	13.42	4.65	77.52	17.83	**129**
Schedule tribe	-	-	76.92	23.08	**13**
Other backward caste	20	3.13	84.38	12.5	**32**
Open	26.09	8.4	73.11	18.49	**119**
Others	37.04	-	70.59	29.41	**17**
Total	**20.51**	**5.48**	**76.13**	**18.39**	**310**

The functioning of the Public distribution system is an important component as it provides essential food items at a subsidised rate. In Maharashtra there are three types of ration card white, yellow and orange determining the card hold holders as above the poverty line, below the poverty line and medium poverty line households. Mothers were asked bout the availability of ration card, quantity and quality of the food items purchased during last six months prior to the interview. If a respondent reported of not availing to

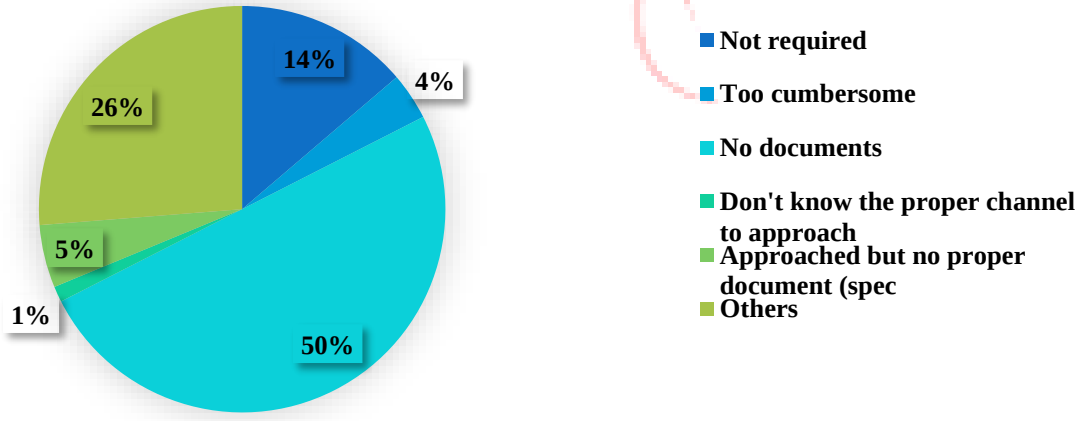
PDS even after having a ration card she was further probed on reasons for not availing the PDS. In addition, respondents who reported not having ration card were asked the reason for not having the ration card.

The above table presents the distribution of the respondent based on their background characteristics. About 20 percent of respondents were not having ration cards and 5 percent of the respondents were having white colour ration card which means they will not get any food items from PDS. The majority of the respondents (76%) were having an orange colour ration card and only 18 percent of the respondents were having yellow colour card which are given to BPL families. Considering the very low cut of BPL it is not surprising that the majority of the respondents posses orange colour ration card. We constructed SLI based on various household items, access to quality life, ownership of land etc. and accordingly gave score which is similar to the DLHS score.

It is disappointing that among low SLI near about quarter of the respondents (26%) are not having ration card, although more than three fourth of the respondents (77%) are having an orange colour card and only 18% of the respondents are having yellow card which is provided to BPL households. Interestingly, respondents who posses yellow colour card is slightly lesser than respondent from middle SLI (20%) and slightly higher than respondents from high SLI (16%). Near about 77% each from low and high SLI are having an orange colour card and 73% of middle SLI are having an orange colour card.

Religionwise 23% and 24% of respondents belonging to Muslim and Buddhist religion respectively owns a yellow colour card as compared to 15% and 11% of respondents belonging to Hindu and other religions respectively. However, 27% of respondents belonging to religion Huslim and 21% belonging to the religion, Hindu does not own any card. Among caste open 26% do not own any card and 73% own orange and 18% own yellow cards. Among respondents belonging to caste SC 77% own orange colour card and 13 % do not own any ration card.

Figure 3.1: Reason of not having a Ration Card



Respondents were further probed on the reason for not having ration card and the reasons quoted by half the number of the respondents (50%) were not having the required documents. This may be true for cities as most of them staying in urban slums are either migrants or without any proper documents. Also, there is every likelihood that even though they are having documents they do not have an idea on how or whom to apply for the ration card as reflected in the response of one percent of the respondents who do not know whom to approach. Further a quarter of the respondents (26%) also reported other reasons However, 5% of the respondent also reported that although they have approached but there was no proper document. In such cases the concerned authorities can look into the matter, especially migrant and people with no proper documents.

Table 3.3: Distribution of household having ration card and the type of ration card by SLI, religion and caste

Characteristics	Type of ration card				
	No Card	White	Orange	Yellow/ Antyoday	Number of HH
Average monthly income					
Less than 5001	27.8 (5)	5.6 (1)	50.0 (9)	16.7 (3)	18
5001 - 10000	20.4 (29)	4.9 (7)	61.3 (87)	13.4 (19)	142
10001 - 15000	24.6 (31)	4.0 (5)	57.1 (72)	14.3 (18)	126
More than 15001	14.3 (14)	4.1 94)	64.3 (63)	17.3 (17)	98
Don't know/Not specified	16.7 91)	0.0 (0)	83.3 (5)	0.0 (0)	6
Family size					
2 - 4 members	27.5 (46)	1.8 (3)	56.9 (95)	13.8 (23)	167
5 - 7 members	17.6 (28)	2.5 (4)	67.3 (107)	12.6 (20)	159
8 - 10 members	12.2 (60	16.3 (8)	55.1 (27)	16.3 (8)	49
11 - 15 members	0.0 (0)	13.3 92)	46.7 (7)	40.0 (6)	15
Total	**18.7**	**5.1**	**61.03**	**14.9**	**390**

Note: *Missing Cases

The Public Distribution system provides food items below the market price which supports people from lower economic status. Unlike in rural areas wherein the people can at least survive on the foodgrains grown on their own land in urban areas such an alternative cannot be expected.

The above table presents the type of ration card available based on the average monthly income of household and family size. Respondents were asked about the average monthly income of the household and findings indicates irrespective of the household income majority of the respondents own orange colour card. Since the upper limit for the eligibility criteria of a yellow card is Rs 15000 it is expected the monthly average income cannot be more than Rs 1250/- However, a substantial number of respondents with a monthly average of more than Rs 5000 to 15000 owned yellow colour ration card. Nearly half the number of respondents with less than the average monthly income of Rs 5000/- owns an orange colour ration card, followed by five respondents having no card and 3 respondents reported having a yellow ration card. Near about 17% of the respondents with an average monthly income of more than Rs 15000 owns a white colour ration card in comparison to 13 and 14 % of the respondents with an average monthly income of Rs 5000-10000 and 10000-15000 respectively.

We also examined the availability of the type of ration card by the size of the family to understand the dependency of an individual on subsidized food items. The majority of the respondents were with a family size of 4 and 56% of them owns the orange colour ration card, 27% does not own any ration card and only 13% owns the yellow colour ration card. There were 159 respondents with a family size of 5 to 7 members and 67% of them own orange colour ration card, followed by 28% with no ration card and 20% with a yellow colour ration card. Forty-one respondents reported the family size of 8-10 members and little more than half the number of respondents (27) owns an orange colour ration card, followed by 8 each of the respondents with no ration cards and yellow colour ration cards respectively. About 15 respondents reported the family size of 10-15 members and 7 of the respondents were having an orange colour ration card and only 6 were having a yellow colour ration card.

The finding prompts a skewed distribution with a majority of them owning an orange colour ration card. However, further enquiry into the possible mechanisms needs to probe.

Chapter 4:

Maternal Healthcare Services Utilization

4.1 Antenatal care

Antenatal care not only helps in the management of pregnancy, detection and treatment of complications, but also helps in promoting good health. It is expected respondents utilizing antenatal care services had more knowledge as compared to those not utilizing them. Hence, delay in seeking ANC care is not advisable for pregnant respondents.

For example, Iron is an essential nutrient, whose demand increases highly during pregnancy and many times do not get supplied through the regular diet. This can be worsened by the loss of appetite during pregnancy. Therefore, the most suitable mass intervention for iron supplementation is administering Iron along with Folic acid in the form of tablets to pregnant respondents.

Table 4.1: Percentage of respondents having ANC card and ever registered JSY beneficiary by background characteristics

Background characteristics	% of respondents having ANC card		% of respondents ever registered as a JSY beneficiary		Sample
	For all deliveries	Specific	For all deliveries	Specific	
Year of Schooling					
Illiterate	50.0 (7)	21.4 (3)	-	-	**14**
Primary	40.0 (4)	20 (2)	-	-	**10**
Middle	56.4	16.4 (9)	-	-	**55**
Secondary	62.9	15.5	-	-	**193**
Higher Secondary	69.9	11 (8)	-	-	**73**
Graduation	65.7	14.3 (5)	-	-	**35**
Post-Graduation	70 (7)	-	-	-	**10**
Age at first delivery					
< 18 Year	66.7 (4)	16.7 (1)	-	-	**6**
18 - 19 Year	61.6	10.5 (9)	-	-	**86**
20 - 24 Year	61.1	13.7	-	-	**234**
25 and Above	67.2	23.4	-	-	**64**
Religion			-	-	
Hindu	66.1	9.4	-	-	**245**
Muslim	59.3	11.9 (7)	-	-	**59**
Buddhist/Neo Buddhist	53.4	34.3	-	-	**73**

Background characteristics	% of respondents having ANC card		% of respondents ever registered as a JSY beneficiary		Sample
	For all deliveries	Specific	For all deliveries	Specific	
Others	53.9 (7)	15.4 (2)	-	-	**13**
Caste					
SC	61.7	21.5	25.5	18.1	**149**
ST	69.2 (9)	15.4 (2)	15.4 (2)	7.7 (1)	**13**
OBC	72.5	7.5 (3)	-	-	**40**
OPEN	59.6	10.6	-	-	**161**
Others	63.0	11.1 (3)	-	-	**27**
Respondent's Occupation					
Not working	63.4	13.7	-	-	**336**
Domestic worker	55.6	20.37	-	-	**54**
SLI					
Low	62.4	14.9	26.2	8.5	**141**
Medium	68.8	10.9	28.1	9.4	**128**
High	55.4	18.2	22.3	18.2	**121**
Type of Family					
Nuclear family	62.2	13.3	-	-	**180**
Joint family	62.4	15.7	-	-	**210**
Have Bank Account					
Yes	67.5	12.3	29.8	10.1	**228**
No	54.9	17.9	19.8	14.2	**162**
Benefited from any scheme*					
Yes	**80.0**	12.0	**60.0**	**32.0**	**25**
No	66.0	12.3	26.1	7.4	**203**
Total	**62.3**	**14.6**	**25.6**	**11.8**	**390**

Note: *Cases are not equal to due specific condition

Maternal care includes care during pregnancy and is advisable as early the good for mother and child. It is expected during ANC visits mother gets an idea about ANC care, risk factors as well as information on various government schemes. In the above table, respondents were asked about owing ANC card and availing government schemes.

The **table 4.1** gives the percentage of respondents who have ever registered as JSY beneficiaries and respondents having an ANC card by their background characteristics. Respondents were asked about the availability of ANC card and JSY benefits for all children or only specific children, which may be either first or second order of the child for which she was registered as a JSY beneficiary and for ANC card. As

JSY benefits can be availed to only respondents belonging to caste SC, ST and BPL categories the details of the JSY beneficiaries were only specified by SC and ST.

It is expected that higher the educational qualification the better is her understanding and awareness regarding the various health schemes and the importance of owning an ANC card. The above table indicates 62% of the respondents own ANC card for all the deliveries whereas 15% of the respondents own ANC card only for specific deliveries. Further, a quarter number of the respondents (26%) were registered for JSY benefits for all the deliveries and only 12% were registered for specific delivery. The majority of the respondents possess a secondary level of education and among them, 62% were having an ANC card for all the deliveries. Overall the percentage of respondents who are having ANC card increased as the level of education increases as reflected from the above table as only 50% of illiterate respondents own the ANC card for all deliveries as compared to 70% of postgraduate respondents.

Information on Age at first delivery and availability of ANC card was also collected, the results show that near about 67 percent of very young mothers (4) and older mother with age 25 and above were having ANC card and about 61 percent of the mothers in the age group 18-19 years and 20-24 age group are having ANC card. Comparatively, 66 percent mother belongs to the religion owns an ANC card for all the deliveries as compared to 59 percent of Muslims and 53 percent each belonging to religion Buddhist and others respectively. The majority of the respondents belong to caste SC and open and among them 61 percent of the mothers belonging to caste SC and 59 percent of the mothers belonging to caste others own an ANC card for all the deliveries as compared to 72 percent of the mothers belonging to caste OBC and 69 percent of the mothers belonging to ST.

It is disappointing that only a quarter of the respondents belonging to caste SC availed the JSY benefits for all the deliveries as compared to 18% for specific deliveries and among the 13 respondents belonging to ST two of them received JSY benefits for all the deliveries and one got the benefit for specific deliveries. JSY beneficiaries for all deliveries as reported by respondents from medium SLI is 28%as compared to 26% of the mother from low SLI and 22% of high SLI. Similarly, in terms of having ANC card 66 percent of respondents from medium SLI; 62 % of respondents from low SLI and 55% from high SLI for all the deliveries. Twenty-one percent of the respondents who were having bank account received JSY benefits as compared to 19% of respondents who were not having bank accounts. Only 25 respondent received any benefits from any government schemes.

Although the overall majority of the respondents reported owning an ANC card it's still not universal further the beneficiaries of JSY or any other schemes reflects a poor picture even among the eligible mothers. Overall, uptake of JSY or any government schemes is far from universal.

Respondents belonging to BPL, SC and ST are eligible for JSY benefits. The figures given below presents the percentage of respondents who had registered for JSY benefits. However, findings suggest the majority of the SC (56%), ST (77%) and BPL (61%) respondents never availed any JSY benefits for any of the delivery as reported by the respondents. Only 29% of respondents belonging to BPL categories, 15% of respondents belonging to ST and 26% of respondents belonging to caste SC could avail JSY benefits for all the deliveries. However, 18% of respondents belonging to caste SC, 8% of respondents from ST and 10% of the respondents belonging to BPL availed JSY benefits for specific delivery. This reflects the poor implementation of JSY schemes.

Figure 4.1: Percentage of SC respondents registered as JSY beneficiaries

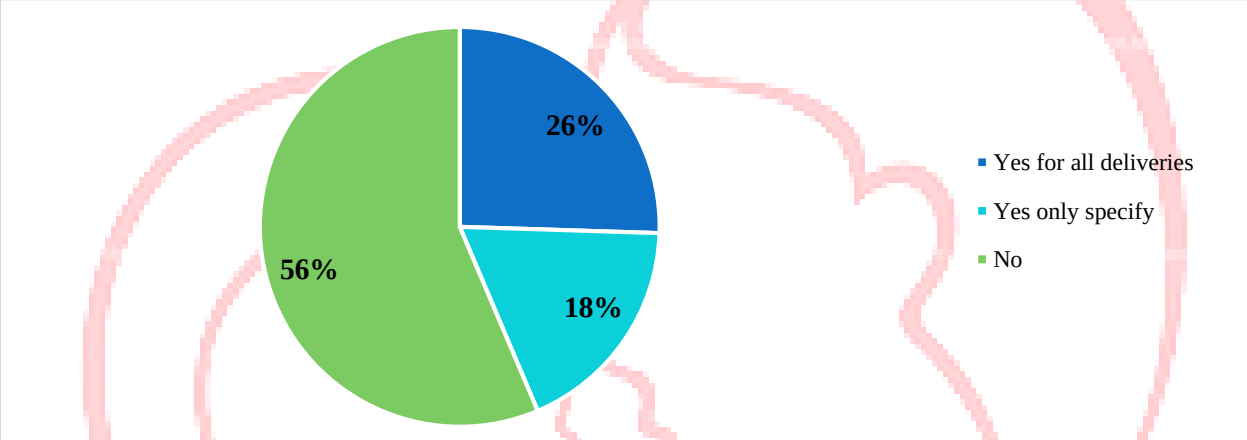


Figure 4.2: Percentage of ST respondents registered as JSY beneficiaries

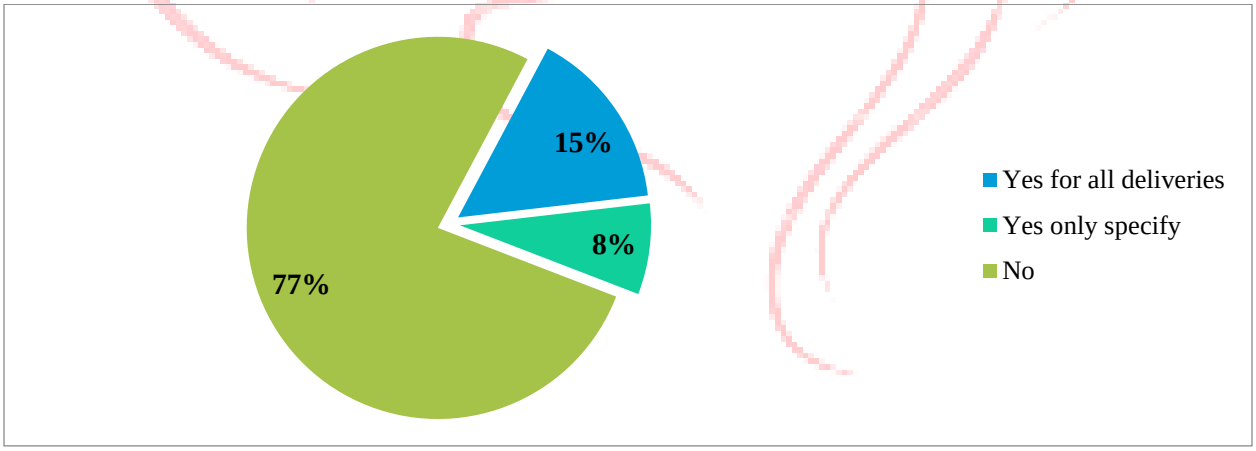


Figure 4.3: Percentage of respondents from BPL categories has registered as JSY beneficiaries

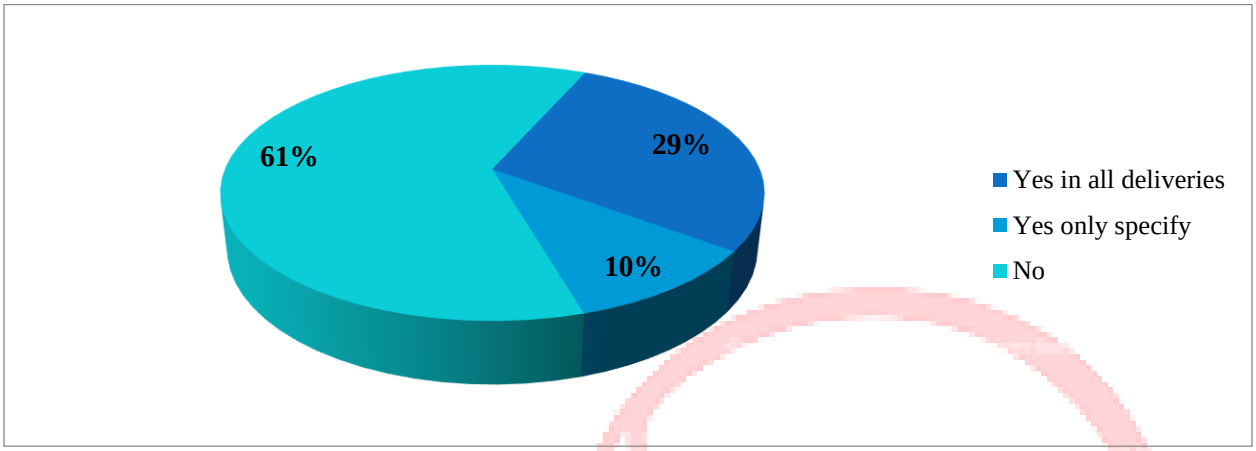


Table 4.2: Percent distribution of respondents visited for ANC and consumed IFA tablets by background characteristics

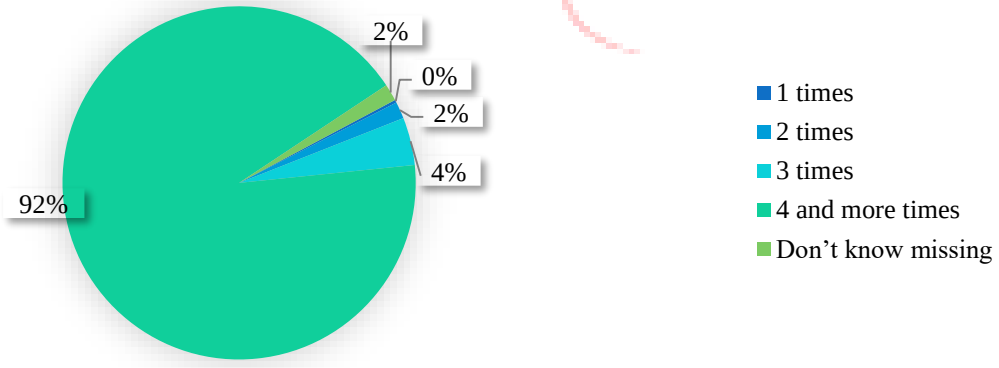
Background characteristics	Received ANC first time in				Consume IFA Tablets	Sample
	1st trimester	2nd trimester	3rd trimester	Can't Recall		
Age Group						
18 - 19 Year	100	-	-	-	100	**8**
20 - 24 Year	95.38	3.85	0.77	-	92.31	**130**
25 - 29 Year	93.33	5	-	1.67	91.67	**180**
30+	95.83	2.78	1.39	-	91.67	**72**
Year of Schooling						
Illiterate	64.29	**28.57**	-	7.14	92.86 (13)	**14**
Primary	100	-	-	-	100	**10**
Middle	96.36	1.82	-	1.82	92.73	**55**
Secondary	94.82	3.63	1.04	0.52	91.71	**193**
Higher Secondary	95.89	4.11	-	-	93.15	**73**
Graduation	97.14	2.86	-	-	91.43	**35**
Post-Graduation	100	0	-	-	80 (8)	**10**
Age at Marriage						
< 18 Year	100	-	-	-	100	**6**
18 - 19 Year	91.86	4.65	-	3.49	88.37	**86**
20 - 24 Year	94.44	4.7	0.85	-	93.59	**234**
25 and Above	98.44	1.56	-	-	90.63	**64**
Religion						
Hindu	94.7	3.7	0.8	0.8	91.4	**245**
Muslim	96.6	1.7	-	1.7	98.3	**59**
Buddhist/Neo Buddhist	94.5	5.5	-	-	89	**73**
Others	84.6	**15.4**	-	-	92.3	**13**

Background characteristics	Received ANC first time in				Consume IFA Tablets	Sample
	1st trimester	2nd trimester	3rd trimester	Can't Recall		
Caste						
SC	92	6.7	-	1.3	90.6	**149**
ST	100	0	-	-	84.6 (11)	**13**
OBC	97.5	2.5	-	-	92.5	**40**
OPEN	97.5	1.2	1.2	-	93.2	**161**
Others	85.2	**11.1**	-	3.7	96.3	**27**
Respondent's Occupation						
Not working	94.6	3.9	0.6	0.9	92.3	**336**
Domestic worker	94.4	5.6	-	-	90.7	**54**
SLI						
Low	90.8	5.7	1.4	2.1	91.5	**141**
Medium	95.3	4.7	-	-	91.4	**128**
High	98.3	1.7	-	-	93.4	**121**
Type of Family						
Nuclear family	91.7	6.1	1.1	1.1	90.6	**180**
Joint family	97.1	2.4	0	0.5	93.3	**210**
Total	**94.6**	**4.1**	**0.51**	**0.77**	**92.1**	**390**

Due to the prevalence of maternal anaemia, it is recommended to consume Iron-folic acid (IFA) tablets during pregnancy. The **table 4.2** gives the detail about the timing of first time antenatal care (ANC) and consumption of IFA tablets by background characteristics of respondents. Overwhelmingly 94% of the respondents received ANC care during the first trimester itself, however among 13 respondents who are illiterate only 9 received ANC care during the first trimester. In terms of consumption of IFA tablets, nearly 92% of the respondents consumed IFA tablets. Overall ANC care among interviewed respondents is good.

Overwhelmingly 92% of the respondents received ANC care during pregnancy, which is quite good (Figure 3.5).

Figure 4.4: Number of times received ANC Care during pregnancy



4.2 Delivery

Table 4.3 shows the background characteristics of the respondents. Respondents were asked about the type of delivery of last birth. As evident from the given table above 66% of the delivery was normal delivery followed by 16 % of caesarean emergency delivery and 15% of caesarean elective delivery. A minuscule 1% of the delivery was at home. This indicates most of the deliveries were conducted in a health facility.

Out of the 6 Respondents who were married less than 18 years of age, 5 respondents had normal deliveries and one had a caesarean elective delivery. Among the respondent in the 18-19 years of age majority of them (81%) underwent normal delivery followed by 11% by emergency caesarean delivery. However, among the respondents in the age group 20-24 years, 64% of the respondents underwent normal delivery and 17 % each underwent caesarean elective and emergency delivery. Near about half, the number of respondents of the age 25 and above underwent normal delivery and a quarter number of the respondents underwent emergency caesarean delivery and 23% underwent elective caesarean delivery. The highest number of normal deliveries of 84% was reported among respondents belonging to other religion and the lowest was among the respondents belonging to Buddhist religion of 61%, whereas 64% of respondents from the Hindu religion and 76% of respondents from the Muslim religion underwent normal deliveries.

Religion wise only 5 respondents belonging to the Hindu religion delivered at home. Caste wise 53% of respondents belonging to ST had a normal delivery as against 81% of respondents belonging to caste others. The percentage of respondents who went normal delivery among caste SC, OBC and Open is 63%, 70% and 65% respectively.

Table 4.3: Percentage distribution of types of delivery by respondent's background characteristics

Background characteristics	Type of Delivery				Sample
	Normal	Home	C-section (elective)	C section (emergency)	
Age Group					
18 - 19 Year	75 (6)	12.5 (1)	12.5 (1)	-	**8**
20 - 24 Year	70.77	0.77 (1)	11.54	16.92	**130**
25 - 29 Year	63.33	1.67 (3)	18.89	16.11	**180**
30+	63.89	-	15.28	20.83	**72**
Year of Schooling					
Illiterate	85.71	-	7.14 (1)	7.14 (1)	**14**
Primary	80 (8)	-	10 (1)	10 (1)	**10**
Middle	78.18	3.64 (2)	9.09 (5)	9.09 (5)	**55**
Secondary	67.36	0.52 (1)	14.51	17.62	**193**
Higher Secondary	58.9	2.74 (2)	23.29	15.07	**73**
Graduation	48.57	-	17.14 (6)	34.29	**35**
Post-Graduation	50 (5)	-	30 (3)	20 (2)	**10**

Background characteristics	Type of Delivery				Sample
	Normal	Home	C-section (elective)	C section (emergency)	
Age at Marriage					
< 18 Year	83.33 (5)	-	16.67 (1)	-	**6**
18 - 19 Year	81.4	1.16 (1)	5.81 (5)	11.63	**86**
20 - 24 Year	64.1	1.71 (4)	17.09	17.09	**234**
25 and Above	51.56	-	23.44	25	**64**
Religion					
Hindu	64.08	2.04 (5)	14.29	19.59	**245**
Muslim	76.27	-	13.56 (8)	10.17 (6)	**59**
Buddhist/Neo Buddhist	61.64	-	24.66	13.7	**73**
Others	84.62	-	-	15.38 (2)	**13**
Caste					
SC	63.76	0.67 (1)	18.12	17.45	**149**
ST	53.85 (7)	-	15.38 (2)	30.77 (4)	**13**
OBC	70	5 (2)	7.5 (3)	17.5 (7)	**40**
OPEN	65.84	1.24 (2)	16.77	16.15	**161**
Others	81.48	-	7.41 (2)	11.11 (3)	**27**
Respondent's Occupation					
Not working	67.26	1.19 (4)	15.48	16.07	**336**
Domestic worker	59.26	1.85 (1)	16.67 (9)	22.22	**54**
SLI					
Low	73.05	2.13 (3)	12.06	12.77	**141**
Medium	64.06	0.78 (1)	20.31	14.84	**128**
High	60.33	0.83 (1)	14.88	23.97	**121**
Type of Family					
Nuclear family	68.89	2.78 (5)	11.67	16.67	**180**
Joint family	63.81	-	19.05	17.14	**210**
Total	**66.15**	**1.28**	**15.64**	**16.92**	**390**

Chapter 5:

Awareness about Child Feeding and Healthcare

A Mother knows what is best for her child and she will prioritize it over anything for giving the best to her child. Right from the conception to delivery to the growth of her child she monitors and supervises and seeks information on what is best for her child. This chapter focuses on the awareness level of the respondents and the factors responsible for the same.

Mothers often turn to the family, especially her own Mother /elders to seek advice on how to feed their children and for treatment in case if the child is ill. Thus, traditional beliefs and behaviours guide the use feeding practices of her children. Also, Mother s seeks the advice of the health service providers. Hence, it is a combination of factors that influence the Mothers on IYCF, child feeding, and treatment of common childhood illnesses.

Thus, this chapter describes the awareness, IYCF practices, feeding practices and treatment during childhood illnesses such as diarrhoea, fever and pneumonia and the source of information on her awareness. This we believe will identify the current delivery channels and challenges in terms of child feeding practices and treatment during childhood illnesses in the selected areas of Pune Urban Slums.

5.1 Source of knowledge about child feeding practices

Breastfeeding is the first communication pathway between the respondents and her baby. Breastfeeding has advantages for both babies and Mothers, including providing the needed nutrition for the babies, boosting the baby's immune system, helping Mothers to lose weight after pregnancy, and stimulating the uterus to return to its previous position before pregnancy (The Office on Respondents's Health, 2012). In addition, infants can absorb and digest breast milk more easily than baby formula (The Office on Respondents's Health, 2012). World Health Organization (WHO) recommends breastfeeding as a main source of food for babies for the first six months and encourages Mothers to consider breastfeeding as the only feeding source. Between six months and two years old, it is recommended that Mothers could use other supplemental sources (such as water, other liquids, or solid baby food) to feed their babies along with breastfeeding (WHO, 2013).

Table 5.1: Source of information for child feeding knowledge in slum, Pune

Source of Information	First milk should be given to newborn (Yes)	Breast-feeding start immediately after birth (Yes)	Exclusive breast-feeding till 6 months	Baby given anything else than breast milk in first 6 months (No)	Child age at which complementary food can be given (6+ month)	Avoiding readymade formula food (Yes)	Baby should be breastfed along with supplementary food (at least 18 month)
ANM	40.9	38.4	32.9	37.5	36.9	40.4	28.7
ASHA	16.5	14.7	16.3	14	15.2	12.6	17.2
Doctor	89.1	84.6	83.3	78	76.4	70.2	69.8
Relative	59.6	63	68.2	62.5	72.4	72.8	69
Friend	7.3	7.5	8.9	6	8.1	3.3	6.3
News paper	2.1	1.7	1.9	1.5	1.4	2.6	1.5
Posters	0.5	-	1.6	0.3	1.9	1.3	0.4
Pamphlets	0.2	-	0.4	-	0.3	0.7	-
JSY Card	5.9	6.5	7.8	8.6	4.9	11.9	8.2
Radio	0.2	6.5	-	-	-	0.7	-
TV	5.9	-	5.8	5.7	4.9	9.3	6.3
Not specified	0.5	1	1.6	8.6	1.9	3.3	3.7
Total	**371**	**392**	**258**	**336**	**369**	**151**	**268**

Note: the percentage provided in the above table cannot be 100%, it has been calculated for the individual source of information (i.e. ASHA, ANM etc.)

Although Mothers knowledge and understanding about child feeding practices to an extent is her own understanding and lifestyle it is also influenced by information provided by health workers, doctors, relatives, peer groups, media etc. Further her own understanding and experiences plays an important role in the feeding practices of child. For example, compared to the first born child the respondents are more confident and well informed in terms of feeding practices to second child after she gains experiences in the feeding practices of her first child. Hence, the respondents were asked about the sources of information on her knowledge about feeding practices.

As shown in **table 5.1**, the knowledge of respondents about child feeding recommendations was generally concentrated among doctors, relatives and to an extent ANM. It is prominently reflected in terms of breastfeeding and her knowledge of exclusive breastfeeding and providing first milk to newborn where the percentage of respondents reporting the source of information as doctors is 84, 83 and 89 per cent respectively; followed by 78, 76, 70 and 69 percent of respondentss reporting source of information as doctors in her following knowledge baby should not be given anything else other than breast milk; only

after 6 month baby complementary fed, readymade and instant food formula should be avoided, and baby should be breastfed along with complimentary food up at least 18 months.

However, when it comes to major source as relatives the percentage of respondents was higher with 72 % each reporting baby should be given complementary food only after 6 months and above and 69 % reporting baby should be breastfed along with supplementary food for at least 18 months. Although 68 % of respondents reported the source of information as relatives regarding her knowledge about exclusive breastfeeding up to 6 months only 59 % of respondents reported her knowledge that first milk should be provided as relatives.

A substantial number of respondents also reported ANM the major source of information in her knowledge about child feeding practices. Forty percent each of the respondents reported her knowledge about first milk should be provided and avoiding readymade food as ANMs; followed by 38 percent reporting that breastfeeding should be started immediately after birth; 37 % of respondents reported that baby should not be given any other food apart from breastmilk, 32 % reported exclusive breastfeeding up to 6 months and only 28 % reported that breastfeeding should continue upto 18 months along with supplementary food the source of information of which was ANM.

5.2 Knowledge of feeding of Children

Respondents' awareness regarding child feeding plays an important role in the growth of the child. The **table 5.2** provides the awareness of respondents by their background characteristics. This will help us in understanding, the awareness of respondents in terms of child feeding by their background characteristics. The awareness related to child feeding was assessed by asking the following question on whether first milk colostrum should be given to newborn; whether breastfeeding should begin immediately after birth; whether exclusive breastfeeding up to 6 months; whether the baby can be given other than breast milk in the first 6 months; and what is the respondents view on providing readymade food such as infant formula to babies; and how long the baby should be breastfed. These were the basic question probed in relation to breastfeeding and the responses were either yes or no.

Age is an important factor as one gets older it is expected the understanding and awareness related to child feeding practices increases by education, IEC programmes and from peer groups. In terms of age near about, all the respondents agreed that first milk (colostrum) should be given to the baby and a baby should be exclusively breastfed for 6 months. Although all the respondents in the age 18-19 years responded in affirmative that breastmilk should be given immediately after birth three fourth of the respondents in other age groups responded in affirmative that breastmilk should be given immediately after birth.

Table 4.2: Knowledge of Diet of children by respondent background characteristics in slum, Pune

Background characteristics	First milk should be given to newborn (Yes)	Breastfeeding start after immediately birth (Yes)	Exclusive breastfeeding till 6 months (Yes)	Baby can be given anything else than breast milk in first 6 months (N0)	child age at which complementary food can be given (6+ month) (Yes)	Avoiding readymade formula food (Yes)	Baby should be breastfeed along with supplementary food (atleast18 month) (Yes)	Sample
Respondent's age								
18-19 years	100	100	62.5	87.5	100	50.0	50.0	8
20-24 Years	93.8	71.5	73.8	86.2	94.6	41.5	73.8	130
25- 29 Years	95.6	75	70.6	83.9	92.8	35	67.2	180
30 and Above	95.8	77.8	68.1	91.7	98.6	41.7	66.2	72
Years of schooling								
Illiterate	92.9	78.6	42.9	71.4	85.7	50	50	14
<5 Years	90	80	60	90	90	60	60	10
5-7 Years	92.7	65.5	63.6	85.5	94.5	47.3	69.1	55
8 - 10 Years	94.3	76.7	75.1	86.5	94.8	39.9	67.2	193
11 -12 Years	100	83.6	71.2	84.9	94.5	32.9	72.6	73
13-15 Years	97.1	62.9	77.1	91.4	97.1	22.9	77.1	35
15 and Above	90	60	60	90	100	30	80	10
Age at marriage								
<18 Years	88.6	84.1	75	81.8	86.4	45.5	61.4	44
18-19 Years	94.7	76	71.3	82.7	94.7	40	66.7	150
20-24 Years	97.1	70.9	71.5	90.1	95.9	34.9	72.7	172
25 and Above	95.8	79.2	58.3	87.5	100	45.8	69.6	24
Age at first delivery								
<18 Years	100	83.3	50	66.7	100	33.3	66.7	6
18-19 Years	94.2	86	73.3	83.7	91.9	46.5	59.3	86
20-24 Years	94.9	70.5	73.9	86.8	94.9	36.3	69.7	234
25 and Above	96.9	75	59.4	89.1	96.9	37.5	79.4	64

Background characteristics	First milk should be given to newborn (Yes)	Breastfeeding start after immediately birth (Yes)	Exclusive breastfeeding till 6 months (Yes)	Baby can be given anything else than breast milk in first 6 months (N0)	child age at which complementary food can be given (6+ month) (Yes)	Avoiding readymade formula food (Yes)	Baby should be breastfeed along with supplementary food (atleast18 month) (Yes)	Sample
Religion								
Hindu	94.7	74.3	71	88.6	97.1	41.6	63.1	62.8
Muslim	94.9	67.8	74.6	81.4	91.5	37.3	67.8	15.1
Buddhist/neo Buddhist	98.6	80.8	72.6	82.2	90.4	31.5	89	18.7
Others (Christian, Sikh, Jain etc.)	84.6	84.6	46.2	84.6	84.6	30.8	69.2	3.3
Caste								
Scheduled caste	97.3	78.5	73.2	84.6	94.6	32.9	71.1	149
Schedule tribe	100	84.6	61.5	100	100	15.4	76.9	13
Other backward caste	85	62.5	87.5	85	95	50	66.7	40
Open	96.3	73.3	65.2	86.3	95	36.6	73.9	161
Others	88.9	77.8	74.1	88.9	88.9	77.8	25.9	27
Respondent's occupation								
Not working	94.6	72.9	69.9	86	94.9	37.5	68.4	336
Domestic worker	95.7	95.7	78.3	91.3	95.7	56.5	65.2	23
Self employed	100	63.6	63.6	90.9	81.8	45.5	63.6	11
Skilled work	100	91.7	83.3	75	91.7	41.7	83.3	12
Class II (Pvt.) Service	100	0	100	100	100	0	100	1
Class III (Govt./Pvt.) Service	100	100	100	100	100	50	100	2
Class IV (Govt./Govt. contra. /Pvt./Pvt.	100	100	80	80	100	20	80	5
Type of Family								
Nuclear Family	93.9	75	68.9	87.8	92.8	39.4	68.2	180
Joint Family	96.2	74.8	72.9	84.8	96.2	38.1	69.5	210

Background characteristics	First milk should be given to newborn (Yes)	Breastfeeding start after immediately birth (Yes)	Exclusive breastfeeding till 6 months (Yes)	Baby can be given anything else than breast milk in first 6 months (N0)	child age at which complementary food can be given (6+ month) (Yes)	Avoiding readymade formula food (Yes)	Baby should be breastfeed along with supplementary food (atleast18 month) (Yes)	Sample
SLI								
Very Poor	92.1	78	74.8	87.4	92.9	42.5	54.3	127
Poor	96.1	73.4	68.8	84.4	96.1	39.1	72.4	128
Normal	96.7	72.7	70.2	86.8	95	35.5	80.2	121
Child Ever Born								
1	93.3	69.9	68.9	87.6	95.2	37.3	71.2	209
2	97.2	80.3	71.1	83.8	95.1	39.4	68.3	142
3 and More	97.4	82.1	82.1	87.2	89.7	43.6	59	39
Beneficiaries								
Yes	100	72	68	76	100	52	76	25
No	95.6	75.5	75.5	89.7	95.1	33.3	68.5	204
Total	**95.1**	**74.9**	**71.0**	**86.2**	**94.6**	**38.7**	**68.7**	**390**

More than 86% of the respondents agreed that babies should not be provided with any other milk apart from respondent's milk, it was highest in the age group 30 and above with 92%. Although 62% of respondents in 18-19 years of age and 68% of respondents in 30+ agreed to exclusive breastfeeding up to 6 months this was slightly better in the age group 20-24 and 25-29 with 73% and 70% respectively. In terms of avoiding readymade food almost half the number of respondents in the age 18-19 years agreed that it should be avoided whereas only 35% of respondents in the age group 25-29 years agreed that it should be avoided; almost 41% of respondents in the age group 20-24 and 30+ agreed that readymade food should be avoided. However, on query on the length of the period where babies can be exclusively breastfed (18 months) along with complimentary food nearly 73% of the respondents in the age group 20-24 and half the number of respondents in the age 18-19 years agreed to it, whereas 66% and 67 % of respondents in the age group 20-24 and 25-29 respectively, agreed that breastfeeding can be continued along with complimentary food up to 18 months.

Education is an important indicator of awareness. Regarding child feeding, this awareness need not be restricted only in terms of feeding practices, but also overs various aspects of nutritious food, child growth, disease control and immunization and hygienic lifestyle. The higher the years of education better are the chances to acquire knowledge related to child feeding practices.

Education doesn't seem to differentiate in the level of awareness in terms of feeding first milk as almost all the respondents agreed that first milk should be given with 90% of respondents with less than 5 years of education to respondents with 15+ years of education to all the respondents with 11-12 years of education agreed that first milk should be provided to babies. Similarly, the age at which the baby should be fed complementary food (6+months), not much difference was observed among respondents in terms of their educational level as 85% of respondents who are illiterate to almost all the Education is an important indicator of awareness.

Education doesn't seem to differentiate in the level of awareness in terms of feeding first milk as almost all the respondents agreed that first milk should be given with 90% of respondents with less than 5 years of education and respondents with 15+ years of education to all the respondents with 11-12 years of education agreed that first milk should be provided to babies. Similarly, age at which the baby should be fed complementary food (6+months) not much difference was observed in terms of responses among respondents by their educational level as 85% of respondents who are illiterate to almost all the respondents with 15+ years of education agreed baby should be provided with complementary foods after 6 months. Among respondents who is illiterate, 71% agreed that the baby should not be given any other food apart from breast milk, whereas 91% of respondents with 15+ years of education agreed to the same.

Awareness regarding exclusive breastfeeding up to 6 months was striking in terms of education with only 42% of respondents agreed that it should be exclusively breastfed and 77% of respondents agreed that it should be exclusively breastfed for 6 months. However, it is difficult to say that education has any impact in terms of providing breastmilk immediately after birth as 78% of the illiterate respondents and 76% of respondents with 8-10 years of education agreed breastmilk should be provided immediately after birth, whereas 60%, 62%, and 65% of respondents with educational level 15+, 13-15 years and -10 years of education reported the same. The highest number of respondents who reported that breastmilk should be given immediately after birth was 83% of respondents with educational level 11-12 years and 80% of respondents with the educational level of fewer than 5 years. Regarding child feeding, this awareness need not be restricted only in terms of feeding practices, but also overs various aspects of nutritious food, child growth, disease control and immunization and hygienic lifestyle. The higher the years of education better are the chances to acquire knowledge related to child feeding practices.

Early age at marriage is considered to be a proximate determinant of lower age of first delivery hence a cross-examination was carried out to know the awareness level of respondents by their age at first marriage. It is expected that the awareness level of younger respondents is much less than the older respondents here we observe a striking difference among very young respondents whose age at marriage was less than 18 years to other age group in terms of awareness of whether first milk should be given to the baby and in terms of exclusive breastfeeding up to 6 months which was responded in affirmative by 88% and 86% respectively as compared to other age groups where the percentage was more than 90% in all the age groups. Although, more than 90% in other age groups agreed that first milk should be fed only nearly 70 to 79%in other age groups agreed that breastfeeding should start immediately after birth. Whereas very young respondents with 18-19 years of age (4%) agreed that breastfeeding should begin immediately. This contradicting response maybe due to their own experience. Since some of the respondents who underwent caesarean deliveries or who were conscious after some time shared that breastfeeding should not start immediately. In terms of exclusive breastfeeding near about three of the respondents with age at marriage, less than 18 years agreed that babies should be exclusively breast for 6 months, which was 71% each in the age group 18-20 years and 20-24 years of age. However, only 58% of the respondents who were married in the age group 25+ agreed that babies should be exclusively breastfed for 6 months. Further, 90 % of the respondents married in the age group 20-24 were aware that babies should not be provided with complementary food while breastfeeding until 6 months; followed by 87% of respondents married in the age group 25+ and 81 and 82% each in the age group <18 years and 18-20 years. Seventy-two per cent of respondents married in the age group 20-24; followed by 69% respondents married in the age 25+; 66% of respondents married at the age 18-20 years and 61% of respondents married<18 years agreed that breastfeeding can be continued up to 18 months along with supplementary diets. Overall, 45% of

respondents married <18 years and 25+ years agreed that readymade food should be avoided from the babies diet; followed by 40% of respondents married in 18-20 years and 34% of respondents married in 20-24 years of age.

Age at first delivery is an important variable in determining the knowledge of respondents in terms of child feeding. Younger the respondents it is expected not much awareness regarding child feeding. Strikingly, there are 6 respondents who have given birth at age less than 18 years and all of them agreed that first milk should be provided to babies and babies should be given complementary foods from 6 months onwards. The same was reported by respondents with older age of delivery in the range of 91 to 96%. Only three fourth of the respondents who had the first delivery at age 25+ are aware that breastfeeding should be started immediately followed by 70% of respondents who had the first delivery in the age group 20-24 years of age. However, younger respondents in the age group 18-20 years and <18 years with 86% and 83% reported that breastfeeding should start immediately after birth. Although 73% each of the respondents who had the first delivery in the age group 20-24 and 25-29 agreed to exclusive breastfeeding this was much lower among very young respondents with <18 years of age. Strikingly a 20% difference in the awareness that a baby can be given anything else apart from milk in the first 6 months between very young respondents who had first delivery <18 years of age to 66% for other age groups was observed. Only 46% of the respondents who had first delivery in 18-20 years agreed that readymade food should be avoided from the babies diet, which was much lesser in other age group respondents in the range of 33 to 37%. Further, there was a 20% difference between respondents who had the first delivery in the age group 18-19 years with 69% and 25+ (79%) in terms of awareness that the baby should be breastfed at least up to 18 months along with complementary feeding, which was 66% among very young respondents with age <18 years and 69% of respondents in the age group 20-24 years of age.

Religion and caste variables were also considered to understand the differences in knowledge or whether knowledge are influenced by customs and religious practices. Striking differences were found in terms of respondents who agreed that the baby should be exclusively breastfed up to 6 months with only 46% of religion others agreeing to it to 74% of respondents belonging to Muslim religion agreeing to it, whereas 71% of respondents from religion Hindu and 72% from the Buddhist religion reported that babies should be exclusively breastfed for 6 months. Further, a striking difference was also observed in terms of respondents agreeing that baby should be breastfed up to 18 months along with the complementary diet, which was 89% of respondents belonging to Buddhism to 63% of respondents belonging to the Hindu religion. Respondents who agreed along with complementary diet breastfeeding should be continued up to 18 months were 67% and 69% among Muslim and others respectively. As observed in other background variables uniformity in awareness regarding first milk should be provided to babies is observed in 94% each

of respondents belonging to Hindu and Muslim religion respectively, and 97% of respondents belonging to Buddhist religion and 84% of respondents belonging to religion others. A similar pattern was observed in terms of respondents awareness that complementary food should be provided to babies of more than 6 months with 97 of Hindu respondents to 84% of respondents belonging to others and 91% and 90% of Muslim and Buddhist religion agreed to the same.

Only 30 to 31 of respondents belonging to religion, Buddhism and others respectively, and 37% of respondents belonging to Muslim and 41 of respondents belonging to Hindu religion agreed that readymade food should be avoided.

Caste wise response of respondents shows all the thirteen respondents who belong to scheduled tribes agreed that first milk should be given to babies; babies should be exclusively breastfed within 6 months and complementary feeding to babies should only begin after 6 months. In terms of respondents who agreed that readymade food should be avoided 15% of respondents from ST reported in affirmative whereas the same was 77 among caste others. Half the number of respondents from caste OBC agreed that readymade food should be avoided whereas the same was reported by 32% of SC and 36% of respondents from caste Open.

Information was also collected on the respondents' employment type. This information was primarily collected to understand not only the knowledge of respondents in terms of child feeding, but also to find out if there are any constraints from her work activities which limits to her child feeding practices and also if there is any gainful impact in terms of awareness in job circles and exposure and the monetary gains. However, in our sample, the majority of the respondents were housewife followed by 23 numbers of respondents who are a domestic worker and 12 and 11 number of respondents employed as a skilled worker and self-employed respectively. Uniformity and affirmative in awareness regarding first colostrum provided to babies and breastfeeding was observed. The breast milk was provided immediately by 63 per cent each of respondents who were not working and self-employed; 66 per cent of respondents who are employed as a skilled labourer whereas 87 percent of respondents who were domestic worker breastfed the baby immediately. However, only 36 percent each of respondents who is housewives and skilled worker breastfed the baby within 1 hour, which was only 13 percent among respondents who were working as a domestic worker. Only 31 percent of respondents who were not working and near bout the quarter numbers of respondents who were working as a domestic worker feed the babies with prelected food.

Joint family can serve as an important social setup in providing knowledge regarding baby care, etc. at the same time it also is a constraint in terms of spatial place. However, irrespective of nuclear or joint family the percentage of respondents who breastfed and colostrum was provided was more than 90 percent More

or less the same number of respondents provided breastmilk immediately (67% nuclear family, 62% joint family); breastfed within 1 hour (32% nuclear family, 37% joint family and prelected food(30% nuclear family, 34% joint family).

As per SLI near about 90percent of the respondents ever breastfed the child and colostrum was provided to baby, however 71 percent of the respondents belonging to very poor SLI breastfed the baby immediately as compared to only 59 per cent of the respondents from normal SLI; whereas 28 per cent of respondents belonging to very poor SLI and 40 percent of respondents belonging to normal SLI breastfed the baby within 1 hour of birth.

5.3 Summary

Overall source of information regarding, the knowledge of respondents about child feeding recommendations was generally concentrated among doctors, relatives and to an extent ANM. It is prominently reflected in terms of breastfeeding and providing the first milk to the newborn. Relatives are the major the source of information regarding respondents knowledge about exclusive breastfeeding up to 6 months.

Education seems to be contributing positively in terms of awareness of respondents that children should be breastfed at least 18 months along with the complimentary food which was responded positively by half the number of the respondents who are illiterate to 80% of respondents with educational level graduate and above. However, the reverse is observed in terms of respondents awareness in avoiding readymade food with only 50% of respondents who are illiterate to 60% of respondents who are with the primary level of education, agreeing that it should be avoided. Among respondents who are illiterate, 71% agreed that the baby should not be given any other food apart from breast milk, whereas 91% of respondents with 15+ years of education agreed to the same.

Strikingly, there are 6 respondents who have given birth at age less than 18 years and all of them agreed that first milk should be provided to babies and babies should be given complementary foods from 6 months onwards. Only three fourth of the respondents who had the first delivery at age 25+ are aware that breastfeeding should be started immediately followed by 70% of respondents who had the first delivery in the age group 20-24 years of age. Strikingly a 20% difference in the awareness that a baby can be given anything else apart from milk in the first 6 months between very young respondents who had first delivery <18 years of age to other age groups was observed. Further, there was a 20% difference between respondents who had the first delivery in the age group 18-19 years and 25+ in terms of awareness that the baby should be breastfed at least up to 18 months along with complementary feeding.

Chapter 6

Infant Child Feeding and Healthcare Practices

Infant feeding practices are very essential, and it has significant effects on both mothers and children. Appropriate infant feeding, starting from the time of birth, is vital for the physical and mental development of children. Breastfeeding enhances the nutritional status of young children and diminishes morbidity and mortality risk among children. Breast milk not only provides important nutrients but also protects the child against infection. The timing and type of supplementary foods introduced in an infant's diet also have significant effects on the child's' nutritional status and morbidity status as well. The Government of India recommends that initiation of breastfeeding should begin immediately after childbirth, preferably within one hour (Ministry of Respondents and Child Development, 2006). Early initiation of breastfeeding is encouraged for many causes. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss. The first breast milk (colostrum) is highly nutritious and has antibodies that protect the newborn from diseases. Late initiation of breastfeeding not only deprives the child of valuable colostrum, but becomes a reason for the introduction of prelacteal feeds (that is, something other than breast milk) like glucose water, honey, ghutti, animal milk, or powdered milk that are potentially harmful and contribute to diarrhoea in the newborn. In the survey, data on breastfeeding and complementary feeding were obtained from a set of questions asked from the respondents. These questions were asked for all children born. Tables 4 show the percentage of children who were ever breastfed and who started breastfeeding soon after birth. The table also gives the percentage of children who received a prelacteal feed during the first three days after birth.

6.1 Breastfeeding and complimentary feeding

Though breastfeeding is nearly universal in slums of Pune, very few children are put to the breast immediately after birth (**Table 6.1**). Ninety-eight percent of children under age six have ever been breastfed, however only ninety two percent have given the colostrum to child. The proportion of respondents have given colostrum to child was higher in those respondents who have knowledge of first milk given to child, respondents have knowledge of immediately start of breastfeeding, respondents having knowledge of breastmilk should be given six or more month. Further, 65.5% of mother reported that they have given the breastfed to baby immediately after birth. Almost ninety per cent start giving breastfeeding to baby within one day of birth. Almost one third of the respondents have reported that they have given the prelacted feed to baby within three days. There is not much variation observed in the pattern of breastfeeding across the

mother knowledge and characteristics, but ever breastfeeding was higher (98.4%) among respondents who had knowledge of first milk given to baby than those did not have knowledge. Further those respondents who had knowledge of first milk given to child they were more likely to given breast milk immediately to baby than it counterparts. Ninety percent of respondents with the knowledge of first milk given to baby reported they have given breast milk to baby within one day of birth, while in its counterpart, only 70.5 % of respondents reported that they have given breast milk to baby within one day of birth. It can be also seen that the percentage of children received prelacted feed is less (30.7%) among those who had knowledge of first milk given to baby than those did not have knowledge (68.4%). Moreover, percentage of respondents given immediately breast milk to baby was higher (79.9%) in those who have knowledge of breastfeeding should be start immediately after birth than its counterparts (237%). Percentage of respondents given pretacted feed to child within three days is higher (46.3%) in those who had knowledge of anything else than breastmilk given the baby within first six months, whereas 30.4 percent from no knowledge of anything else than breastmilk given the baby within first six months, have not given prelacted feed to baby within three days.

Table 6.1: Ever breastfeed to the baby and the timing of the breastfeeding practices by mother's knowledge

Mother knowledge and background characteristics	Ever breastfeed to the Child	Colostrum given to the child	Time to first breast milk given to child		Percentage who given a prelacted feed to baby	Sample
			Immediately	Within one day of birth		
Whether first milk given to newborn						
Yes	98.4	95.1	66.6	90.7	30.7	**371**
No	94.7	31.6	36.8	70.6	68.4	**19**
When should the breastfeeding start after birth						
After 2 hours	99	85.7	23.7	75	50	**98**
Immediately	97.9	94.2	79.7	94.8	26.7	**292**
Knowledge of months should be exclusive breastfeed						
Less than 6 months	100	85.7	47.6	85.7	33.3	**21**
6 months	98.4	91.9	62.2	89.3	34.9	**258**
7 - 12 months	98	94	71.4	93.9	36	**50**
More than 12 months	96.7	93.4	81.4	89.8	19.7	**61**

Mother knowledge and background characteristics	Ever breastfeed to the Child	Colostrum given to the child	Time to first breast milk given to child		Percentage who given a prelacted feed to baby	Sample
			Immediately	Within one day of birth		
Knowledge of anything else than breastmilk given the baby within first six months						
Yes	98.1	90.7	60.4	90.6	46.3	**54**
No	98.2	92.3	66.4	89.7	30.4	**336**
Total	**98.2**	**92.1**	**65.5**	**89.8**	**32.6**	**390**

Table 6.2 show the percentage of children who were ever breastfed and who started breastfeeding soon after birth by background characteristics. Though the analysis is not showing much differences in among socio-economic characteristics, but the gender difference is clearly exits in the child breastfeeding practice. Percentage of children received colostrum was higher among male child then female child. Similarly, the percentage of immediate breastfeeding was higher (70%) in male children than female children (60%). The ever breastfeed to child was less, if respondents belongs to 20-24 years age group, completed secondary or higher secondary level of schooling, follower of 'other religion, belongs to open caste category, or if children born to respondents in household in Medium SLI. With increase in respondents' educational levels, the proportion of respondents given the colostrum to child has decreased. With increase in SLI, the proportion of respondents given colostrum to child has also increased. Immediately initiation of breastfeeding was not common for any group, but it was highest for children born to thirty years or more respondents (69.4%), illiterate respondents (92.9%), Hindu respondents (68.5%), Domestic workers (76.4%) and children born to respondents in household in low SLI (71.9%). Immediate breast milk given to baby were least likely if the mother was from 18-19 year age group, if she was more educated, if she was from OBC caste, or if she belongs to higher SLI category.

Table 6.2: Ever breastfeed to the baby and the timing of the breastfeeding practices by mother's background characteristics

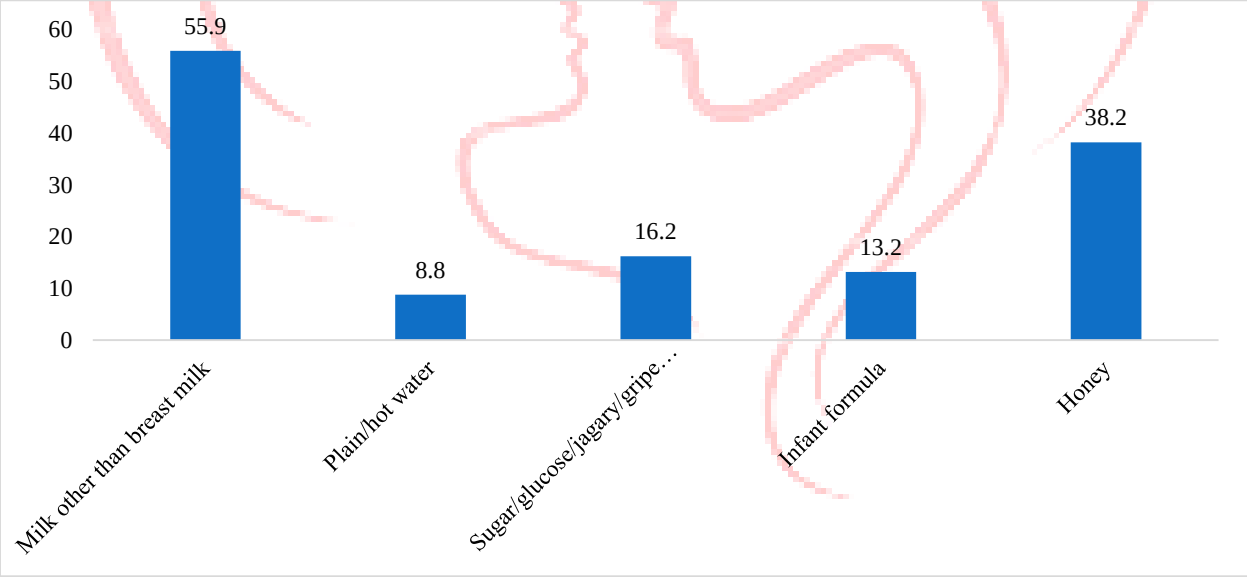
Background Characteristics	Ever breastfeed to the Child	Colostrum given to the child	Time to first breast milk given to child		Percentage who given a prelacted feed to baby	Sample
			Immediately	Within one day of birth		
Child age (in month)						
<6 months	100	90.3	77.4	22.6	19.4	31
6-8 months	94.7	94.7	52.6	47.4	26.3	38
9-11 months	95.8	91.7	79.2	20.8	33.3	24

Background Characteristics	Ever breastfeed to the Child	Colostrum given to the child	Time to first breast milk given to child		Percentage who given a prelacted feed to baby	Sample
			Immediately	Within one day of birth		
12-14 months	100	90.3	51.6	48.4	38.7	31
15-17 months	100	87.5	56.3	43.8	56.3	16
18-23 month	97.7	93	65.1	34.9	23.3	43
24 or more months	98.6	92.3	66.7	33.3	34.8	207
Sex of the child						
Male	99	92.4	70.1	30	33.5	197
Female	97.4	91.7	60.1	39.9	31.6	193
Age Group						
18 - 19 Year	100	100	62.5	100	12.5	**8**
20 - 24 Year	96.2	89.2	64.8	88.8	36.2	**130**
25 - 29 Year	98.9	93.3	64.6	91.5	32.8	**180**
30+	100	93.1	69.4	86.1	27.8	**72**
Year of Schooling						
Illiterate	100	100	92.9	100	28.6	**14**
Primary	100	90	80	100	40	**10**
Middle	100	92.7	67.3	92.7	30.9	**55**
Secondary	97.4	91.7	67	88.8	34.7	**193**
Higher Secondary	97.3	94.5	66.2	91.6	26	**73**
Graduation	100	85.7	40	82.9	40	**35**
Post-Graduation	100	90	60	80	20	**10**
Age at Marriage						
< 18 Year	97.7	86.4	72.1	93	40.9	**44**
18 - 19 Year	98	93.3	75.8	91.8	32.7	**150**
20 - 24 Year	98.3	92.4	60.4	87.5	30.2	**172**
25 and Above	100	91.7	58.3	87.5	33.3	**24**
Religion						
Hindu	98.4	91	68.5	86.3	30.6	**245**
Muslim	98.3	96.6	51.7	96.6	39	**59**
Buddhist/Neo Buddhist	98.6	93.2	68.1	94.4	31.5	**73**
Others	92.3	84.6	58.3	100	46.2	**13**
Caste						
SC	98.7	30.2	66	91.1	30.2	**149**
ST	100	38.5	69.2	76.9	38.5	**13**
OBC	100	52.5	47.5	80	52.5	**40**
OPEN	96.9	31.1	69.2	91.7	31.1	**161**
Others	100	22.2	66.7	92.6	22.2	**27**
Respondent's Occupation						
Not working	98.2	91	63.3	89.4	31.3	**336**
Domestic worker	98.2	98.2	76.4	92.4	40	**23**

Background Characteristics	Ever breastfeed to the Child	Colostrum given to the child	Time to first breast milk given to child		Percentage who given a prelacted feed to baby	Sample
			Immediately	Within one day of birth		
SLI						
Low	98.6	90.8	71.9	90.7	34	**141**
Medium	97.7	92.2	64	85.5	34.4	**128**
High	98.3	93.4	59.7	93.3	28.9	**121**
Type of Family						
Nuclear family	98.3	90.6	68.4	88.6	30.6	**180**
Joint family	98.1	93.3	63.1	90.8	34.3	**210**
Total	**98.2**	**92.1**	**65.5**	**89.8**	**32.6**	**390**

Mothers who gave their child anything to drink other than breast milk in the three days after child birth were asked what was given to the child. By far, the most common prelacteal liquid is milk other than breast milk (Figure 6.1). Other common prelacteal liquids are honey (38.2%) (often given as part of a blessing ceremony), sugar or glucose water/jugary/gripwate (16.2%), infant formula (13.2%) and plain/hot water (8.8%).

Figure 6.1. Percent who received specific prelacteal liquids within three days



Note: based on the mother's responses

6.2 Duration of Breastfeeding

Duration of breastfeeding can affect the length of postpartum amenorrhoea of respondents and children nutritional level. Postpartum amenorrhoea plays role as a natural contraception for respondents to reduce the fertility. It is important that breastfeeding is continued for two years or more because breast milk provides useful amounts of energy, good quality protein, and other nutrients to child. **Table 6.3** shows the duration of breastfeeding for last-born child under three years of age by Mother knowledge characteristics. The median duration of breastfeeding for youngest child is 17 months. The median duration of breastfeeding is one month shorter in those respondents who have knowledge of first milk given to child than its counterparts. The duration of breastfeeding is higher (18 months) in those who have knowledge of breastfeeding immediately start after child birth than those who replied after 2 hours (14.5 months), Similarly the median duration of breastfeeding is higher among those respondents who have knowledge of exclusive breastfeeding should be given more than 12 month (18 months). The duration of breastfeeding is relatively high in those respondents who have no knowledge of anything else than breastmilk given the baby within first six months than its counterparts.

Table 6.3: Months of breastfeed given to baby, median duration of breastfeeding among youngest child three year of age by mother knowledge characteristics

Mother knowledge and background characteristics	Months of breastfeeding the baby			MDBF	Sample
	<6 Months	6 - 12 Months	13+ months		
Whether first milk given to newborn					
Yes	17.5	32.8	49.8	17	**229**
No	0	44.4	55.6	18	**9**
When should the breastfeeding start after birth					
Immediately	18.6	32	49.4	18	**172**
After 2 hours	12.1	36.4	51.5	14.5	**66**
Knowledge of months should be exclusive breastfeed					
Less than 6 months	23.1	38.5	38.5	17	**13**
6 months	19.2	32.5	48.3	15	**151**
7 - 12 months	16.1	38.7	45.2	12	**31**
More than 12 months	4.9	29.3	65.9	18	**41**
Knowledge of anything else than breastmilk given the baby within first six months					
Yes	5.4	48.7	46	13	**37**
No	18.9	30.4	50.8	17	**201**
Total	16.8	33.2	50	17	**238**

Note: MDBF= median duration of breastfeeding

Moreover, the median duration of breastfeeding is three months shorter for female child than for male child. The median duration of breastfeeding is also shorter in mothers age group 18-19 years, and it increases steadily with the mother age and education level **(Table 6.4).** The duration of breastfeeding is relatively high for children from domestic worker category and medium SLI.

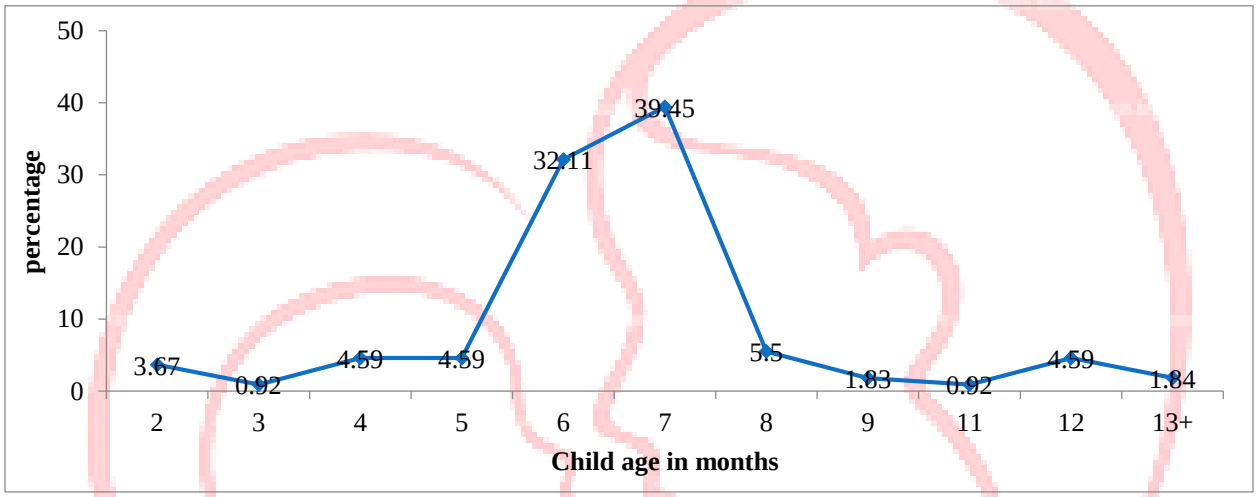
Table 6.4: Months of breastfeed given to baby, median duration of breastfeeding among youngest child three year of age by background characteristics

Background characteristics	Months of breastfeeding the baby			MDBF	Sample
	<6 Months	6 - 12 Months	13 and more		
Sex of the child					
Male	16.1	32.2	51.7	18	118
Female	17.5	34.2	48.3	15	120
Mothers age					
18 - 19 Year	50	37.5	12.5	5.5	**8**
20 - 24 Year	18.6	40.2	41.2	12	**97**
25 - 29 Year	12.2	25.5	62.2	18	**98**
30+	17.1	34.3	48.6	18	**35**
Year of Schooling					
Illiterate	0	62.5	37.5	12	**8**
Primary	33.3	33.3	33.3	13.5	**6**
Middle	12.5	34.4	53.1	18	**32**
Secondary	18.8	33	48.2	17	**112**
Higher Secondary	17.4	30.4	52.2	14	**46**
Graduation	19.2	30.8	50	16	**26**
Post-Graduation	0	25	75	18	**8**
Age at Marriage					
< 18 Year	20	36	44	14	**25**
18 - 19 Year	12.2	41.1	46.7	15	**90**
20 - 24 Year	21.5	23.4	55.1	17	**107**
25 and Above	6.3	50	43.8	18	**16**
Religion					
Hindu	18.7	32.9	48.4	15.5	**155**
Muslim	11.4	34.3	54.3	17	**35**
Buddhist/Neo Buddhist	9.5	31	59.5	18	**42**
Others	50	50	0	12	**6**
Caste					
SC	10.8	36.6	52.7	18	**93**
ST	22.2	22.2	55.6	18	**9**
OBC	11.1	33.3	55.6	17	**18**
OPEN	18.9	32.1	49.1	15	**106**
Respondent's Occupation					
Not working	16.9	33.8	49.3	15	**213**
Domestic worker	16	28	56	18	**25**
SLI					
Low	19.4	37.5	43.1	14.5	**72**
Medium	15.9	32.9	51.2	18	**82**
High	12.5	33.3	54.2	16.5	**72**

Background characteristics	Months of breastfeeding the baby			MDBF	Sample
	<6 Months	6 - 12 Months	13 and more		
Type of Family					
Nuclear family	16	32.1	51.9	17	**106**
Joint family	17.4	34.1	48.5	15.5	**132**
Total	16.8	33.2	50	17	**238**

Note: MDBF= median duration of breastfeeding

Figure 6.2: Child age at which complementary food introduced to them among children three years of age



Exclusive breastfeeding is that infant only receives mother breast milk, no other solid, semisolid or liquid given to a child. It recommends that children should be exclusively breastfed for the first six months of life and that children should be given appropriate and adequate complementary feeding in addition to continued breastfeeding from six months of age. The purpose of complementary feeding is to complement the breast milk and sustain the growth and development of the child. The above figure (**Figure 6.2**) shows the child age at which complimentary food introduced to them among children three year of age. From the graph it can be seen that majority of the children received complimentary food at the age of six or seven month.

Table 6.5 shows the month in which complimentary food introduced to child by mother's knowledge characteristics. Majority of the mothers (76.5%) introduced the complimentary food between six to seven months of child birth. Further, result shows that about 14% of the mothers introduced the complimentary food to the child in less than six months of child birth. Mothers' with knowledge of breastfeeding should start immediately after child birth, among them 10.5 % had started giving complimentary food to child in less than six months and 80.2 % had started given complimentary food to child during 6-7 months. Further, among those who had knowledge of exclusive breastfeeding should be at least six months, among them

37.5 % of the mothers had started giving the complimentary food within six months and 50 % had started giving the complimentary food during 6-7 months.

However, those who had reported the knowledge of exclusive breastfeeding should be given more than 12 months, among them about 11 % of the mothers had started given the complimentary food in less than six months and 77.8 % had started given the complimentary food to the child during six to seven months. Moreover, 35 percent of mothers' had introduced complementary food to child in less than six month, when they have knowledge of anything else than breastmilk given the baby within first six months, whereas, only 9 percent of mothers' had introduced complimentary food in those who had replied as 'no'.

Table 6.5: Child age at which complementary food introduced to them among children three years of age

Mother knowledge and background characteristics	Child age at which complementary food introduced			Sample
	<6 Months	6 - 7 Months	8 and more	
Whether first milk given to newborn				
Yes	12.7	78.2	9.1	110
No	40	40	20	5
When should the breastfeeding start after birth				
Immediately	10.5	80.2	9.3	86
After 2 hours	24.1	65.5	10.3	29
Knowledge of months should be exclusive breastfeed				
Less than 6 months	37.5	50	12.5	8
6 months	11.3	78.9	9.9	71
7 - 12 months	16.7	77.8	5.6	18
More than 12 months	11.1	77.8	11.1	18
Knowledge of anything else than breastmilk given the baby within first six months				
Yes	35	60	5	20
No	9.5	80	10.5	95
Total	**13.9**	**76.5**	**9.6**	**115**

6.3 Types of Supplemental Food

Table 6.6: Frequency of different type of food consumption by children.

Food items	Average		Low		Never	Total responses
	Daily	Alternate days	Weekly	As and when available	Never	
Fruits	22.7	26.6	21.8	21.5	7.4	353
Milk only	76.7	5.8	2.3	0.9	14.3	343
Milk with pack supplements	36.3	11.9	3.3	6.9	41.6	303
Milk with homemade supplement	37	7.6	4.7	2.3	33.8	393
Porridge	14.2	11.9	15.3	6.7	51.9	268
Packed food (biscuits bread toast etc)	49.6	21.6	6.7	7.3	10.8	329
Packed food (Chips, Farsan, etc)	18.5	26.6	16.6	12.7	25.6	308
Packed Food-Noodles	8.2	15.5	18.4	8.5	30.9	279
Sweets (Ladoos shera cake etc)	21.2	20.9	23.6	11.8	22.6	297
Rice, wheat, Jowar, Bajra, etc.	86.6	1.9	0.8	1.4	9.2	359
Pulses	40.6	23.1	10	10	16.3	320
Vegetables	54.5	19.1	6.5	7.9	12	341
Sprouted pulses	17.2	19.5	20.9	12.8	29.6	297
Fish	2.6	10.3	21.7	26.1	32	316
Egg	10.3	23.5	27.6	22.3	17.3	344
Chicken	2.7	10.1	30.1	33.6	23.5	336
Meat	1.6	7.5	24.9	28.2	37.7	305
Process food (Corn flakes, oats)	1.2	2.9	13.8	17	49.9	289
Ready to eat meals	0.6	4.7	9.1	10.3	59.5	287
Fizzy drinks	2.3	3.4	4	11.7	78.5	298
Tea	31.7	6.5	3.2	3.5	48.1	317
Coffee	0.9	2.6	7.6	2.9	68.9	283

The minimum diet diversity is very essential for child growth when breastfeed is no longer sufficient to meet the child's nutritional needs. However, the adequacy of dietary diversity depends on the availability of a variety of food in the household as well as the cultural feeding practice of the household. Moreover, food diversity also depends on the household's economic status. **Table 6.6** depicts that among the food items, children consume milk, packed food, rice and vegetables most often. 22.7% and 76.7% of respondents reported that they are giving fruit and milk to the child on a daily basis. Further, 36.3% of respondents are giving the milk with pack supplements and 37% of respondents are giving milk with a homemade supplement to the children on a daily basis. The consumption of Porridge is less common in the

study area. About half of the respondents reported that they are giving the packed food (biscuits bead toast etc.) to children on a daily basis. Almost one-fifth of the respondents are giving sweet to children daily or alternate days. 86.6% of respondents are giving the rice, wheat, jowar, bajra to the child and only 40.6% of the respondents reported that they are giving pulses to the child on a daily basis. 54.5 % of respondents giving vegetables to child daily and an additional only one-fifth of respondents giving vegetables to child alternate. In term of non-vegetarian food, only 1.6% to 10.3% of respondents are giving fish, egg, chicken and meat to children on a daily basis.

Chapter 7:

Child Health Status and

Mother knowledge plays an important role in terms of child feeding knowledge and practices. This chapter presents findings related to maternal knowledge and child health care and feeding practices with and without illness in the selected areas of urban slums in Pune. The information we believe will assist policy makers, planners, and other collaborators in the health sector to improve maternal knowledge and ultimately child health care. Feeding practices were assessed using dietary recall of foods the child was usually provided. To assess mothers' child-feeding knowledge, Questions on food intake, such as milk, grains, pulses, vegetables, fruits, dairy products, eggs and flesh foods were asked to mothers. For mothers with children 6 months and above, questions on feeding frequency and continued breastfeeding were included.

An estimated 35% of global under-five deaths and 50-70% of diarrhoeal diseases, measles, malaria and lower respiratory infections in developing countries are attributable to child undernutrition (Black et, 2008) Restriction and withdrawal of foods are common among children suffering from illness. Mothers often turn to the family, especially elders to seek advice on how to feed their sick children. Thus, traditional beliefs and behaviours guide the use of 'special' feeding practices, foods and diets for sick children. Hence, building knowledge based on traditional beliefs and medicines, is of most importance as well as proper guidance of community health workers and primary health care practitioners can help in providing timely information for mothers.

7.1 Child Feeding during illness/morbidity

Diarrhoea and fever/cold is one of the major causes of morbidity and mortality among young children. Mothers were asked whether their children had diarrhoea, fever/cold and other types of diseases. **Table 6.1** shows the percentage of children under six who suffered diarrhoea, fever/cold and other illness in the last one year preceding the survey according to background characteristics.

In all the categories, the prevalence of fever was higher than the prevalence of diarrhoea or other types of illness. The majority of the children (70%) suffered from fever. Nineteen percent of children under six had diarrhoea and 17% suffered from other types of diseases.

Prevalence of diarrhoea was mostly observed among respondents who are illiterate (41%), among caste OBC (31%), and among Muslims (26%). Fever/cough seems to be common among all the children. Religion-wise 57% of respondents from the Muslim religion reported fever/cold in children compared to 71% among Hindus and 72% among Buddhist religions and all the respondents from other religion reported

the child suffered from cold/fever. Caste wise 48% from caste others, 69% from caste open, 80% from caste OBC and 72% and 73% from caste SC and ST respectively reported the child suffering from fever/cold.

Table 7.1: Percentage of children suffering from diarrhoea, fever/cough and any disease during last 1 year by respondent's background characteristics

Background characteristic	Diarrhoea	Cough/Fever	Any Disease (Other than Diarrhoea and Fever/Cough)	Sample
Age Group				
18 - 19 Year	10	60	20	10
20 - 24 Year	19.6	65.8	13.3	158
25 - 29 Year	19.7	75.2	18.8	218
30+	17.5	67.5	18.8	80
Year of Schooling				
Illiterate	41.2	70.6	0	17
Primary	0	80	20	10
Middle	17.6	62.2	16.2	74
Secondary	21	68.6	17.9	229
Higher Secondary	15.1	79.1	15.1	86
Graduation	15	72.5	20	40
Post-Graduation	20	80	30	10
Age at Marriage				
< 18 Year	15.1	66	24.5	53
18 - 19 Year	20.3	68.1	15.4	182
20 - 24 Year	20.7	73.4	15.3	203
25 and Above	7.1	71.4	25	28
Religion				
Hindu	20.2	71.6	16.8	292
Muslim	26.3	57.9	14.5	76
Buddhist/Neo Buddhist	9.5	72.6	20.2	84
Others	14.3	100	14.3	14
Caste				
SC	21	72.2	14.8	176
ST	13.3	73.3	13.3	15
OBC	31.9	80.9	21.3	47
OPEN	14.9	69.7	18.5	195
Others	18.2	48.5	15.2	33
Respondent's Occupation				
Not working	20.1	68.7	16.8	399
Working	13.4	80.6	17.9	67
SLI				
Low	22.2	65.3	13.2	167
Medium	11.6	70.1	18.3	164
High	24.4	77	20	135

Background characteristic	Diarrhoea	Cough/Fever	Any Disease (Other than Diarrhoea and Fever/Cough)	Sample
Type of Family				
Nuclear family	16.7	71.6	19.1	215
Joint family	21.1	69.3	15.1	251
Total	19.1	70.4	17	466

Table 7.2: Type of food provided to the children during their illness by the mother's (% of food provided for each disease separately)

Type of food provided	Diarrhoea	Cough/ Fever	Any Disease (Other than Diarrhoea and Fever/Cough)
Warm food/water (gruels/easy to digest food/(specify)biscuits/toast)	83.3	79.7	35.9
Give curds	5.6	18	-
Give glucose/ORS	53.3	38.3	-
Boiled/filter water	41.1	34.7	46.2
Avoid oily food/Ghee, Butter	5.6	13.5	39.7
Avoid street food/water	1.1	6.1	10.3
Maintain hygiene	1.1	9.6	-
Avoid non-veg	-	3.2	19.2
Avoid cold/refrigerated food	-	7.1	16.7
Avoid packet food	4.4	9	7.7
Provide nutritious food	-	-	52.6
Provide fruits daily	-	-	38.5
Total	**90**	**311**	**78**

To ascertain how widespread knowledge of food precautions and care such as intake of warm food, ORS, glucose etc. respondents were asked about the food provided/care during illness.

The above **table** 7.**2**, depicts the type of food provided to children by types of illness. Eighty-three percent of the respondents provided warm food/water. In order to understand diarrhoea management by mothers of children questions were asked pertaining to the home-based treatment. The administration of oral rehydration solution (ORS) is a simple means of countering the effects of the dehydration that accompanies diarrhoea. As shown in Table above, almost half the number of respondents (53%) gave ORS when her child was suffering from diarrhoea. Further, 41% reported they gave boiled water when children are suffering from diarrhoea.

Similarly, when a child is having fever/cough 79% of the respondents responded that they provide warm food and 38% and 34% reported that they provide glucose and boiled water respectively. A little more half

the number of respondents (52%) provided nutritious food and 46% reported that they provide boiled water to children suffering from other types of diseases.

7.2 Child Health Status

Urbanization has historically been acknowledged to lead to mortality reduction due to economic opulence and increased access to modern medical care. Although, this has not been the right for most developing world where evidence suggests that quality of life in some urban areas is even worse than in rural areas mainly due to a high rate of poverty and inequitable distribution of resources in pockets of the urban population. Unemployment and irregular and unskilled livelihood opportunities limit financial capabilities to avail nutritious child food and demand for quality healthcare at household level. Slum residents are also heterogeneous in some socioeconomic features. The poor environmental and housing conditions under which slum-dwellers live draw up a heavy disease burden on residents, particularly on children, because they are vulnerable to infectious diseases. To promote child survival and prevent infant mortality, the Government of India has initiated several curative and preventive program under the umbrella of National Health Mission (NHM) through the management of the life threating disease, provide the food supplementation at the right time and proper counselling to mother related to child care practices. In the given backdrop present chapter deals with child nutritional status in the Pune slums.

Table 7.3 shows the percent distribution of children ever admitted to the hospital by demographic and socio-economic characteristics of the respondents. 34.7 percent of the children under age six years had ever admitted to the hospital/health facility as reported by mother. The highest percentage of children admitted to hospital/ health facilities from children age 37-48 months (38.9%) and male children (39.5%). The proportion of ever admitted child to hospital/ health facility was higher in respondents's age group 18-19 years. The percentage of children admitted to hospital/health facility was higher from whose mother completed graduation or post-graduation level education. It was also observed that the percentage of children admitted to hospital/health facility was highest among children belongs to Hindu and Buddhist/Neo Buddhist (36..9% each). 36.3 percentage of children belongs to not working mothers and 25.4 percent of children belongs to working mothers were ever admitted to hospital/health facility. The percentage of children admitted to hospital/health facility was higher (36.3%) among children belongs to joint family and 33 percentage of children ever admitted hospital/health facility from nuclear family.

Table 7.4 provides the reason of ever admitting the baby to hospital/health facility. Results shows that those children who had ever admitted to hospital/health facility, among them highest percentage of children admitted due to the pneumonia (40.7%), followed by high fever (29%), Diarrhea/Dysentery (5.6%). 4.9% of children admitted to hospital/health facility due to under nutrition and 16.7 % of children admitted in the

hospital/health facility for other cause. Out of total ever admitted children in hospital, reason of the 2.5% of the children was not known (Table 2).

Table 7.3: Percentage of children have ever admitted to hospital/heath facility due to any health issue by mother's background characteristics

Background characteristics	baby ever admitted to hospital/health facility	Sample
Child age (in months)		
<6 Months	15.4	26
7 - 12 Months	31.4	86
13 - 24 Months	35.7	126
25 - 36 Months	38	92
37 - 48 Months	38.9	72
49 - 60 Months	35.9	64
Sex of the Child		
Male	39.5	228
Female	30.3	238
Age Group		
18 - 19 Year	40	10
20 - 24 Year	31	158
25 - 29 Year	37.2	218
30+	35	52
Year of Schooling		
Illiterate	29.4	17
Primary	10	10
Middle	24.3	74
Secondary	25.3	229
Higher Secondary	24.4	86
Graduation	42.5	40
Post-Graduation	40	10
Age at Marriage		
< 18 Year	28.3	53
18 - 19 Year	34.1	182
20 - 24 Year	35.5	203
25 and Above	46.4	28
Religion		
Hindu	36.9	292
Muslim	26.3	76
Buddhist/Neo Buddhist	36.9	84
Others	21.4	14
Caste		
SC	32.9	176
ST	46.7	15
OBC	27.7	47
OPEN	41	195
Others	12.1	33
Respondent's Occupation		
Not working	36.3	399

Background characteristics	baby ever admitted to hospital/health facility	Sample
Working	25.4	67
SLI		
Low	31.7	167
Medium	36.6	164
High	36.3	135
Type of Family		
Nuclear family	33	215
Joint family	36.2	251
Total	**34.7**	**466**

Table 7.4 Reason for admitting the baby to hospital/health facility

Reason for admitting the baby to hospital/health facility	%
Under nutrition	4.9
Diarrhea/Dysentery	5.6
Pneumonia/ARI	40.7
High fever	29.0
Accident/Injury	0.6
Other	16.7
Don't Know	2.5
Total	**162**

7.3 Child health status by mother knowledge characteristics

Mothers knowledge and practice plays a vital role to prevent the children from morbidities and life threating events. However, mother's knowledge about Infant Young and Child Feeding (IYCF) depends on various factors, such as, education place of residence, media exposure, age and sex of the child, government policies, economic status of the individual. Nevertheless, the rate of knowledge on IYCF recommendation differed across countries. Sometime inadequate knowledge is often an important determinant of care givers feeding practice than availability of food. Moreover, evidence suggest that mother knowledge about IYCF and practice of these have significant effect on child morbidity and mortality.

The **table 7.5** shows that percentage of children falling sick in last one month with mother's knowledge and actual feeding practices. In overall, half of the children fallen sick in last one month and the percentage of sick children was higher among children from respondents having no knowledge of first milk given to child (50.7%), knowledge of breastfeeding start after 2 hours of child birth (51.4%) and knowledge of anything

else given to child with six month of child birth (61.4%) than its counterparts. Similarly, if we look into practice variables, it can be seen that about sixty-six percentage of children fallen sick who never breastfed, whereas, fifty percentage of children fallen sick in those who ever breastfeed. Further, the percentage of sick child was higher in those who did received first milk (colostrum, 66.7%), breastfeeding started after two hours of child birth, and within the three days of child birth baby given anything to drink other than breastmilk (55.8%) compared with their counterparts.

Table 7.6 shows the percentage of children fallen sick in last one month due to any reason in the slums of Pune by mother knowledge variables. Result shows that in overall more than half the children were fallen sick due to various reason. The percentage of sick child was higher among male child (52%) and children from to 18-19 age group of respondents (60%). Further, educational status of respondents emerged as a vital determinant for children morbidity status. 30% of children from respondents completed post-graduation level education were fallen sick in last one month, whereas, 41 percent of children from illiterate mother were fallen sick in last one month. The religions differences can also been observed from the table. 5.72% of children from Hindu religion and 41.7 % of children from Buddhist/Neo Buddhist religion were fallen sick in last one month from the survey date. Interestingly, percentage of children fallen sick in last one month was higher among other caste group (60.6%) followed by OBC (59.6%) and SC (48.9%). Little more than half of the children from not working respondents fallen sick in last one month, whereas, 46.3% of children belongs to working respondents category fallen sick in last one month. The contradict result has been observed in Standard of living index (SLI) categories of the households. The percentage of children fallen sick in last one month was low (43.7%) among children belongs to low SLI household than medium (55.5%) and high SLI (52.6%). It was also found that the risk of sickness among was higher in nuclear family compared to joint family.

Table 7.5: Percentage of children falling sick in last one month with knowledge mother's and actual practice

Knowledge Variable and practice variables	Fall sick (last one months)	Sample
Knowledge Variable		
Whether first milk given to newborn		
No	45.8	24
Yes	50.7	442
When should the breastfeeding start after birth		
Immediately	47.4	352
After 2 hours	51.4	114
Knowledge of months should be exclusive breastfeed		
Less than 6 months	50	22
6 months	50.7	304

Knowledge Variable and practice variables	Fall sick (last one months)	Sample
7 - 12 months	63.9	61
More than 12 months	39.2	79
Knowledge of anything else than breastmilk given the baby within first six months		
No	48.5	396
Yes	61.4	70
Practice Variables		
Ever Breastfeed		
No	66.7	9
Yes	50.1	457
First Milk given (Colostrum)		
No	62.9	35
Yes	49.4	431
Time taken for starting breastfeed		
Immediately	48.9	311
After 2 hours	53.1	145
Within first three days, was the baby given anything to drink other than milk		
No	47.9	319
Yes	55.8	147
Total	**50.4**	**466**

Table 7.6: Percentage distribution of children falling sick in last 1 month due to any reason except undernutrition by background characteristics

Background characteristics	Fall Sick (last one months)	Sample
Sex of the Child		
Male	52.6	228
Female	48.3	238
Age Group		
18 - 19 Year	60	10
20 - 24 Year	46.8	158
25 - 29 Year	53.7	218
30+	47.5	80
Year of Schooling		
Illiterate	41.2	17
Primary	60	10
Middle	48.6	74
Secondary	47.6	229
Higher Secondary	63.9	86
Graduation	47.5	40
Post-Graduation	30	10
Age at Marriage		
< 18 Year	52.8	53

Background characteristics	Fall Sick (last one months)	Sample
18 - 19 Year	48.3	182
20 - 24 Year	50.7	203
25 and Above	57.1	28
Religion		
Hindu	52.7	292
Muslim	48.7	76
Buddhist/Neo Buddhist	41.7	84
Others	64.3	14
Caste		
SC	48.9	176
ST	46.7	15
OBC	59.6	47
OPEN	48.2	195
Others	60.6	33
Respondent's Occupation		
Not working	51.1	399
Working	46.3	67
SLI		
Low	43.7	167
Medium	55.5	164
High	52.6	135
Type of Family		
Nuclear family	52.6	215
Joint family	48.6	251
Total	**50.4**	**466**

7.4 Place of treatment

The health facilities plays important role in controlling and eradicating the morbidities and mortality in community and nation. The distance from health facility, working environment, nature and behavior of health care provider, cost of medicine and sanitation are factors which attract the patient for medical care. Recently launched National Health Mission which is a umbrella program to provide the comprehensive health care facilities to all section of the society emphasis on to bring patient into public health facilities through incentives or many temptation. However, still it has been observed that many people does not have faith on public health facility and care provider to several reason. Even, the marginalized and vulnerable section of society does not prefers to go to public health facility for preventive or curative care due to inherent baseness in the health care system. Moreover, in slums, people prefers to go to private health facility compared with public health facility.

The below table depicts the place of treatment of the children falling sick during last 1 month by background characteristics in slums of Pune **(table 7.7).** Results shows that in overall, about 28.9 %, 68.1% and 3.0% of the children have taken a treatment of sickness from public health facility, private health facility and from both, respectively. It was found that as education increases, the treatment from public health facilities decreases, and treatment from private health facilities increases. The percentage of treatment from public health facility was higher (30.9%), if respondents belongs to not working category and low among respondents belongs to working category (16.1%). Similarly, respondent belongs to wealthy household preferred to go private health facility for the children treatment. About 42.5 % of children from low SLI were taken treatment form public health facility, whereas, 25.3% and 19.7% of children belongs to medium and high standard of living (SLI) household were taken treatment from private health facility, respectively.

Table 7.7: Place of treatment of the children falling sick last 1 month by mother background characteristics

Background characteristics	Type of Facility			Sample
	Public	Private	Both	
Sex of the Child				
Male	30.8	65	4.2	120
Female	27	71.3	1.7	115
Age Group				
18 - 19 Year	50	50	0	6
20 - 24 Year	29.7	68.9	1.4	74
25 - 29 Year	24.8	70.9	4.3	117
30+	36.8	60.5	2.6	38
Year of Schooling				
Illiterate	28.6	71.4	0	7
Primary	83.3	16.7	0	6
Middle	36.1	61.1	2.8	36
Secondary	33	63.3	3.7	109
Higher Secondary	18.2	80	1.8	55
Graduation	10.5	84.2	5.3	19
Post-Graduation	0	100	0	3
Age at Marriage				
< 18 Year	64.3	35.7	0	28
18 - 19 Year	19.3	78.4	2.3	88
20 - 24 Year	27.2	68	4.9	103
25 and Above	31.3	68.8	0	16
Religion				
Hindu	30.5	65.6	3.9	154
Muslim	18.9	78.4	2.7	37
Buddhist/Neo Buddhist	37.1	62.9	0	35

Background characteristics	Type of Facility			Sample
	Public	Private	Both	
Others	11.1	88.9	0	9
Caste				
SC	30.2	67.4	2.3	86
ST	28.6	71.4	0	7
OBC	21.4	67.9	10.7	28
OPEN	23.4	74.5	2.1	94
Others	60	40	0	20
Respondent's Occupation				
Not working	30.9	65.7	3.4	204
Working	16.1	83.9	0	31
SLI				
Low	42.5	57.5	0	73
Medium	25.3	71.4	3.3	91
High	19.7	74.7	5.6	71
Type of Family				
Nuclear family	29.2	67.3	3.5	113
Joint family	28.7	68.9	2.5	122
Total	**28.9**	**68.1**	**3**	**235**

7.5 Morbidities among children

Diarrhoea is one of the single most common causes of death among children under age five worldwide, following acute respiratory infection. Deaths from acute diarrhoea are most often caused by dehydration due to loss of water and electrolytes. Nearly all dehydration-related deaths can be averted by immediate management of rehydration solutions. Because deaths from diarrhoea are a significant proportion of all child deaths. Moreover, Fever is a key expression of malaria and other acute infections in children. Malaria and fever contribute to high levels of malnutrition and mortality. While fever can occur year round, malaria is more prevalent after the end of the rainy season and mostly in dirty places.

Table 7.8 shows the percentage of children under age six with diarrhoea with fever, fever/cough any disease in the last one year, by child feeding practices indicators. Overall, 17.2 percent, 53.4 percent and 74 percentage of all children under age six had diarrhea with fever, fever/cough and any disease, respectively during last one year preceding the survey. There were considerable differential observed in prevalence of disease by child feeding practice indicators. Percentage of children suffered from diarrhoea with fever was higher among who had not given first breast milk (colostrum), initiated the breastfeeding after 2 hours of birth. Similar kind of result had been observed for the fever/cough and any disease. The prevalence of fever/cough and disease was higher among those who had given anything to drink other than breast milk.

According to UNICEF, diarrhoea can be managed at home by providing children with an increased amount of fluids, or ORT, and a continuation of frequent feeding. The study indicates that 82 per cent of mothers, whose children suffered from diarrhoea with fever during last one year preceding the survey gave warm food/water (gruels/easy to digest food) to their children. 54.4 percentage of the mothers gave Glucose/ORS, and 43 percentage of the mothers gave Boiled/Filter water to the children. Similar patterns had also been observed for Fever/Cough (**table 7.9**).

Table 7.8: Percentage of children suffering from diarrhea, fever/cough and any disease during last 1-year knowledge and actual practice by respondent's

Practices Variable	**diarrhoea with fever**	**Fever/Cough**	**Any disease**	**Sample**
Ever Breastfeed				
No	33.3 (3)	55.6 (5)	88.9 (8)	9
Yes	16.9	53.4	73.7	457
First Milk given (Colostrum)				
No	22.9	57.1	80	35
Yes	16.7	53.1	73.6	431
Time taken for starting breastfeed				
Immediately	13.5	56	73.3	311
After 2 hours	24.1	48.3	75.2	145
Within first three days, was the baby given anything to drink other than milk				
No	17.2	52.4	72.7	319
Yes	17	55.8	76.9	147
Total	**17.2**	**53.4**	**74**	**466**

Table 7.9: Type of food given to child while suffering from Diarrhea and Fever/Cough

Type of food	**Diseases**	
	diarrhoea with Fever	**Fever/ Cough**
Warm food/water (gruels/easy to digest food)	82.3	79.6
Given curds	6.3	20
Given glucose/ORS	54.4	40.4
Boiled/filtered water	43	30.4
Avoid oily food	6.3	14.2
Avoid street food	1.3	6.7
Maintain hygiene	1.3	12.1
Avoid packet food	6.3	12.1
Avoid cold/refrigerated food	-	8.3
Total	**79**	**240**

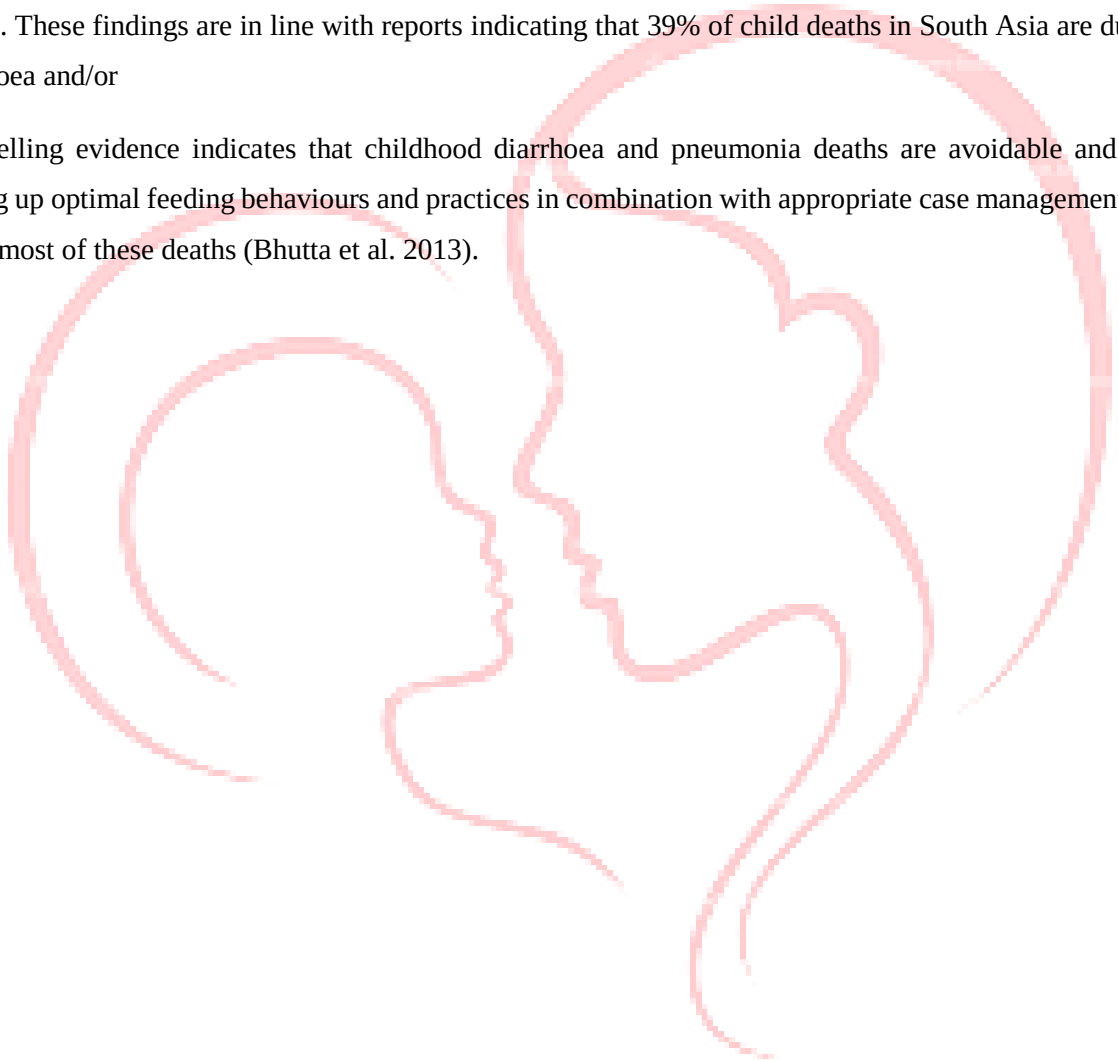
Note: percentage is more than hundred due to multiple response.

7.6 Summary

Although most mothers were knowledgeable in terms of feeding practices, but overall the knowledge regarding child feeding practices was suboptimal.

In all the categories, the prevalence of fever was higher than the prevalence of diarrhoea or other types of illness. These findings are in line with reports indicating that 39% of child deaths in South Asia are due to diarrhoea and/or

Compelling evidence indicates that childhood diarrhoea and pneumonia deaths are avoidable and that scaling up optimal feeding behaviours and practices in combination with appropriate case management can avoid most of these deaths (Bhutta et al. 2013).



Chapter 8:

Summary and Conclusion

A quarter (26%) of the world's children under five live in South Asia. Thirty-eight per cent of them have stunted growth (UNICEF 2015). However, evidence indicates that most stunting in low-income and middle-income countries occurs during the first 24 months of life as a result of suboptimal breastfeeding and complementary feeding practices, often in combination with recurrent infections (Stewart et al. 2013).

Child undernutrition and poor feeding practices remain a concern. Although children living in urban areas enjoy the advantages of urban life, including access to educational, medical and recreational facilities. However, it is also true many children from poor socio-economic conditions are deprived basic essentials such as electricity, clean water and health care even though they may live close to these services. Too many are forced to live under the most challenging conditions in congested dwellings and overcrowded settlements that are acutely vulnerable to disease and disaster.

Infant and young child feeding practices directly affect the nutritional status of children. The knowledge and feeding practices of mothers and children in an underpriveleged setting can help policy makers in measuring and improving feeding practices among the target population, thereby constraining improvements in child nutritional outcomes. This report describes breastfeeding knowledge, awareness, feeding practice and influencing factors among mothers in Pune urban slums. A cross-sectional study of 380 mothers in six slums areas i.e. Hadapsar, Sahakarnagar, Sangamwadi, Aundh, Ghole Road and Warje of Pune Municipal Corporation (PMC) area was conducted. A semi structured questionnaire was used to collect data on respondent characteristics and child feeding knowledge; a 7 days' dietary recall tool was used to record child feeding practices.

8.1 Summary

8.1.1 The summary of our findings are as follows

The Public Distribution system provides food items below the market price which supports people from lower economic status. Unlike in rural areas where people can depend on local products the people in urban areas do not have such an option. In such a situation PDS operation should be strengthened with adequate food items. However, It is disappointing that among low SLI near about quarter of the respondents (26%) are not having ration card. The reason for not having ration card as quoted by half the number of the respondents (50%) were not having the required documents. The slum dwellers frequently migrate not only

interstate and district but also from one slum area to another. There is every likelihood of loss of documents in the transit process and in adverse situation if they are forced out either by extreme climate or forced eviction. In such cases the concerned authorities can look into the matter, especially migrant and people with no proper documents. Overall enquiry into the possible mechanisms of issuing ration cards also needs to probed.

Findings suggests the majority of the respondents belonging to SC (56%), ST (77%) and BPL (61%) never availed any JSY benefits for any of the delivery. Only 29% of respondents belonging to BPL categories, 15% of respondents belonging to ST and 26% of respondents belonging to caste SC could avail JSY benefits for all the deliveries. This reflects the poor implementation of JSY schemes.
Overwhelmingly 92% of the respondents reported to have received ANC care during pregnancy, which is quite good. The percentage of respondents who are having ANC card increased as the level of education increases as evident from our findings which shows 50% of illiterate respondents own the ANC card for all the deliveries as compared to 70% of postgraduate respondents.

Breastfeeding is recommended during the first six months of life. Low rates of breastfeeding may be attributed in part to a lack of knowledge about the importance of the practice and to the reality that poor women in urban settings are either anaemic or often unable to breastfeed. Overall source of information regarding, the knowledge of respondents about child feeding is generally concentrated among doctors, relatives and to an extent ANM. It is prominently reflected in terms of breastfeeding and providing the first milk to the newborn. Relatives are the major the source of information on knowledge about exclusive breastfeeding up to 6 months. Overwhelmingly 83% of the respondents agreed that babies should not be provided with any other milk apart from Mothers milk. In terms of child feeding practices as per SLI 71 % of the respondents belonging to very poor SLI breastfed the baby immediately as compared to only 59 per cent of the respondents from medium SLI

Education seems to be contributing positively in terms of awareness of respondents regarding children should be breastfed at least 18 months along with the complimentary food which was reported positively by half the number of the respondents who are illiterate to 80% of respondents with educational level graduate and above. Strikingly a 20% difference was observed between very young respondents who had first delivery <18 years of age to other age groups in terms of exclusive breastfeeding in the first 6 months. Further, there was a 20% difference between respondents who had the first delivery in the age group 18-19 years and 25+ in terms of awareness that the baby should be breastfed at least up to 18 months along with complementary feeding.

Though breastfeeding is nearly universal in slums of Pune, very few children are put to the breast immediately after birth. The proportion of respondents who fed colostrum to child was higher in those respondents who have knowledge that first milk should be given to child. Ninety percent of respondents with the knowledge of first milk given to baby reported they have given breast milk to baby within one day of birth. The percentage of respondents given immediately breast milk to baby was higher (79.9%) in those who have knowledge that breastfeeding should start immediately after birth than its counterparts (23.7%). Though the analysis is not showing much differences among socio-economic characteristics, but the gender differential clearly exists in the child breastfeeding practice. Percentage of children who received colostrum was higher among male child then female child. Similarly, the percentage of immediate breastfeeding was higher (70%) in male children than female children (60%).

The median duration of breastfeeding is one month shorter in those respondents who have knowledge of first milk given to child than its counterparts. The duration of breastfeeding is higher (18 months) in those who have knowledge of breastfeeding immediately start after child birth than those who replied after 2 hours (14.5 months), Similarly the median duration of breastfeeding is higher among those respondents who have knowledge of exclusive breastfeeding should be given more than 12 month (18 months). The duration of breastfeeding is relatively high in those respondents who have no knowledge of anything else than breastmilk given the baby within first six months than its counterparts. Moreover, the median duration of breastfeeding is three months shorter for female child than for male child. The median duration of breastfeeding is also shorter in mothers age group 18-19 years, and it increases steadily with the mother age and education level**.**

Appropriate feeding practices are crucial for survival, growth, and development in childhood. Fruits are provided on a daily basis to children and on alternate days as reported by 22% and 26% of respondents respectively. Plain milk was provided daily, whereas milk with homemade and packed supplement was provided daily to children as reported by 37% and 36% of respondents respectively. Packed food such as biscuits, toast, etc. is provided daily to children as reported by 49% of respondents. Whereas, nutritious food such as sprouted pulses are provided to the child on a daily basis by only 17% of respondents and 29% reported that they never provide their child sprouted pulses. However, packed foods such as chips and noodles are never provided to children as reported by 25% and 30% of respondents respectively. It is good that unhealthy food items such as fizzy drinks and ready to eat meals are never provided to the child as reported by 78% and 59% of respondents respectively. Similarly, tea and porridge are also not being provided to children as reported by 48% and 51% of respondents respectively. Although most mothers were

knowledgeable in terms of feeding practices, but overall the knowledge regarding child feeding practices was suboptimal.

Global evidence shows that children's growth deteriorates rapidly during/after illness if foods and feeding practices do not meet the additional nutrient requirements associated with illness. In all the categories, the prevalence of fever was higher than the prevalence of diarrhoea or other types of illness. These findings are in line with reports indicating that 39% of child deaths in South Asia are due to diarrhoea. The highest percentage of children admitted to hospital are children in the age group 37-48 months (38.9%) and male children (39.5%). Result shows that those children who had ever admitted to hospital/health facility, among them the highest percentage of children admitted was due to the pneumonia (40.7%), followed by high fever (29%), and 16.7 % of children admitted in the hospital/health facility for other cause.

Overall, half of the number of children who have fallen sick in last one month and the percentage of sick children was higher among children from respondents having no knowledge that first milk should be given to child (50.7%), knowledge of breastfeeding start after 2 hours of child birth (51.4%) and knowledge of anything else given to child with six month of child birth (61.4%) than its counterparts. Similarly, if we look into practice variables, it can be seen that about sixty-six percentage of children who had fallen sick were never breastfed. Further, the percentage of sick child was higher in those who did receive first milk (colostrum, 66.7%), breastfeeding started after two hours of child birth, and within the three days of child birth baby given anything to drink other than breastmilk (55.8%) compared with their counterparts.

The majority of the respondents children (70%) suffered from fever. Prevalence of diarrhoea was mostly observed among respondents who are illiterate (41%), among caste OBC (31%), and among Muslims (26%). Almost half the number of respondents (53%) gave ORS when her child was suffering from diarrhoea. Further, 41% reported they gave boiled water when children are suffering from diarrhoea. Similarly, when a child is having fever/cough 79% of the respondents reported that they provide warm food and 38% and 34% reported that they provide glucose and boiled water respectively.

Educational status of respondents emerged as a vital determinant for children morbidity status. 30% of children of respondents with completed post-graduation level education were fallen sick in last one month, whereas, 41 percent of children from illiterate mother were fallen sick in last one month. Interestingly, percentage of children fallen sick in last one month was higher among other caste group (60.6%) followed by OBC (59.6%) and SC (48.9%). The contradict result has been observed in Standard of living index (SLI) categories of the households. The percentage of children fallen sick in last one month was low (43.7%) among children belongs to low SLI household than medium (55.5%) and high SLI (52.6%). It was also found that the risk of sickness among was higher in nuclear family compared to joint family.

Results indicates as education increases, the treatment from public health facilities decreases, and treatment from private health facilities increases. Similarly, respondent belongs to wealthy household preferred to go private health facility for the children treatment.

8.1.2 Key Recommendations

- Urgent prioritization on building the knowledge, skills and capacity of community healthworkers and primary health care practitioners to provide mothers/caregivers with accurate and timely information, counselling and support on IYCF, first aid and basic homemade treatment and care during and after common childhood illnesses, combined with large-scale communication programmes to address traditional beliefs and norms that may be harmful.

- Nutrition counselling which is age appropriate and specific to the family environment can be offered through the health system as well as at community level.

- PDS is having significant impact against malnutrition PDS needs to improve its delivery mechanism and improve its targeting to better serve the needs of the poor.

- Children in urban areas especially in slum localities are exposed to a challenging condition. Hence, they must be afforded with basic amenities and opportunities.

- In urban slums sanitation facilities are often shared by large numbers of people. Public facilities are frequently overcrowded especially during peak hours, poorly maintained and contaminated. Hence, special provision should be made for children and sick.

- Policy prioritizing spacious housing; safe drinking water, sanitation; food security; efficient waste management systems; and safer places to live, work and can play a major part in safeguarding the health of children.

- Policies aiming at addressing the dietary diversity gap in children's diets should emphasize intake of key nutrient-dense food groups at all ages.

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