## RESEARCH TEAM

### Principal Investigators

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<tr>
<th>Professor Venita Kaul</th>
<th>Professor Adarsh Sharma</th>
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</thead>
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<tr>
<td>Director, CECED</td>
<td>Visiting Professor, CECED</td>
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### Co-ordinator

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<th>Ms. Sameen Almas</th>
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### Project Associates

| Ms. Palak Gupta, Project Associate | Ms. Mukulika Dadhich, Project Assistant |

### Research Investigators

<table>
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<tr>
<th>Mr. Tejender Singh Bisht</th>
<th>Ms. Archita Jha</th>
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<tr>
<td>Mr. Naveen Prasad</td>
<td>Ms. Anita Saroj</td>
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Research Advisory Committee Members

Chairperson
Professor Venita Kaul, Director, CECED

Expert members
Dr. Amita Govinda, ECE Consultant
Dr. A.B.L. Srivastava, Statistical Analyst
Dr. Santosh Jain Passi, Associate Professor, Institute of Home Economics, Delhi University
Dr. Vinita Bhargava, Associate Professor, Lady Irwin College, Delhi University

Representatives of Aga Khan Foundation
Ms. Meena Narula, Senior Programme Officer, AKF
Mr. Deepak Padhi, AKF
Mr. Ganesh Reddy, AKF

Representatives of CECED, AUD members
Professor Adarsh Sharma, Visiting professor, CECED
Ms. Sameen Almas, Research Assistant
Ms. Shubhi Sachdeva, Research Associate
Ms. Mukulika Dadhich, Project Assistant
Ms. Palak Gupta, Project Associate
ACKNOWLEDGEMENT

For us at the Center for Early Childhood Education and Development (CECED, AUD) this study has a great deal of sentimental significance---it was our very first activity after the launch of our Center!! This maiden venture was made really memorable with the extremely participatory and collaborative approach adopted by AKF, our sponsors who placed the initial confidence in us by assigning this study to us and provided their utmost cooperation and support at all stages of the project. We are in particular appreciative of Ms. Meena Narula and Mr. Deepak Padhi who were always so responsive to our concerns. We would like to place on record our gratitude to the RAC also whose expert comments and critical insights helped us design and structure our study more effectively.

We would like to appreciate the painstaking efforts taken by the field investigators: Anita, Archita, Tejender and Naveen for data collection and their commitment to their work. We would also like to use this as an opportunity to thank all the residents of Nizamuddin basti- parents of children, the community volunteers and the service providers whose ready cooperation and support we got throughout the study. Our special thanks to Ms. Ghazala and Ms. Musarrat, who helped us connect with the community and who untiringly led the research team from one house to another during the course of data collection. The support received from AKF and community was indeed very encouraging.

In conclusion we would like to appreciate the little children of the Basti we interacted with, who were not only a source of joy but a lot of insightful learning for us and towards whose betterment and enrichment we hope this study will make a small contribution.

CECED Team

Adarsh Sharma          Palak Gupta
Sameen Almas           Mukulika Dadhich
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<td>BMI</td>
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<td>Centre for Early Childhood Education and Development</td>
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<td>Municipal Corporation of Delhi school</td>
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Executive Summary

1. INTRODUCTION:

This report is about the lives of young children and their families living in Nizamuddin Basti, an urban settlement located in the heart of Delhi. It is an attempt to capture the life trajectories of these young children, in the context of the basti. Right from conception (when life begins) through the young years to middle childhood, this study illustrates the wide array of experiences, expectations and challenges that young children have to face as they are growing up in this milieu. In this context, the study’s focus is on the early years and on the environment children get for Early Childhood Education and Development (ECED), which has proven to be the most crucial and formative stage in the life of the child, since these are the years when foundations are laid for motor, sensory, cognitive, language, social and personality development.

This study was undertaken by Centre for Early Childhood Education and Development (CECED), Ambedkar University in response to a request from Aga Khan Foundation (AKF) to undertake a situational analysis of the Basti households, with the focus on ECED for children from 0 to 8 years. The scope of the situation analysis was informed by the life cycle approach to children’s development so that it included not only the entire development continuum of children below 8 years but also adolescent girls, pregnant and nursing mothers and care givers. The study also outlined need-based interventions for further planning of interventions by AKF and also served as a baseline for any subsequent impact evaluation.

The context for the study was AKF’s agreement with the Government of India (GOI) for undertaking community based socio-economic development initiatives designed to improve the environment and quality of life of people living in Nizammudin Basti. The study covered the

1 Early Childhood Education and Development (ECED) is operationally defined, as all provisions for children up to 8 years of age, that ensure enabling and stimulating environments (home, programs, services) for them and address their developmental and educational needs in an integrated and comprehensive manner. These primarily include needs relating to health, nutrition and psychosocial development/education, which are fundamental for assuring optimal utilization of children’s potential and enabling them to develop a sound foundation for life (CECED, 2009).
households of 8 clusters of the Basti - Kot Mohalla, Dildar Nagar, Gali Gadriyan, Kali Masjid, Khushro Nagar, Musafir Khana, Nizam Nagar, and Quresh Masjid.

2. OBJECTIVES:

2.1 Broad objectives:
A) To carry out a need assessment and on its basis suggest interventions for AKF’s future programmes.
B) To establish a baseline for any subsequent impact evaluation.

2.2 Specific objectives:
To assess the status and quality of services available for children along the entire age/development continuum below 8 years. In addition, adolescent girls, pregnant and nursing mothers and care givers were also covered in accordance with the life cycle approach to children’s development.

The situational analysis was designed to cover an assessment of:

- **Facility based aspects:** related to space, resources and facilities, human resources (numbers and capacities), services provided and linkages amongst key service providers (government and non government) and key information regarding Education and Communication Services.
- **Population based indicators:** These cover the status of children against key ECED indicators which include the following domains:
  i. Health and Nutrition (0-8 year olds)
  ii. Immunization
  iii. Ante natal, natal and post natal care (including referrals)
  iv. Sanitation and safe water supply and key hygiene practices
  v. Early Education
  vi. Education and Economic indicators: Care givers and mothers
  vii. Awareness, current practices with respect to i. to v. above and perception on quality of services.
3. METHODOLOGY
The methodology adopted for the study was characterized by the following: approach:

3.1 Adopting a participatory process: The study followed a participatory approach with regular consultations with members from AKF. A Research Advisory Committee was constituted with experts from the areas of Early Childhood, Education, Human Development, Health, Nutrition and Statistics, and their views were integrated while carrying out the study.

3.2 Getting to know the basti: Field visits were undertaken during the preparatory phase of the study itself, to get an exposure to the reality of the basti, its residents and their living conditions, as this was considered a pre-requisite for developing the research design.

3.3 Reviewing of Documents and Related Research: At the outset, a thorough review of documents relevant for understanding the context and the AKF intervention was undertaken. Analytical review of relevant research and research tools used in studies with similar objectives was also done prior to finalizing the design and tools.

3.4 Combining Qualitative and Quantitative Methods: Based on the theoretical constructs, detailed and comprehensive information of the family profile and feedback on upbringing and care of young children during the various sub stages of life was needed. Looking at the diversity and variations in the basti population, it was felt that the quantitative data alone was likely to average out the results and may not present a realistic picture. Furthermore, there was a felt need to capture the so-called “voices” of the people of the basti and its children on issues concerning them. Hence, quantitative as well as qualitative tools were developed and used to complement and supplement the information and enable a more nuanced understanding and interpretation of data. The qualitative measures included conversations, interviews and focus group discussions with different categories of stakeholders. The details of the tools used are given in Annexure 1.

3.5 Selecting the Sample: The family composition details were scanned and analyzed meticulously by extrapolating from the data of the year 2008, to identify households having children below the age of 8 years. It was envisaged that these households are likely to have the
needed target group categories within the family. The process resulted in selection of a list of 220 households that met the eligibility criteria from which the sample of 108 households was drawn, using the systematic randomized method, taking every second household from the eligible list. It was envisaged that by covering around 50 percent households, sufficient numbers in each category would be available and all would be included in the sample.

On the advice of the Research Advisory Committee, it was decided that a minimum of 20 pregnant women must be covered in the sample for any meaningful analysis. It was agreed that the additional number be drawn using the recognized procedure of cluster sampling from additional households listed in the eligible universe of households (221) of the AKF survey and data available on registration of pregnant women at the AWCs in the Basti.

3.6 Training the Field Investigators: After the draft tools were prepared, the research investigators for the study were inducted and given intensive training at the centre for a period of 15 days, beginning from first of February. During this time, they had an opportunity for hands-on training and trialing of tools; and conducted several mock interviews in their neighbourhood. Additionally, two workshops were conducted by a senior resource person from CECED for community volunteers in the basti, resource personnel of AKF, research team, and field investigators of the study. The focal area of the workshops was to train participants for effectively engaging with families living community.

3.7 Piloting the Tools: The pilot testing of the study was carried out in the basti, covering a select number of households that were not to be a part of the main study sample. After the pilot testing, meetings were held with members of AKF and CECED research team to further refine, edit and revise the tools, as per the results of the pre-testing of the tools.

3.8 Scope and details of data collected: Table 1 lists out the research tools vis-à-vis target groups, the content outlines of the tools and the respective number of the respondents.
## TABLE 1

### At the household level:

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<th>Contents/Scope</th>
<th>Number of respondents</th>
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<td>1</td>
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### A. Schedule for Beneficiaries:

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<td>Anthropometric measurement of the child, antenatal and natal practices, new born care, early stimulation, child health and immunization.</td>
<td>60</td>
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<td>4</td>
<td>Parents having children in the age group of 3 to 5 years (Care givers)</td>
<td>Anthropometric measurement of the child, pre-school experiences, early stimulation, developmental milestones, hygiene practices</td>
<td>67</td>
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<td>5</td>
<td>Parents having children in the age group of 6 to 8 years</td>
<td>Anthropometric measurement of the child, hygiene practices of the child, school adjustment of the child.</td>
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<tr>
<td><strong>Number of respondents/ institutions</strong></td>
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<td>8 Check list for education facilities</td>
<td>Basic physical environment / settings, teaching learning aids, class room activities under various domains of development based on direct observation.</td>
<td>7 Anganwadis + 1 Nursery section (MCD School)</td>
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<td>9 In-depth Interview for the School Teachers (Grade 1 and 2)</td>
<td>Training needs, teaching learning process, problems and challenges, perception of parents regarding their services</td>
<td>4 teachers teaching Grade 1 &amp; 2 from MCD School in the Basti</td>
<td></td>
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<tr>
<td>10 Check list for the Health Facility</td>
<td>Basic infrastructure, human resource, equipments and quality of services, current situation and utilization of these services.</td>
<td>1 Mother and Child Welfare Centre located in Bhogal</td>
<td></td>
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<tr>
<td><strong>B. Qualitative tools</strong></td>
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<tr>
<td>11 Detailed Case studies</td>
<td>Documenting the child's life in a socio-cultural context. Selection of the case study sample was done keeping in mind the circumstances that were unique in terms of their influence these have on the growing child.</td>
<td>10 children in the age group of 0-8 years with special circumstances</td>
<td></td>
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<tr>
<td>12 FGD with adolescents</td>
<td>Daily schedule, health and nutrition, health problems, education, aspirations, gender, marriage, personal hygiene.</td>
<td>2 FGDs</td>
<td></td>
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<tr>
<td>13 FGDs with Anganwadi workers</td>
<td>Daily schedule, training and capacity building, monitoring, community participation, self assessment</td>
<td>1 FGD with all the Anganwadi workers</td>
<td></td>
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<tr>
<td>14 FGD with Parents</td>
<td>Issues related to maternal and child health, education of children, gender, availability of services and perception of the community about the basti</td>
<td>1 FGD with Mothers and 1 FGD with fathers</td>
<td></td>
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<tr>
<td>15 FGD with Community leaders</td>
<td>Accessibility to the services, available civic amenities and health services</td>
<td>1 FGD</td>
<td></td>
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</table>
3.9 Data Processing:
The specifically developed tools for the study had a uniform pre-coded system across all schedules. In order to optimize on time there was a built-in provision to skip questions when ever not applicable. Further, during the course of data collection, the research team members reviewed schedules filled out by the FIs, to check for errors and gaps. A data analysis expert was appointed to prepare an entry format using CS Pro to develop a flat file, which provided multiple options for varied statistical analysis. The process of data cleaning was carried out after the punching of data in the flat file. The schedules were checked for consistency, with 10 percent of data filled to identify the errors. The standard descriptive univariate and multivariate analysis was carried out using MS Excel 2007 and SPSS (version 16.0). All the above steps and procedures facilitated; data scrutiny, back-check and omission of errors for ensuring quality analysis.

4. MAIN FINDINGS:
Since the child’s survival and development is under the direct influence of his/her immediate environment, for any intervention to be effective, the child’s family and physical environment should be congenial and supportive to his/her development. We therefore weave the discussion of our findings primarily around the child in the Basti and discuss his/her development along the different sub stages of the developmental continuum, from pre natal to eight years.

4.1 Overall Proximal Environment available to the child
An analysis of the proximal environment in the Basti reveals a mixed picture of poverty, with a few silver linings. The population in the basti was found to be increasing at an alarming rate of 7.4 per cent with the average family size per household being six. The dependency ratio was found to be 88, i.e., for every 100 persons of working age, 88 are dependents, which is significantly higher than national average. This inevitably limits the resources, physical and financial, available to the child. Despite poor sanitation, overall community awareness and action to address this issue is also limited.
The silver linings are that most families have a regular source of income with fathers employed. Most children are engaged in appropriate educational programmes, with more than 50 per cent 3 – 5 year olds enrolled in pre-schools and approximately 88 per cent of 6 to 18 years age group studying in schools. Another 10 per cent were receiving religious education or studying in non-formal centres. In addition, there is a positive gender ratio favoring girls with 118 female to 86 males in the age group 6 to 18 years. However, with 30 percent of the women illiterate, their access to information related to optimal child care is bound to be affected and this has implications for the children’s development. The potential for enhancing household incomes through women engaging in income generating activities or employment is completely untapped and limits resources available at the household levels for child care and education. Insufficient vocational training available to the women, adolescents and the youth was identified as an additional issue.

4.2 Safe Motherhood – a healthy headstart:

It is a well-acknowledged fact that life begins at conception. It would be logical thus to see the mother and child as a linked biological unit. The period from conception through the moment of birth is critical and influences survival and development during subsequent stages of the early childhood years. Our Situational analysis explored the extent to which the Continuum of child care from the period of conception to birth is optimal for children’s growth and development in the Nizamuddin Basti. Our results do not exactly present a very heartening picture, with several risk factors emerging significant.

More than half of the mothers (53 per cent) were found to be moderately or severely anemic, which has serious implications for the health of the new born. Underage pregnancy also emerged as a matter of concern with almost one-fifth of both pregnant and lactating women becoming pregnant for the first time before the age of 18 years. Frequency of miscarriages was another significant concern with around 30 percent of women reporting previous history of miscarriages, which was found to be positively correlated to high parity (r=0.64, p<0.001). Analysis revealed a positive correlation between age of mothers and risk of miscarriages (r=0.4 p=< 0.05). 83 per cent of the mothers had abnormal weight gain in both positive (overweight – 33%) and negative (underweight – 50%) direction. A significant factor may be the diet followed
by the mother during and after pregnancy. In this context, it is pertinent to note that almost all mothers (91 per cent) had insufficient or no knowledge regarding the need for change in dietary practices during pregnancy. About three-fourth nursing mothers and half of the pregnant women were unaware of the complications that women may face during pregnancy. A large 48 per cent of the women reported having faced complications during delivery. It was a matter of great concern that 12.5 per cent of the women had not undergone any checkup or test. The rate of institutionalized delivery was 61 per cent in basti as compared to the national urban figure of 70 per cent.

The lack of knowledge may be attributed to both insufficient education and poor quality of support services available to the women. Almost 42 per cent of the mothers were either uneducated or non-formally literate. A strong correlation between literacy and fertility was established in this study ($r= 0.27, p<0.05$); as mothers’ educational level elevated, reduction in parity was observed. Half of the pregnant women (50 per cent) were unaware of the facilities from the anganwadi such as early registration after pregnancy, using ANC services and supplementary nutrition and referral services. This reflects on the quality of the services and their limited outreach.

In conclusion, what stands out is that while anemia and malnourishment, which are by themselves major risk factors, seem endemic among the women, these factors are further compounded by early marriage and pregnancy at an immature age, possibly due to inadequate awareness and socio cultural beliefs. A related determinant for this scenario could also be lack of education among women which was observed to have a direct effect in terms of larger families, lack of awareness and inadequate utilization of available health services and more morbidity and miscarriages. While these demand side factors emerge significant, supply side factors also need to be considered particularly when we consider the finding that the Anganwadi’s role in advocacy and information sharing among the community has been at best, marginal. Any proposed intervention would need to address these factors in a focused, comprehensive and context specific mode.
4.3 The first three years – a window of opportunity:

The first few years of life are the most crucial in determining the growth and development of a child during subsequent years. It is a well established and recognized fact that the foundations for lifelong learning are also laid in these years. The care practices addressing the needs of the growing child therefore, play a critical role in having a favorable or unfavorable influence on the growth and development of the child.

Our study reveals several positives but also some concerns, in this context. Despite seven Anganwadi Centres and a health facility in the Basti it is disturbing to find that the mothers lack knowledge about exclusive breastfeeding and delayed introduction of complementary feeding. This was reflected in the poor nutritional status of the children, with majority having low weight for age and many had stunted growth. The immunization status was unsatisfactory but showed some good coverage only in the case of BCG and OPV vaccines. The detrimental effect of unsupportive environment on growth and development of the young ones was reflected in delayed developmental milestones.

The details of the findings that emerged are presented into two sub-sections, dealing with:

(a) the neonate (until 1 month after birth), and
(b) the child up to 3 years of age.

(a) The neonate: Newborn Care comprises of simple practices of providing warmth to avoid hypothermia, early colostrum feeding, hygiene, cleanliness and care of the umbilical cord, support for mother-infant bonding and relationship. The positive practices of new born care in the Basti are that more than half of the sample reported placing the newborn on the mother’s body to keep it warm, which was a scientifically sound practice. Almost 85 per cent of the women were aware about feeding colostrum and reported having initiated breast feeding within an hour of delivery. Among the mothers who did not give colostrums, 10 percent did not do so due to lack of awareness and another 5 percent due to socio-cultural taboos. Almost all mothers (91 per cent) in the study were aware of the importance of breast feeding and practised it.

On the flip side more than 90 per cent of them reported to have given the first bath to their babies immediately after birth or within one or two days. It was disheartening to know that the mothers
in the basti were unaware of the implications of bathing a newborn before one week. Another is that requires attention is that, parents of children born at home did not bother to get Birth Certificate made till their child was ready to be enrolled in a school and later had to face trouble on account of it. This is an issue which needs more advocacy.

(b) The child up to 3 years of age: Proper feeding practices, regular growth monitoring, complete immunization, nurturance and early stimulation can assure optimal development of the child less than 3 years of age.

Health and Nutrition status observed during the study reveals that both are neglected in the Basti. Although a sizeable 81.7 per cent of 0-3 year olds possessed health cards, they were not updated for 70 per cent of the children. Only 3 out of 60 children had received full immunization. There was high prevalence of anemia among children (both boys and girls) as only 23.7 per cent were found to have normal hemoglobin count; the incidence of anemia was found more in boys than in girls.

More than half (57 per cent) of the mothers in our sample did not know the exact duration until when the child should be breast fed exclusively, and the appropriate time period of the onset of complementary feeding. There was lack of knowledge among the mothers regarding appropriate infant young child feeding practices and its importance for physical growth and cognitive development. Children were assessed on two parameters: weight-for-age and BMI-for age. There was a high prevalence of under-nutrition in terms of underweight (49 per cent), wasting (44 per cent) and stunting (64.2 per cent) among basti children; these figures are alarmingly higher than the national data (NFHS-III). On segregating nutritional data sex wise, it was surprisingly found that girls showed comparatively better nutritional status than boys, contrary to the expected trend of discriminatory feeding practices for girls. The feedback from the FGD with mothers was that supplementary nutrition to children (0 to 3 years) was not being provided through ICDS in the Basti. Vitamin A supplements too were received only by a meager one-third of the population, owing to the lack of knowledge about its benefits. Mothers were unable to understand the importance of one to one interaction with the infant and of providing early cognitive and psychosocial stimulation. They considered their mere presence
or routine caring as adequate for infant’s all-round development. This neglect on account of unawareness of the consequences could be seen as developmental milestones showed delayed achievement in case of three-fourth of children in the age group of 18 to 24 months.

4.4 The Preschooler in the Basti:

Preschool stage is marked with remarkable, cognitive, social and emotional changes. From the first two words uttered at two years, the child begins to communicate proficiently by the age of five years! Children between the ages of 3 to 5 years, like the infant, need a stimulating environment along with proper nutrition and health care; in addition they also need to be exposed to a developmentally appropriate ECE programme which should cater to their all-round physical, cognitive, social and emotional development.

Despite ECCD facilities provided for the children in the Basti, their health, nutritional status and school readiness at this crucial stage of development presents a really dismal picture.

64 per cent of the children were found stunted and 81 per cent anemic, possibly a cumulative impact from the previous sub stage, suggesting the critical importance of focusing on health and nutritional status as a priority for children below 3 years. With regard to the psycho–social component, 21 per cent of 3 to 6 year olds were not accessing any PSE services. And even for those who were accessing, the quality of preschool services was not found to be satisfactory, neither in terms of infrastructure nor the activities conducted; on account of which parents had to send their children to preschools outside the basti. The state of AWCs was dismal, especially on issues concerning safety, utilization of space and lack of application of knowledge received by AWW.

In terms of outcomes, **School Readiness Instrument (SRI)** a tool used to assess a children’s cognitive and linguistic preparedness for school was administered on a sample of 5 year olds.

With a maximum score for the test being 40, it was a matter of concern that only 3 children out of a total of 32 children were able to score over 30. It was further disturbing to note the skewed distribution wherein 40 per cent of the children scored less than the mean score (19), out of which nearly half scored below 8 i.e. less than 25 per cent of the total score. Further
disaggregating of data indicated three key areas of school readiness that stand out as particularly deficient across public, private and NGO provisions; these are phonological awareness (identifying beginning sounds of words), skills of classification and pattern making and sequential thinking.

In terms of services, the quality of the Early Childhood programmes available for the children in the Basti was assessed using a modified and adapted version of an international tool - Early Childhood Environment Rating Scale (ECERS) in 7 AWCs and Nursery class in the MCD School. The major findings showed that physical infrastructure facility in the AWCs was dismal, as it had shortage of space for children to sit properly, leave aside the availability of a toilet. Pedagogical practices were extremely poor as activities to develop cognitive skills, creative skills, social development and gross and fine motor development of the children were not observed in any of the AWCs. In comparison to the AWCs physical facilities and pedagogical practices in the Nursery Class, MCD School was far better but could only cater to 25 children from the Basti.

4.5 The School going child in the Basti:

The child in the age range of 6 to 8 years is in early school going age, this period is considered as the transition stage and is an extension of the early childhood stage, since developmentally the child continues to demonstrate characteristics which are more in common with the early childhood rather than the following stage of development. At this stage, children need support in getting gradually accustomed to the formal routine of the school as well as in learning the basics of literacy (reading and writing) and numeracy i.e. understanding and applying mathematical concepts and gaining systematic knowledge of the social and natural environment (NCF, 2005).

Overall, the positive finding is that almost all children were found to be enrolled in school, indicating that parents in the basti do place a value on education for their children. But malnutrition among children continues to be an issue and needs to be tackled.

Out of the 53 children identified in this age group, 51 were found to have some or the other schooling experiences (96 per cent), and almost half of children were taking private tuitions too.
at this early stage. Most parents preferred private/public schools and these were mentioned as the most popular place to send children (43 per cent), followed by Government schools (35 per cent). School Achievement Test (SAT) administered on Grade 2 children clearly showed that children from private and NGO run schools perform far better than government school children, which explains and re-affirms the choice of the parents for private and NGO-run schools. On evaluating the scores achieved on SAT it was observed that girls outperformed boys with 69 per cent achieving maximum scores in Language and Mathematics tests (n=20) as compared to 29 per cent of boys. However, Inclusive Education was not observed in the schools as in both Grades 1 and 2 there was not even a single special child enrolled in the MCD School. The teachers reportedly have not received any training to manage special children, and did not feel well equipped in this regard. In terms of nutritional status, children continued to demonstrate significant levels of under nutrition, the boys of the basti were far more undernourished than the girls (n=41) but anaemia among girls was more prevalent than boys.

5. SCAFFOLDING CHILDREN'S DEVELOPMENT: PROPOSED INTERVENTIONS
In conclusion, the study brings forth many crucial and critical concerns regarding children’s well being. High levels of malnutrition and inadequate learning levels across all age groups, all the way up to the school going age, emerge as the most significant concerns with regard to children’s growth and development in the Nizammudin Basti. Both have their genesis in the earliest stages of life, from a life cycle perspective, and demonstrate a cumulative deficit over the years, which, if unaddressed, will persist not only to adversely impact on the life chances of these children but will also have inter-generational implications. While both malnutrition and inadequacies of early learning are significant concerns, each in its own right, they are also significantly interdependent. Global research has demonstrated the adverse impact of malnutrition on early learning and school performance in terms of attention span, memory span, activity levels, perseverance on a task, school attendance and so on. Conversely low learning levels impact on the extent of access and utilization of knowledge children are able to have which can enable them to lead more fulfilling lives and be a part of a learning society.
While low levels of awareness especially female, non conducive cultural practices like early marriage, uninformed decisions regarding health care and nutrition, congested and overcrowded
living conditions and inadequate health and hygiene practices may be identified as some significant demand side factors, the poor quality of services offered in the public sector, and particularly so in the AW are critical supply side factors, that need attention. Some major recommendations and areas of priority for interventions that have emerged from this analysis are as follows:

5.1 Nipping malnutrition in the bud: Need for a comprehensive package: It is imperative to address this issue with planning of a package of support interventions which should focus on children between 0 to 3 years through (a) regular growth monitoring, (b) raising the knowledge and awareness levels of the pregnant women, and (c) ensuring reach of health and nutritional support services to them to which they are entitled through the AW and the health center. Some stage specific interventions suggested are as follows:

Safe Motherhood: There is need to encourage and promote institutional deliveries while also ensuring improved and strengthened health services and availability of trained birth attendants in case of home deliveries. Birth of a child is equally important for a father; therefore, involvement of male members is needed in advocacy and ensuring care of the mothers during pregnancy. It is important to ensure co-ordination between health and ICDS functionaries; and NGOs and private practitioners in this context.

First three years of children: Early Contact of Health Personnel/AWW/Health Volunteers especially in case of home deliveries with mothers and babies and visiting the newborn and the mother thrice in the first month after delivery should be ensured. Exclusive breastfeeding and timely introduction of complementary feeding should be promoted aggressively. Mothers must be counseled and made aware of providing sensory and language stimulation during routine child care activities. Major gaps that exist between knowledge and practice of immunization among the basti people must be bridged with multi-pronged strategies of appropriate awareness campaign, use of IEC non-print material, making health and ICDS functionaries work as change agents and improving efficacy of services providers. The problem of under-nutrition must be dealt with proper mechanisms being put in place.

5.2 Promoting behavior change rather than mere knowledge sharing: The study points to the need to move beyond just raising awareness levels, to promoting behavior change in the area of
developmentally sound child care practices, which are within the cultural context of the community. This would include specific aspects like the care of new born, exclusive breast feeding, growth monitoring, health and nutritional needs and possible modes of easy-to-prepare nutritional supplementation and maintenance of personal hygiene by all. Identifying and training community volunteers for this task to support the AWW can prove to be a successful model.

5.3 Improving AW and Health center outreach and service quality: The study revealed that the people of Nizammudin Basti preferred private over public services; it must be appreciated that this preference indicated a perception of better quality services of the private providers. This perception needs to change if quality of access and utilization of services have to improve in the public sector. Supportive supervision and monitoring and periodic evaluation of the baseline levels in terms of inputs, outputs and outcomes will also be required as key ingredients of this package.

5.4 Ensuring Psychosocial development and early learning: From a developmental perspective, the early years of life i.e. the first 3 years of life which are critical for brain development are marked by high malnutrition levels and inadequate psycho social stimulation in terms of quality of parent child interaction. The child thus begins with a disadvantage and this is further consolidated by a preschool program, particularly in the AW, which does not offer a developmentally appropriate curriculum for school readiness or overall development of the child. Possibilities of involving and orienting the elder women in the community as a resource for children in this respect can also be explored as has been successfully demonstrated in an ICDS project in Kerala. Specific interventions that are proposed in this context for the next sub stage are as follows:

The preschoolers: Besides promoting balanced diet for young children; there is an urgent need to improve the condition of the existing AWCs in the basti, and build more AWs to address the needs of the population of the community. The quality of the AWCs must be maintained through regular checks by community volunteers or leaders. Mere attention to building and infrastructure to build a successful program is not enough; efforts must be made to provide intensive ‘hands
on’ trainings to the service providers especially in transaction of a developmentally appropriate curriculum. The existing curriculum followed in AWs needs to be reviewed and strengthened to incorporate aspects related to school readiness and habit formation. AWW and health workers must be given practical training on a regular basis. There is a need to have regular interaction with community members to spread awareness about what exists and how important it is for their well being, and how the participation and involvement of the community members in managing the services can contribute to improving the quality of the services and getting them the kind of service that is rightfully theirs.

*The School going child:* Moving on to the school stage, for Grades 1 and 2 it may be ensured that the constructivist and activity based approach underlying the new textbooks which are being used is followed in the classrooms and children’s learning is optimized. Setting up teacher sharing sessions, reorientation of teachers, facilitating interaction of teachers with the textbook writers and orientation of supervisory staff could be some ways forward. It may be useful also to conceptualize an effective system of continuous assessment of children which could provide ready feedback and opportunities for mid course correction.

### 5.5 Seeking Active involvement of the community

The sense of ownership of the programme is a necessary condition for it to be implemented effectively and for its sustainability. This condition becomes even more imperative if the interventions are process based and focused on behavior change and change in attitudes and perceptions of the community. Community management committees and other community members may be encouraged to initiate a civic campaign for approaching the appropriate authorities to address issues of sanitation, hygiene, and improvement of existing health and educational services. To ensure effective community involvement and participation it is important to orient them in what are the developmentally appropriate needs, practices and behaviors desired for children below 8 years.

### 6. CONCLUSIONS

While planning interventions to improve the childhood of children in the *Basti*, it would be important to keep the following principles in mind. Firstly, the development and growth of a newborn child occurs within the proximal environment of the immediate and extended family
and whatever services are available in the neighborhood. Secondly, the holistic development of the child occurs along a life cycle continuum so that for the benefits of any set of interventions to reach the child, these will have to address the continuity and cumulative nature of development across the different sub stages of childhood, while also addressing the interdependence of health, nutritional and education needs.

The earliest years of a child's life are known to last a lifetime and are key to predicting his/her eventual success in life. Given the current situation of children in the Nizamuddin Basti, the urgency of planning for a better childhood for them cannot be over emphasized. We hope the direction provided by this study makes benchmark for future studies, and will help stakeholders plan more meaningfully for their childhood and contribute in a small way to this imperative goal.
ANNEXURE 1

i. **Household schedule**: A common schedule used for the *household head* which aimed at getting basic family information vis-à-vis socio economic status of the family, total number of family members, educational status of members.

ii. **Schedule for Beneficiaries**:
   1. Interview schedule for *currently pregnant* women: Aimed at assessing the level of awareness of the pregnant woman in terms of health, nutrition, immunization, concerns and issues relevant to the phase of pregnancy.
   2. Interview schedule for *mothers of children (0-35 months)*: Aimed to assess the practices of breast feeding, care of health, hygiene, immunization and nutritional needs of mother and child.
   3. Interview schedule for *mothers of children (3 years to 5 years 11 months)*: This schedule aimed to assess the quality of health, nutrition and education services availed by the parents for their child(ren).
   4. Interview schedule for *mothers of children (6-8 years)*: It assessed quality of education and health services available, and perception of parents regarding them.

iii. **Assessment of children**:
   1. *School Readiness Instrument* (for children in the age group of 4½ to 5½ years): A standardized tool (adapted from the tool developed and standardized by the World Bank) was administered on children between the ages of 4½ to 5½ years to assess their cognitive and linguistic preparedness for primary school.
   2. *Achievement Test* (for children studying in Grade 2, irrespective of age): administered on children who were completing their Grade 2 to assess their Math and Hindi achievement levels.

iv. **Assessment of services**:
   1. *ECERS* (Early Childhood Environment Rating Scale): An Indian adaptation of the internationally used tool named as TECERS was further adapted for this study by adding to it an observation proforma, with a checklist through minimized subjective interpretation/observation. The tool measures *the quality of the ECE*
program being offered to children, and assessed different aspects including infrastructure and pedagogical practices followed in the preschool setting.

2. **School Teacher interview Schedule**: Interview schedules aimed to assess school teachers’ service training, activity based teaching, classroom transaction, supervision and monitoring and community/parent participation.

3. **Checklist for the Health Centre**: A checklist-cum-interview for the neighbourhood health centre was used to identify the quality of health services being offered at the community level.

v. **Qualitative techniques used:**

1. **Case Studies**: consisted of detailed interviews and developmental assessments which helped to draw children’s profiles based on their context and experiences. Variation in family structure and the specific needs of children and families has also found appropriate representation.

2. **Focus Group Discussions with adolescent girls**: to gain perspectives of adolescent girls on issues of women’s health, education, aspirations, marriage and gender concerns.

3. **Focus Group Discussions with Anganwadi workers**: To gain insight on training, supervision and schedule of activities of the anganwadi workers.

4. **Focus Group Discussions with parents**: To gather the perceptions of the community concerning aspects of health and education of children specifically.

5. **Focus Group Discussion with community leaders**: To gather the views and opinion of the leaders, who are in constant touch with the community members at large, and thus know the felt needs of the people and the solutions for the same.
1. INTRODUCTION

The Context

This research tells the story of a certain community of little children and their not so easy early childhood, as they are growing up in what is popularly known as the Nizamuddin Basti, an urban settlement of Delhi. Interestingly, Nizamuddin has a nice story of its own, a story which has made it a popular tourist site today. Way back in the thirteenth century, in a small village called Gyaspur on the banks of Sitara, a tributary of Yamuna, there lived a holy man in a humble hut whose piety and learning and austere way of life made people consider him as a zinda pir (a living saint), who could heal both body and spirit. This saint was known as the Sufi saint, Nizamuddin Auliya who was born in AD 1236 and lived for almost 100 years. Now, the place has become famous for its shrine. Although his disciples built a tomb over his grave, the original structure has long since disappeared. Today, the dargah of Nizamuddin, as it is known, is the collective work of many successive followers of the saint’s teachings.

An Interesting Paradox: the Dargah and the Basti

The site of Nizamuddin is perhaps better known because of this history so that today, the unsuspecting visitor may get to know Hazrat Nizamuddin just as a fascinating tourist site and may miss out completely on the ‘paradox’ that surrounds it — the densely populated Nizamuddin Basti! The Dargah2 continues to be a source of livelihood to this large section of residents in the Basti which came about initially as a result of the original influx of people to the Dargah in large numbers, leading to a spurt in commercial activity. This, in turn, resulted in the settlement that is known today as the Basti. Thus, on the one hand there is the rich heritage and culture of Nizamuddin, marked by structures dating to the pre-Mughal and Mughal periods, shrines, mausoleums and Baoli (step well), located within relatively short distance of one another. A captive vision of abandoned ruins, old doorways,

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2 http://www.sarai.net/fellowships/independent/abstracts/03-04/page-3/
narrow streets, rose petals, Urdu verses, evening azaan, hidden courtyards, soaring kites, veiled ladies, tandoor ovens, itar stalls, seekh kebabs, invisible djinns, and sufis dargahs and an old, romantic world of charm and beauty meet your eyes! On the other hand, is the well integrated vibrant community clustered around the Dargah, known as the Basti, which has over the years seen sudden spurts in population influx, to the extent that between 1991 and 2001, the population is reported to have increased by almost two and a half times!! As expected, with the limited infrastructure, this increase has led to inevitable problems of unhealthy surroundings, cramped spaces, over burdened sanitation system, over worked service providers, and all in all, a typical picture of urban poverty. Consequently, Hazarat Nizamuddin Basti was declared a slum by a government notification (D/LB: 1850/175/81 dated 2/5/1981) denotified vide Notification (WJ 6841/88 dated 3/8/88)

Profile of Nizamuddin Basti

For the convenience of intervention AKF divided the Basti in to 8 clusters - Kot Mohalla, Dildar Nagar, Gali Gadiyan, Kali Masjid, Khushro Nagar, Musafir Khana, Nizam Nagar, and Quresh Masjid . The sketch of the basti and the satellite image of the area near Nizamuddin basti on the next page, indicates how densely populated is the basti!

\[^3\] \[^4\]


\[^4\] Census data 1991
When I was a little boy the area near the ‘nala’ was called ‘jungle’—now due to illegal construction all greenery has been lost. I used to play with my friends in open green areas. Now, there is not even a window in the house, hence many people are asthmatic here. I am afraid to send my son out to play as there is no safe place to play”.

- A parent’s expression during the FGD

Satellite image of Nizamuddin Basti area

Figure 1.1: Map of Nizamuddin Basti
Dildar Nagar surrounding the dargah is the most congested area. One of the entrances to this cluster is through the main entrance of the dargah and so every person who goes to Dildar Nagar via the dargah religiously goes barefoot with footwear in hand, climbing steep stairs till they reach their cluster. Interestingly, this does not bother them at all! In Dildar Nagar one can see wooden and iron ladders precariously placed to climb onto the first and second floor shed rooms, occupied by one family, irrespective of the size.

The Polyclinic and Municipal Corporation School, which are located near the west side entrance of the basti are two important landmarks. In front of the Polyclinic is Nizam Nagar cluster while Musafir Khanna and Khusro Nagar are adjacent to the MCD school. Gali Gadriyan, Kali Masjid, and Quresh Masjid are further inside the Basti. Sunder Nursery is the only segregated cluster nearer to the Humayun’s Tomb, across Dr. Zakir Hussain Marg.

**Aga Khan Foundation’s (AKF) Intervention**

The Government of India (GOI) has, under its urban conservation scheme through a public private partnership (PPP) approach, signed an agreement with The Aga Khan Foundation\(^6\) (AKF). This agreement combined conservation of protected and unprotected monuments and urban environmental rehabilitation works, with a series of community based socio-economic development initiatives designed to improve the environment and quality of life of the community. The AKF began work on restoring the archaeological site of Hazrat Nizammudin, including the Baoli and alongside, it also initiated efforts towards social development of the Basti, as per the agreement. A baseline survey of the households in the Basti was undertaken by the AKF in 2008.

On the basis of its findings, at the outset a complete revamp was initiated for the functioning of MCD School located in the Basti. It presently stands out as imposing structure

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\(^6\) The public private partnership agreement was signed on 11\(^{th}\) July, 2007.
with facilities as good as any public school! The AKF also supported establishment of a well equipped laboratory in the MCD Polyclinic, which had earlier been abandoned by the people of the Basti. It now caters to a large inflow of outdoor patients on a daily basis, buzzing with activities like pathology checkups, as a prized service!

To further this social development initiative and identify future areas of intervention, particularly in what it recognized to be the key areas for human development such as health, education and environmental sanitation, AKF proposed a situational analysis of the Basti households. This analysis was envisaged with the focus on Early Childhood Education and Development (ECED) for children from 0 to 8 years, which are foundation years for a child’s development. It was proposed with an aim to suggest needs and ways to improve the care aspect for mother and child strengthen the quality of preschool education and provide opportunities to all children for age-appropriate and holistic development.

The Centre for Early Childhood Education and Development (CECED), Ambedkar University, Delhi was approached by AKF to undertake this study, CECED agreed to this assignment since it would provide an opportunity for its team to understand and document the status of the children in an atypical socio-cultural milieu, with its own characteristic features, and explore and understand the ways in which it may have a bearing on the caregivers and caring of children during their early childhood years. The scope of the situation analysis was informed by the life cycle approach to children’s development. It therefore included analysis of the status of and services for the entire development continuum of children below 8 years, including in addition to the children, adolescent girls, pregnant and nursing mothers and care givers. The study was expected to suggest need-based interventions for the further planning of interventions by AKF and also serve as a baseline for any subsequent impact evaluation.
ECCD: A THEORETICAL FRAMEWORK
2. WHY ECED? A THEORETICAL FRAMEWORK

Why ECED?

Early Childhood Education and Development (ECED) is operationally defined, as all provisions for children up to 8 years of age, that ensure enabling and stimulating environments (home, programs, services) for them and address their developmental and educational needs in an integrated and comprehensive manner. These primarily include needs relating to health, nutrition and psychosocial development/education, which are fundamental for assuring optimal utilization of children’s potential and enabling them to develop a sound foundation for life (CECED, 2009).

The early years are the most crucial period in life, because this is when foundations are laid for motor, sensory, cognitive, language, social and personality development. Within the first eight years span, the first two years are particularly important and vulnerable. By the end of second year of life most growth of the human brain is already complete and critical brain structures are in place.

By the age of three a child’s brain is twice as active as that of an adult (Shore, 1997). This head-start continues for the first decade making it all the more important for the child to use her/his brain at the right time – or lose out its potential.

If a child falters in one or more of the development milestones – health and nutrition outcomes, or learning opportunities and capacities – the child carries in latent or cumulative terms the burden of failure to the next stage. This then adds to the deficit and reduces the probability of future success. Thus, it is imperative to reach the child at this critical early stage of life.

“...The short and long term benefits of ECED programs for children are enormous. By providing basic health care, adequate nutrition and nurturing and stimulation in a caring environment, ECED interventions help ensure children’s progress in primary school, continuation through secondary school and successful entry into the work force.”

(Young, 2002)
Evidence from Research

The Critical Periods: The brain is very immature at birth, to permit maximum adaptability to the environment. Most of the connections between the nerves and cells are formed after birth. In order for connections to be made the child must have a range of sensory experiences of seeing, hearing, smelling, touching, and tasting. Without experience, or full use of these senses, connections will not develop or existing connections will be lost. For the infant this means USE IT OR LOSE IT! Though, the brain has a remarkable capacity to change, but timing is critical. There are sensitive periods during the child’s development, when connections within the brain system are being formed, and it is important that children have the kind of experiences that support growth and development during these times. These are referred to as critical periods and time slots/range for various aspects of development have been tentatively identified in the literature (Begley 1996., Figure 2.1) Negative experiences, or inadequate early stimulation during these ‘critical periods’ can adversely hamper cognitive development and school readiness in children.

Figure 2.1: Critical periods for some competencies related to children’s overall development and school readiness


Note: The dark band represents the maximum sensitivity of the critical period in question; the light band represents the stage during which the critical period wanes. Though not indicated by the above diagram,
Early Development depends on:

- interaction between genetic background (the child’s nature) and the environment (the type of nurture the child receives).
- early care and nurturing
- the environment which, not merely influences the general direction of development, but also affects how the brain is “wired”.

-Rethinking the Brain: New Insights into Early Development

The critical period wanes gradually as the area of the brain, neural pathway, or skill in question loses plasticity and, hence, its ability to change.

**Figure 2.2: Bronfenbrenner’s Ecological Systems**

**Addressing the Child and the Child’s Context:** Research around the globe indicates the importance of addressing ECED from a holistic perspective. Bronfenbrenner (1998) very effectively demonstrated (Figure 2.2) on the basis of his research that a child develops within a complex system of relationships affected by his/her surrounding environment. He depicts this ‘environment’ in four concentric circles, which he describes as:

(a) **Micro-system** which concerns relations between the child and his/her immediate environment like the parents, siblings and immediate and extended family, (b) **Meso-system** which illustrates connections between the child’s development and the interaction with institutions in the immediate neighbourhood such as the child-care centre, school, services etc. (c) **Exo-system** – which demonstrates social settings that affect the child indirectly like health services, local settings, parents workplace, local government etc and (d) **Macro-system** which is the outermost circle which includes factors like customs, beliefs, ideologies, and culture that have an overarching influence on
activities & interactions across all the inner layers, thus impacting on the child. This model highlights the need to address children’s development holistically.

An Integrated Conceptual Framework evolved in Indian context (Figure 2.3) elaborates further on this issue, as it delineates expected outcomes, determinants and indicators for each sub stage of development along the entire child development trajectory. At each stage child’s chances are influenced by a set of determinants the impact of which can be measured in terms of specific outcome indicators. Specific development objectives and priorities have thus been identified for each sub-stage of child’s development (World Bank 2004). The holistic approach is based on an understanding of interdependence of outcomes at two levels, (a) vertically, it is seen in terms of the continuous and cumulative nature of process of a child’s development, so that every preceding sub-stage tends to set the readiness level; for the next sub-stage and (b) laterally, it is in terms of the synergistic relationship evident across the human development aspects or sub-sectors, i.e. health, nutrition and education. This framework indicates the need to address health, nutrition and educational outcomes in holistic manner.
Figure 2.3: Indian conceptual framework for integrated child development

**Prenatal to one month**

**Determinant**
- Maternal health, nutrition adequacy and quality of care of newborn
- Safe delivery, family and community support for the mother and baby
- Environmental hygiene safe water and sanitation

**Outcomes**
- Healthy responsive newborn

**Indicators**
- Mother not anemic or underweight
- Child weight more than 2500 grams
- Child moves head side to side on being stimulated

**One month to three years**

**Determinant**
- Nutrition adequacy, including exclusive breast feeding
- Responsive complementary feeding, quality of mother/caregiver-child interaction
- Immunization, management of diarrhea and other illnesses
- Health and hygiene practices
- Sensory motor and language stimulation and opportunities for play and exploration
- Cultural attitudes and stereotypes

**Outcomes**
- Freedom from intermittent diseases(diarrhea and ARIs)
- Nutritional security
- Curiosity, sociability
- Confidence- self help and sensory motor skills

**Indicators**
- Full immunization by end of year one
- Completion of all prophylaxis(e.g. vitamin A) by end of 3 years
- Toilet trained
- Ability to communicate clearly and confidently
- Sociability and ability to away from family for a few hours
- Appropriate height and weight for age
- Age appropriate gross motor and auditory visual skills

**Three to six years**

**Determinant**
- Quality ECCE
- Basic healthcare services including disability screening
- Nutrition adequacy and incidence of intermittent diseases
- Literacy level of parents, educational environment at home

**Outcomes**
- Interest in learning and school readiness skills/language, numeracy and psychological skills
- Activeness, self-confidence, awareness of environment
- Freedom from intermittent diseases, nutritional security
- Management of any identified disability

**Indicators**
- Active participation in ECCE activities
- Ability to narrate experience confidently
- Demonstration of curiosity
- Age-appropriate self-help and social skills
- Age-appropriate height and weight
- Regular pre-school attendance

**Six to Eight years**

**Determinant**
- ECCE experience/school readiness
- Access to schooling
- Nutritional adequacy
- Quality of school
- Socio-cultural factors-extent of inclusion(gender, tribe, caste etc)
- Early detection of learning disabilities
- Social norm, role-models and supportive home environment
- Safe water and sanitation, incidence of infestation and infection affecting regular attendance
- Female teachers

**Outcomes**
- Sociability, self-confidence/self-esteem
- Ability to read and write, with a continued interest in learning
- Freedom from anemia and intermittent diseases

**Indicators**
- Demonstration of competencies for class 2 by the end of age 8
- Regular attendance
- No worm infestation/or anemia

* Source: New Concept Information Systems 2003*
Considering the focus of the present study on the holistic development of children from 0-8 years, the Framework provides an effective reference point for identifying the critical elements of different sub-stages of the early years. It is therefore worthwhile to dwell over the implications of each sub stage, as elaborated in the integrated frame work, which could provide a direction to make appropriate assessments and plan appropriate stage-wise interventions.

**Sub-Stage 1 (Prenatal to One Month):** This basic foundation period of development, indeed of survival, is predisposed by complex determinants: maternal health (physical and emotional, including inadequate nutritional intake of the expectant mother); safe delivery and care of the newborn; and family and community support, including hygiene, safe water and sanitation. This is the first sub stage and most critical for brain development (McCain, Mustard, 1999).

**Sub Stage 2 (One Month to Three Years):** The mother’s nutritional intake continues to be important for the growing child after birth. A nutritionally adequate child would have been exclusively breastfed to begin with, and then provided timely, appropriate complementary feeding. Research indicates the link between nutritional supplementation, and improved cognitive development and school attainment. Indian researchers (Ghai 1975, Natesan and Devadas 1981, Anandalakshmy 1982, Bhattacharya 1981) have shown how malnutrition can hinder the cognitive and physical capacities of children, especially in the first two years of life. A study that placed 1000 LBW premature babies in enriched daycare centres between 12-36 months found that the poorest children with the least educated mothers gained the most (Young 2000). Children who receive psychosocial stimulation along with nutritional supplementation benefit more in terms of gain in nutritional status compared to those who get nutritional supplementation alone.. These early years are critical for brain development, and extremely vulnerable to environmental influence; deprivation may, in fact, result in irreversible deficits. Immunization of both mother and child against communicable diseases, and immunizing the child against childhood illnesses, are also necessary during this period.

**Sub Stage 3 (Three to Six Years):** This period continues to be significant for brain development and as the foundation for lifelong learning. If the child has negotiated previous sub stages successfully with the help of a conducive environment, the priority now shifts from an emphasis
on nutritional and health needs to psychosocial development. An individual’s cognitive development takes place at a rapid pace in these early years making these early years crucial for all around physical, cognitive, social and emotional development of the child, (Bloom, 1964). Good quality Early Childhood Care and Education (ECCE) becomes an indispensable intervention, particularly for children from disadvantaged families.

What child needs to learn during this period- from cognitive, language and creative activity, to motor skills, to developing good habits of health and hygiene- can all be inculcated by using play as the medium of learning (Kaul 1989, 1992; Swaminathan 1990, Consultative Group on ECCD, 2000). In the Indian context, the child in the 4-6 years of age group also needs specific cognitive, social and psychomotor experiences that will promote her school readiness- prepare her better for entering school and adjusting to its demands. The child, particularly a first generation learner, needs help to develop the necessary skills related to emergent literacy—pre-reading, pre-writing and pre-mathematical skills. Most of all, the child needs to develop an interest in learning so as to successfully negotiate the primary school curriculum. ECCE programs have demonstrated the significant impact they can have on these outcomes, both in India and elsewhere (Kaul et.al. 1994).

With increased exposure to environment, the child’s vulnerability to worm infestation and intermittent illnesses also increases during this sub stage. As a result, certain systemic needs arise in addition to the need for safe water. These needs include appropriate support for nutritional needs and immunization against communicable diseases. At the same time, increased activity calls for higher energy requirement and the appropriate enhancement of nutrition and nutrition adequacy. Hence a nutritious meal during pre school hours is a desirable intervention. Children with experience of early malnutrition were likely to have lower scores in tests assessing cognitive function, psychomotor development, fine motor skills, activity levels and attention span (Alderman et al., 2006; Behrman, 1996; Maluccio et al., 2009). Early childhood interventions become a pre-requisite in such contexts to mitigate the effects of deprivation and disadvantage.

**Sub Stage 4 (Six to Eight Years):** This is primarily the initial school stage linked to primary education. The 6-8 year period is considered globally as an extension of the early childhood
stage, where play continues to be a need as well as an effective means of learning. The child is also in transition as far as cognitive development is concerned—moving towards logical and analytical thinking and reasoning. The classroom methods and interactions need to be designed accordingly. As in the previous sub stage, the incidence of minor diseases increases with exposure to the general environment. Nutritional demands match high growth demands, and influence learning capacity of the child; hence a cooked mid day meal as in preschool continues to be desirable.

This sub stage has been especially carved out of primary education stage since it requires specific attention in the Indian context. It is an important stage to help children learn and master the basic skills of reading, writing and arithmetic, leading to the development of learning skills and a positive self concept. But the data indicates that this sub stage is characterized by the highest dropout level across the country, particularly among the large majority of children who come to primary school without an ECCE background. This is important since the positive impact of ECCE on participation and achievement in primary school and beyond is well documented (Arnold, 2004; Mustard, 2005; Young, 2002, 2007; Kaul et al 1994). This finding makes this sub stage especially vulnerable for primary school completion with this vulnerability further heightened in the case of girls. Large enrolments in first grades, coupled with the lack of teachers as well as multi grade classroom situations, lead to a situation in which children remain unengaged in any meaningful activity for long hours. The consequence is that children are “pushed out” of an uninteresting and unchallenging classroom situation (Ramachandran 2003b, Kaul et al 2003). The lack of community involvement and motivation in sending children to school can also affect retention. All these can be contributing factors, and they need specific and contextual examination in view of the number of dropouts at this stage (Jha and Jhingran, 2002).

In summary, review of research around the world has shown that policy planning and programming for ECED has the maximum impact when it is informed by three central tenets of child development (World Bank, 2004). (i) Since child development is a continuous and cumulative process, every sub-stage is influenced by the status of the child in the previous sub-stage, (ii) The child’s health, nutrition and psychosocial development are synergistically interrelated and interdependent, and (iii) the child’s development takes place within a context
and is influenced by it. The implication is that programmes for children need to address the entire childhood continuum, instead of intervening in any one stage exclusively; all the needs of the child need to be addressed at the same time by adopting a holistic approach to programming; and programmes need to address the child’s total context, including poverty reduction and elimination of gender disparity. Good quality early childhood interventions enhance preparedness of children, both academically and socially, for formal schooling (Kaul et al, 1994) and result in long term benefits in terms of improving their life chances.

Holistic planning and programming for children is thus the need of the hour and the scope of these programmes need to include maternal health, safe delivery, care of newborn, nutrition security including breastfeeding and complementary and responsive feeding, caregiver-child interaction, management of childhood illnesses, childcare practices, pre-school care and education, family and community support, environmental hygiene, safe water and sanitation, cultural attitudes and contexts.

**Deriving the Design for the Present Study**

In keeping with the theoretical framework and analysis discussed above, the present Situational Analysis of Nizamuddin Basti was designed to allow for a comprehensive overview of the situation, covering different aspects of life spaces that were linked directly or indirectly to the context of childhood from a life cycle perspective.

The study was thus undertaken, keeping the following objectives in view:

To undertake a situational analysis of facilities through which key services for the following sets of beneficiaries are delivered: (i) 0-8 year old children, (ii) adolescents, (iii) pregnant, lactating/nursing mothers and (iv) caregivers. The situational analysis was designed to cover an assessment of:

**a. Facility based aspects:** related to space, resources and facilities, human resources (numbers and capacities), services provided and linkages amongst key service providers (government and non government) and key information regarding Education and Communication Services.
b. **Population based indicators:** These cover the status of children against key ECED indicators which include the following domains:

i. Health and Nutrition (0-8 year olds)

ii. Immunization

iii. Ante natal, natal and post natal care (including referrals)

iv. Sanitation and safe water supply and key hygiene practices

v. Early Education

vi. Education and Economic indicators: Care givers and mothers

vii. Awareness, current practices with respect to i. to v. above and perception on quality of services.
METHODODOLOGY
3. THE METHODOLOGY

**Background**

The overview of the theoretical concepts and rationale of ECCE outcomes discussed in the previous chapter provided a framework to design the study. The objective of the study was to analyze and assess the present situation in the context of ECED and provisions required for children in the age group of 0 to 8 years. The Aga Khan Foundation intends using the empirical evidence emerging from this study for improving key areas of health, nutrition, education and environmental surroundings through intervention strategies that are targeted at mothers and young children. The study besides serving as a baseline for the ECED scenario, has also tried to identify gaps that need to be filled in amenities and services at the level of the community.

**The Method**

*Getting to know the basti- Exposure Visit:*

During the preparatory phase of the study, it was felt that an exposure to the reality of the basti, its residents and their living conditions was a prerequisite, prior to developing the research design. In order to familiarize the research team

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**A treat to the eyes: The basti’s panorama**

It was only after we arrived in the basti that we observed how full of life the place was. Shop-owners had already setup for the day, and as we passed by, tied goats and squawking chickens on the sidewalk greeted us. Young children fed leaves to the goats, and we could not help but wonder if they were actually being fed for the festival of Bakr-Eid which was then a few days away. All houses of varying sizes and colors on each side of the paths were visible, and men and women in burqa (veiled) walked hurriedly by with a quick step past us. Young children played on undisturbed in those lanes, with little or no vehicular traffic stopping them, except the occasional passage of the bicycle, rickshaw or a motorcycle at the most.

On approaching the popular Nizamuddin dargah, the shop owners on the way beckoned us to buy flowers and scented cloth pieces to be used in the practices of the dargah. On our way, we also got an opportunity to tour the Chausath Khamba (meaning 64 pillars), a heritage site currently under restoration by a joint effort of AKDN, MCD and ASI. Also, we were led to the tomb of the great Urdu poet, Mirza Ghalib (under-renovation too). Sandstone and marble were to redefine the faded colors of the place.

During the visit, we also traversed on foot to an Anganwadi centre. Our way was through lanes and by-lanes which were pretty narrow, and the balconies of the houses nearly touched each other over our heads. Heavy wires sagged from post-to-post, and uneven paths finally led us to the centre which functioned in a tiny room, a part of someone’s house. A few children were seated on a straw mat playing and hitting one another, as we casually stood outside talking with the Anganwadi worker about the centre and children.

The paradox lies in the way the two worlds are merged together: the rich heritage of the place mesmerizes the onlookers and the co-existence of deplorable environmental and sanitation conditions elicits mixed feelings.
with the project site, AKF was requested to arrange a visit to the *basti*. Accompanied by two senior faculty members and community volunteers, the research team had a conducted tour to the major landmarks of the *basti* through pathways and by-lanes. Getting a feel of the *basti* in terms of its geographical features, layout and a sketch of the people residing there proved most useful to us while preparing the tools of the study, time plan as well as for orientation of the research team to the context of the study.

Besides exposure to the settings in which AKF’s program is being implemented, the field visit added insight about the specific program interventions already in place. The interaction in the field with the community and AKF staff was extremely informative; it helped in understanding the cultural, social, political, and administrative ground realities related to the implementation of the program. Field notes were recorded which proved useful in evolving the proposed strategy for situation analysis.

The main sources of information collected during the field visit comprised:

- Observation of the MCD school and polyclinic (renovated by AKF efforts)
- Interaction with the staff at the vocational centre
- Interaction with the functionaries and service providers (*Anganwadi* worker, health staff)

**Review of Documents and Related Research:** At the outset, a thorough review of documents relevant for understanding the context and the AKF intervention was undertaken. Analytical review of relevant research and research tools used in studies with similar objectives was also done prior to finalizing the design and tools, as discussed in the previous chapter.

**A Participatory Process:** The process involved for this study was a participatory one, with regular consultations with members from AKF. A *Research Advisory Committee* was constituted with experts from the areas of Early Childhood, Education, Human Development, Health, Nutrition and Statistics to guide and direct the study during the phase of its conceptualization. Hence, two meetings of this core group- one held at the beginning of the study and the other after the preparation of the tools proved to be useful in steering the research study
in the right direction. Moreover, at every stage, the tools and steps were shared with AKF and their suggestions and recommendations incorporated into the progression of events.

**Combining Qualitative and Quantitative Methods:** Based on the theoretical constructs, we needed to get detailed and comprehensive information of the family profile and obtain feedback on upbringing and care of young children during the various sub stages of life. Looking at the diversity and variations in the basti population, it was felt that the quantitative data alone was likely to average out the results and may not present a realistic picture. Furthermore, there was a felt need to capture the so-called “voices” of the people of the basti and its children on issues concerning them. Hence, quantitative as well as qualitative tools were developed and used to complement and supplement the information and enable a more nuanced understanding and interpretation of data. The qualitative measures included conversations, interviews and focus group discussions with different categories of stakeholders. Children’s drawings provided an interesting reflection of their perspectives and developmental status.

**Figure 3.1 Timeline at a Glance**

- **Preparatory Phase**
  - Research Advisory Committee (RAC) meeting in November 2009, discussion on study design and sharing of research proposal
  - Recruitment of Research Associate and Research Assistant in Jan 2010
  - Literature review and development of tools
  - 2nd RAC to discuss research tools- February 2010

- **Pilot Study**
  - Recruitment of Field Investigators (FIs) - Feb 2010
  - Intensive training of FIs on how to use research tools effectively
  - Mock interviews done within university and in FIs neighborhood
  - Pilot study in the field in Feb 2010 for two days (15th and 16th February)

- **Data Collection**
  - Modification of tools based on pilot testing
  - Data collection initiated in first week of March for duration of 6 weeks
  - Data entry done simultaneously

- **Data Analysis and Report Writing**
  - Preparation of flat file for analysis
  - Data analysis in Excel 2007 and SPSS version 16.0
  - Report writing done simultaneously - May & June 2010

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Quantitative tools: Keeping in mind the objectives of the study, most of the information solicited concerned the beneficiaries at the household level. In a sequential manner, the first schedule gave basic information about the household, and at the same time helped in identification of the other target groups from the same household to be covered for the study. Thus, information was collected through the sections (ii to v) based on the responses gained in the first schedule (i). All the tools were pre-coded, and for the ease of the investigators, the questionnaires were colour coded, for effortless handling and administration.

The following quantitative tools were developed after a series of consultations with AKF which have been described in greater detail in Table 3.1 (Research tools: Appendix XX).

At the household level:

vi. Household schedule: A common schedule used for the household head which covered basic family information vis-à-vis socio economic status of the family, total number of family members, educational status, and other details. This schedule also helped in establishing rapport with the family.

vii. Interview schedule for currently pregnant women: This covered assessment of awareness level of the pregnant woman in terms of health, nutrition, immunization, concerns and issues relevant to the phase of pregnancy.

viii. Interview schedule for mothers of children (0-35 months): It discussed practices of breastfeeding, care of health, hygiene, immunization and nutritional needs of mother and child.

ix. Interview schedule for mothers of children (3 years to 5 years 11 months): This schedule covered the quality of health, nutrition and education services availed by the parents for their child(ren).

x. Interview schedule for mothers of children (6-8 years): It assessed quality of education and health services available, and perception of parents regarding them.

Assessment of children:

xi. School Readiness Instrument (for children in the age group of 4½ to 5½ years): A standardized tool (adapted from the tool developed and standardized by the World Bank)
administered on children between the ages of 4½ to 5½ years to assess their cognitive and linguistic preparedness for primary school.

xii. Achievement Test (for children studying in Grade 2, irrespective of age): administered on children who were completing their Grade 2 to assess their Math and Hindi achievement levels.

Assessment of services:

xiii. ECERS (Early Childhood Environment Rating Scale): An Indian adaptation of the internationally used tool named as TECERS was further adapted for this study by adding to it an observation proforma, with a checklist through minimized subjective interpretation/observation. The tool measures the quality of the ECE program being offered to children, and assessed different aspects including infrastructure and pedagogical practices followed in the preschool setting.

xiv. Teacher interviews: Interview schedules focused on aspects of service training, activity based teaching, classroom transaction, supervision and monitoring and community/parent participation.

xv. Checklist for the Health Centre: A checklist-cum-interview schedules for health personnel were prepared which was used to identify the quality of health services being offered at the community level.

Qualitative tools: The following qualitative techniques and processes were used:

xvi. Case Studies: consisted of detailed interviews and developmental assessments which helped to form profile of the children based on their context and experiences.

xvii. Focus Group Discussions with adolescent girls: to gain perspectives of adolescent girls on issues of women’s health, education, aspirations, marriage and gender concerns.

xviii. Focus Group Discussions with Anganwadi workers: To gain insight on training, supervision and schedule of activities of the anganwadi workers.
Focus Group Discussions with parents (separately for fathers and mothers): To gather the perceptions of the community concerning aspects of health and education of children specifically.

Focus Group Discussion with community leaders: To gather the views and opinion of the leaders, who are in constant touch with the community members at large, and thus know the felt needs of the people and the solutions for the same.

For each set of FGDs broad frameworks were developed to guide the discussion, with care taken to elicit more discussion from the participants rather than dominate the interaction.

*Training the Field Investigators:* After the draft tools were prepared, the research investigators for the study were inducted and given intensive training at the centre for a period of 15 days, beginning from first of February. During this time, they had an opportunity for hands-on training and trialing of tools; and conducted several mock interviews in their neighbourhood. Additionally, two workshops were conducted by a senior resource person from AUD for community volunteers in the basti, resource personnel of AKF, research team, and field investigators of the study. The focal area of the workshops was to train participants for effectively engaging with families living community.

*Piloting the Tools:* Meanwhile, preparation for the piloting of the tools was in full swing. Arrangements were made, and some houses were identified which were exclusive of the sample for the study.

Prior to the field study, pilot testing of the tools was an essential step in ascertaining that the research tools were framed properly and to adapt them wherever necessary. The pilot testing of the study was carried out on 15th and 16th of February 2010 in the basti, covering a select number of households that were not to be a part of the main study sample. The community volunteers (with an advantage of established rapport) led the CECED research team and the four field investigators to the identified households. In all, 12 households were covered during the pilot study, and (i) to (v) types of questionnaires (as mentioned above) were administered. Subsequently, after the pilot testing, meetings were held with members of AKF and CECED
research team to further refine, edit and revise the tools, as per the results of the pre-testing of the tools. Hence, a few corrections were made based on the findings (Pre-testing report appended at Annexure XX), and the final tools were then used for data collection. Questions on awareness about *anganwadi* services and options, wherever necessary, were added for questions with multiple choice responses.

**Selecting the Sample:** The sampling design was finalized in accordance with the scope and objectives of the study. Considering the focus of the study on the life cycle approach to child development, covering health, nutrition and education aspects along the development continuum, the universe from which the sample has been derived includes the following respondents:

**Household Level:**
- Head of the household
- Pregnant women
- Adolescent girls
- Parents/Caregivers of children in the age groups- below 35 months; 3-5 years & 11 months and 6 – 8 years
- Children in the age range of 4½ to 5½ years (to assess the level of school readiness prior to entry to primary school).
- Children who are studying in grade 2 in the elementary school (to assess their achievement levels in Mathematics and Hindi language).

**Criterion for selection of case studies:**
Selection of the case study sample was done keeping in mind the circumstances that were unique in terms of their influence these have on the growing child. Variation in family structure and the specific needs of children and families has also found appropriate representation. Studies were developed using mixed techniques of intensive interaction and was done by use of detailed interviews with the mothers, observation and conversations with the family members. Assessment of the children below 6 years of age was done by a standardized tool. In selected cases, Revised Denver's Pre-screening Developmental Questionnaire which is mainly a screening tool to gauge competence of children in various domains proved handy, in ascertaining
children’s performance against the developmental age norms of the scale. A projective technique of making drawings on sheet with crayons on themes of “me” and “my family” supplemented the information and acted as a window into the personal spaces of children.

**Facilities and Service Providers:**
- Health facility related to Maternity and Child Health (Government), MCW center, Bhogal
- Education facilities: 7 Anganwadi centers and 1 Nursery class
- Anganwadi workers from 7 AWCs
- School Teachers (Grade 1 and 2)

**Sample Size**
The Socio Economic Survey conducted by the Aga Khan foundation in 2008, covering 493 households across 9 clusters in Nizamuddin Basti was considered as the universe for the study. Since Sunder Nursery cluster is no longer included in the operation of AKF project sites, 26 households of that cluster were dropped from the household list to be used for drawing the sample. This reduced the universe size to 467 households. (‘has been considered’ change to was considered”).

AKF was requested to provide details of the family profile; giving numbers of members with their ages in each of the 467 households. The family composition details were scanned and analyzed meticulously to identify households having children below the age of 8 years, by extrapolating from the data of the year 2008. It was envisaged that these households are likely to have the needed target group categories within the family.

The process resulted in selection of a list of 220 households that met the eligibility criteria from which the sample of 108 households was drawn, using the **systematic randomized method**, taking every second household from the eligible list. It was envisaged that by covering around 50 percent households, sufficient numbers in each category would be available and all would be included in the sample.

The exact number available in each target category of the sample thus emerged, as the data collection progressed in the sample households. This process was further facilitated by the
community volunteers of AKF through their door to door visits of the selected households, prior to beginning the survey.

Based on the preliminary information from the listed family profile, estimated number of respondents for each category was calculated and found adequate for all target groups, except for
the pregnant women since only four could be identified. On the advice of the Research Advisory Committee, it was decided that a minimum of 20 pregnant women must be covered in the sample for any meaningful analysis. It was agreed that the additional number be drawn using the recognized procedure of *cluster sampling* from additional households listed in the eligible universal households (221) of the AKF survey and data available on registration of pregnant women at the AWCs in the Basti may be used to locate these households.

In the above back drop, the size of the sample and the details of the process after completion of the household survey are given in the table below:

**Table 3.1: Details of the Process**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Research tools and target groups</th>
<th>Number of respondents</th>
<th>Questionnaire type</th>
<th>Contents/Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>For all the households: Head of the household</td>
<td>111</td>
<td>Section 1</td>
<td>Household data + general socio economic indicators: household profile, access to basic services, income and assets and household expenditure.</td>
</tr>
<tr>
<td>ii</td>
<td>Currently pregnant women</td>
<td>23</td>
<td>Section 2</td>
<td>Anthropometric measurement, antenatal knowledge, behaviour and practices</td>
</tr>
<tr>
<td>iii</td>
<td>Women having children in the age group of 0-3 years</td>
<td>60</td>
<td>Section 3</td>
<td>Anthropometric measurement of the child, antenatal and natal practices, new born care, early stimulation, child health and immunization.</td>
</tr>
<tr>
<td>iv</td>
<td>Parents having children in the age group of 3 to 5 years (Care givers)</td>
<td>67</td>
<td>Section 4</td>
<td>Anthropometric measurement of the child, pre-school experiences, early stimulation, developmental milestones, hygiene practices</td>
</tr>
<tr>
<td>v</td>
<td>Parents having children in the age group of 6 to 8 years</td>
<td>53</td>
<td>Section 5</td>
<td>Anthropometric measurement of the child, hygiene practices of the child, school adjustment of the child.</td>
</tr>
<tr>
<td>vi</td>
<td>School Readiness Instrument (children in the Age group of 4½ to 5½ years)</td>
<td>32</td>
<td>School Readiness Instrument (adapted from the World Bank)</td>
<td>Activities for assessing different school readiness aspects like pre-number and pre-language skills including vocabulary, verbal expression, pattern making, classification and pre-number concepts.</td>
</tr>
<tr>
<td>vii</td>
<td>School Achievement Test (children studying in grade 2)</td>
<td>20</td>
<td>2 subjects (Maths and Hindi Language)</td>
<td>Grade 2 level of Mathematics and Hindi language from NCERT textbooks</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Assessment of services**

| viii | Check list for education facilities | 7 Anganwadis + 1 Nursery section (MCD School) | Check list adapted from Early Childhood Environment Rating Scale (ECERS) by CECED | Basic physical environment / settings, teaching learning aids, class room activities under various domains of development based on direct observation. |
| ix | In-depth Interview for the School Teachers (Grade 1 and 2) | 4 teachers | Check list prepared by CECED | Training needs, teaching learning process, problems and challenges, perception of parents regarding their services |
| x | Check list for the Health Facility | 1 Mother and Child Welfare Centre located in Bhogal | Check list prepared by CECED | Basic infrastructure, human resource, equipments and quality of services, current situation and utilization of these services. |

**B. Qualitative tools**

<table>
<thead>
<tr>
<th>Research tools and target groups</th>
<th>Number of respondents/ institutions</th>
<th>Research tool used</th>
<th>Contents/ Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>xi</td>
<td>Detailed Case studies</td>
<td>10 children in the age group of 0-8 years with special circumstances</td>
<td>Framework developed by CECED</td>
</tr>
<tr>
<td>xii</td>
<td>FGD with adolescents</td>
<td>2 FGDs</td>
<td>Framework developed by CECED</td>
</tr>
<tr>
<td>xiii</td>
<td>FGDs with Anganwadi workers</td>
<td>1 FGD with all the Anganwadi workers</td>
<td>Framework developed by CECED</td>
</tr>
<tr>
<td>xiv</td>
<td>FGD with Parents</td>
<td>1 FGD with Mothers and 1 FGD with fathers</td>
<td>Framework developed by CECED &amp; AKF</td>
</tr>
<tr>
<td>xv</td>
<td>FGD with Community leaders</td>
<td>1 FGD</td>
<td>Framework developed by CECED</td>
</tr>
</tbody>
</table>
Data Processing
The specifically developed tools for the study had a uniform pre-coded system across all schedules. In order to optimize on time there was a built-in provision to skip questions when ever not applicable. Further, during the course of data collection, the research team members reviewed schedules filled out by the FIs, to check for errors and gaps. A data analysis expert was appointed to prepare an entry format using CS Pro to develop a flat file, which provided multiple options for varied statistical analysis. The process of data cleaning was carried out after the punching of data in the flat file. The schedules were checked for consistency, with 10 percent of data filled to identify the errors. The standard descriptive univariate and multivariate analysis was carried out using MS Excel 2007 and SPSS (version 16.0). All the above steps and procedures facilitated; data scrutiny, back-check and omission of errors for ensuring quality analysis.

Limitations/ Challenges Encountered
Although the course of field work went smoothly without any disturbance, we encountered the following problems:

- **Migration:** During the course of data collection, it was found that a sizeable number (more than 10 per cent of the households) had reported shifting from the basti. Hence, households from the buffer sample were taken up in order to cover the required numbers.

- **Lack of Time for Children:** It was found that the schedule of children was tightly packed due to school and tuitions throughout the day, and hence left them with little time for assessments and interviews. Accordingly, the research team had to plan the assessment as per the convenience of the children.

- **Delayed Process:** On account of various reasons, the process of data collection could not begin until March and had to be finished within a month’s time. Hence, with the schools closing by mid-March as end of session, the administration of ECERS was postponed for another 10-15 days, and other assessments of children had to be done in a relatively short span of time.

- **Problem with AWs:** Moreover, the anganwadis were found to be locked majority of the time, hence ECERS which required observation on two occasions could only be done once in each educational facility.
- **Parental participation for testing:** Finally, there was some difficulty in motivating parents to bring children for anthropometric measurements, and hemoglobin test requiring collection of blood sample using a syringe. However, persuasion and follow-up done by volunteers resulted in fairly good participation. Interestingly, some additional children were also tested, brought by enthusiastic parents despite not being part of the sample.

The major findings of the study emerging from this analysis have been discussed in the next chapter.
4. CHILDHOOD IN THE BASTI: OUR FINDINGS

Located in the heart of New Delhi, Nizamuddin basti is considered as an urban slum with a predominantly Muslim population. At a glance, the basti appears as a crammed place, with hustle and bustle everywhere. The uneven structured houses with their balconies touching each other seem typical of a slum setting. However, our study found that a majority of these houses were ‘pucca’. Despite poor power and water situation in Delhi, all the houses in the basti reported receiving regular supply of electricity and piped water! However large dumps of garbage, cramped spaces, over burdened sanitation system could also be seen, depicting a typical picture of urban poverty.

Such surroundings are likely to make the growing child more vulnerable and at risk. Since the child’s survival and development is under the direct influence of his/her immediate environment, for any intervention to be effective, the child’s family and physical environment should be congenial and supportive to his/her development. We therefore weave the discussion of our findings primarily around the child in the Basti and discuss his/her development along the different sub stages of the developmental continuum, from pre natal to eight years. As a backdrop to this discussion, we begin with an analysis of the overall proximal environment available to the child in the Basti, in which the child is growing and developing.
CHILDHOOD IN THE BASTI: THE PROXIMAL ENVIRONMENT
The Proximal Environment:

Findings at a Glance

<table>
<thead>
<tr>
<th>Gender ratio- 1102.7 women : 1000 men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family profile: 70% Nuclear families</td>
</tr>
<tr>
<td>Average family size: 6</td>
</tr>
</tbody>
</table>

Educational Status of Adults (n= 376, Males = 190, Females = 186)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Educational Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Illiterate</td>
</tr>
<tr>
<td>19-65 (n1= 353)</td>
<td>23.5%</td>
</tr>
<tr>
<td>&gt;65 (n2=23)</td>
<td>52%</td>
</tr>
</tbody>
</table>

Employment Status of Adults (n= 376)

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Male (n1= 190)</th>
<th>Female (n2= 186)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>76.8%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>23.2%</td>
<td>89.2%</td>
</tr>
</tbody>
</table>

Number and percentage of children in age range of 0-8 years (n=217)

<table>
<thead>
<tr>
<th>No. of children/by age</th>
<th>&lt;2 years</th>
<th>2-4 yrs</th>
<th>5-6 yrs</th>
<th>7-8 yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.5%</td>
<td>30.4%</td>
<td>25.3%</td>
<td>20.7%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Educational Profile of children (n= 277) Age

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>No education</th>
<th>Preschool</th>
<th>Not enrolled in preschool</th>
<th>School</th>
<th>College</th>
<th>Religious education</th>
<th>NFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5 (n=73)</td>
<td>-</td>
<td>72.6%</td>
<td>17.7%</td>
<td>8.2%</td>
<td>-</td>
<td>-</td>
<td>1.4%</td>
</tr>
<tr>
<td>6-18 (n=204)</td>
<td>0.5%</td>
<td>5.3%</td>
<td>1%</td>
<td>87.7%</td>
<td>0.5%</td>
<td>2%</td>
<td>2.46%</td>
</tr>
</tbody>
</table>
5. CHILDHOOD IN THE BASTI: THE PROXIMAL ENVIRONMENT

Proximal environmental for the study has been operationally defined as the immediate environment or the ‘micro’ and ‘meso’ levels (described in Chapter 2) around the child, which directly or indirectly influences her/his growth and development. This includes; (a) Demographic profile of the basti - dependency ratio, sex ratio and population growth (b) Family profile - family size, educational and employment status, standard of living; (c) Physical environment - fuel, electricity, water and sanitation conditions.

Demographic Profile of the Basti

The population in the basti is increasing at an alarming rate of 7.4 per cent. The high influx of people has further added to the burden on the available resources like space, water, public toilets etc. which has indirect influence on children’s development. The same was reaffirmed during FGD with community leaders as well as parents. They also discussed safety issues of children threatened by presence of negative influence around, including substance abuse!

Given our focus on children in the early years of life, i.e. 0-8 years, we analyzed the profile of children in the Basti disaggregated by age and gender (Table 4.1.1).

Table 4.1.1: Number and percentage of children in age range of 0-8 years (n=217)

<table>
<thead>
<tr>
<th>No. of children/by age</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>54.9</td>
<td>45.1</td>
<td>100</td>
</tr>
<tr>
<td>2-4</td>
<td>56</td>
<td>44</td>
<td>100</td>
</tr>
<tr>
<td>5-6</td>
<td>36.3</td>
<td>63.7</td>
<td>100</td>
</tr>
<tr>
<td>7-8</td>
<td>46.7</td>
<td>53.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>46.8</td>
<td>51.2</td>
<td>100</td>
</tr>
</tbody>
</table>

Recent changes in basti profile

"Basti ka mahual bharat ho gaya hai, yahaan tab ki chhote bachhkon ko bhi yeh se baahar bhejne mein darr lagta hai... Kyunki baahar se aage toh nasha harta hain. johe dafa keh ba chhake bhi bigad rahe hain."

-A worried parent (during FGD)

Population growth has been calculated on the basis of 148 eligible couples [women in reproductive age (15-45 years)] in the sample of 111 households. 48 (pregnant women + mothers of children under 1 year) out of 148 couples were found to be pregnant within the last one year, pointing to 7.4 per cent of the population growth.
As observed from Table 4.1.1, the **Gender Ratio** was found to be favorable for girls. This may be attributed to the following two practices; (a) recurring deliveries in the hope of a baby boy; and, (b) religious belief that children are ‘Allah ki dein’ (gift of God) and non-acceptance of abortion. A similar trend was observed with regard to the gender ratio of the sample households among adults, being 1102.7 which again was favorable for females; that means for every 1000 men, there were 1102.7 women. The high sex ratio in the *basti* was a positive trend as compared to the adversely falling national and state level sex ratio. However, majority of the families were found to be male- headed (84 per cent), with a handful headed by widowed grandmothers or separated women (16 per cent).

**Dependency Ratio** is a measure of the portion of a population which is composed of dependents (people who are too young or too old to work) in comparison to the working population. India ranks 83rd in the world with a dependency ratio of 61. Countries that have a high dependency ratio have more people who are not of working age, and fewer who are working. Higher the number, more are the people who need to be looked after.

In the *basti*, dependency ratio was found to be 88, i.e., for every 100 persons of working age, 88 are dependents. The national picture of dependency ratio is much better than that of the *basti*. The high dependency ratio in the *basti* could be attributed to the large family size of the population, as seen in the earlier section. This may limit the availability of economic resources for a growing child in the family. The rising dependency ratio and high level of unemployment was a major concern within the community, as has been supported in the arguments in the FGD with the community members, who wanted vocational guidance/counseling for young adolescents and some training opportunities to be organized.

**Family Profile**

*Family Size* and number of siblings have a direct bearing on child’s growth and development. Smaller the family size, better the quality of care likely to be available to the young child.

---

*Dependency Ratio* = \( \frac{\text{Number of people aged 0-14 and those aged 65 and over}}{\text{Number of people aged 15-64}} \) \times 100
Almost all children in the basti were growing up in nuclear families (70 per cent), but with an average family size of six people living in a household. Interestingly, the family size of nuclear and joint families didn’t differ much.

**Educational Status** of the family is another important variable to understand the family profile. The current educational status of the children and the level of education of the parents therefore, were analyzed from the data, disaggregating children as well as parents across age groups and sex wise (Table 4.1.2).

**Educational Status of Children:** Table 4.1.2 clearly indicates the educational status of the children in age groups of 3 to 5+ and 6 to 18 years separately, from the households included in the sample.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Sex (Numbers given in parenthesis)</th>
<th>No education</th>
<th>Preschool</th>
<th>Not enrolled in preschool</th>
<th>School</th>
<th>College</th>
<th>Religious education</th>
<th>Non formal education</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5</td>
<td>Male (32)</td>
<td>-</td>
<td>71.9</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>Female (41)</td>
<td>-</td>
<td>73.2</td>
<td>12.2</td>
<td>14.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total (73)</td>
<td>-</td>
<td>72.6</td>
<td>17.7</td>
<td>8.2</td>
<td>-</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td>6-18</td>
<td>Male (86)</td>
<td>1.2</td>
<td>7</td>
<td>1.2</td>
<td>83.7</td>
<td>-</td>
<td>2.3</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Female (118)</td>
<td>-</td>
<td>4.2</td>
<td>0.8</td>
<td>90.7</td>
<td>0.8</td>
<td>2.6</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Total (204)</td>
<td>0.5</td>
<td>5.3</td>
<td>1</td>
<td>87.7</td>
<td>0.5</td>
<td>2</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Despite not so encouraging educational status of the adults, it was a matter of relief to know that parents valued education for their children. This is evident from the fact that almost two-third of 3-5 year olds was enrolled in preschools and in the age group of 6 to 18 years 87.7 per cent were studying in schools and another 10 per cent were receiving religious education or studying in non formal centres.

**Educational Status of Adults in the Household:** There seemed to be not very encouraging scenario of education level amongst adults 19 to 65 years of age. Almost half of men and around one-third of women had education level less than Senior Secondary (Table 4.1.3). almost one-third of women were found to be illiterate which was a matter of concern. The illiterate mothers’
positive inclination for imparting education to children was indicated during interviews when they mentioned that they sent their children for tuitions. However, illiteracy of mother is a disadvantage for the child as the mother who has to take care of children, look after their nutrition, immunization, hygiene, education and other health related problems, is likely to be not able to acquire the requisite knowledge to take care of growing needs of her children.

**Table 4.1.3: Educational Status of Adults (n= 376, Males = 190, Females = 186)**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Sex</th>
<th>Educational Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Illiterate</td>
<td>Non-formal education</td>
</tr>
<tr>
<td>19-65</td>
<td>Male (177)</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>Female (176)</td>
<td>29.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23.5</td>
</tr>
<tr>
<td>≥ 65</td>
<td>Male (10)</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Female (10)</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
</tr>
</tbody>
</table>

**Employment Status:** Opportunities for employment abound by higher levels of education; which is important to meet the basic need of survival and quality of life. Children in the basti were generally found to be living in a secure environment, with a majority of their fathers being employed (76.8 per cent) in either private job or having small shops around dargah of flowers, perfumes and sweets (Table 4.1.4). Mothers, on the other hand, were predominantly housewives. This was found to be a limiting factor for family income. The same was expressed by mothers during FGD, as they expressed an urgent need for vocational training and self employment opportunities, to improve access to better facilities and resources for child care and education.

**Table 4.1.4: Employment Status of Adults (n= 376)**

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Male (n=190)</th>
<th>Female (n=186)</th>
<th>Total (n=376)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>76.8</td>
<td>10.8</td>
<td>44.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>23.2</td>
<td>89.2</td>
<td>55.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
**Standard of Living:** The amenities, facilities are directly related to standard of living at home which in turn influences quality and quantity of childhood experiences. This is inferred by family income, availability of assets and type of ration card, which reflects the family’s status to meet minimum needs of food, security etc.

The study revealed that from the estimated *Income* of the families, 47 families were above poverty line criteria and 44 families were below poverty line. The criterion of Below Poverty Line (BPL) was taken as Rs. 560/month/head (Planning Commission, 2005-06).

Owning a *Ration Card* in Delhi is related to several entitlements, eligibility and benefits to services. Families below poverty line are entitled to essential food commodities at subsidized rates through yellow ration cards. In the present study, 82 per cent families owned ration cards, out of which, most families (83.5 per cent) possessed the white card which signifies people above poverty line (Figure 4.1.5). A few people also reported having a yellow card (16.5 per cent) meant for people below poverty line. However, possession of few fake ration cards was observed in the basti. Due to this, families were unable to avail the benefits provided by the government. This when compared with income levels as indicated above, it was found that many above poverty line held BPL cards

<table>
<thead>
<tr>
<th>Ration card</th>
<th>% households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ration card available</td>
<td>82</td>
</tr>
<tr>
<td>Above poverty line (White card)</td>
<td>83.5</td>
</tr>
<tr>
<td>Below poverty line (Yellow card)</td>
<td>16.5*</td>
</tr>
<tr>
<td>Ration card not available</td>
<td>18</td>
</tr>
</tbody>
</table>

*It maybe noted that only 8.8% households were fulfilling the criteria of possessing yellow card. Allocation of cards was found to be uneven when the color of ration card was compared with the income of the family. Almost 7.7 per cent of the families falling above poverty line possessed yellow cards which are meant for BPL families. Paradoxically, almost 43 per cent of families falling below poverty line had white cards which prevent them to avail food commodities at subsidized rates.
For the present study, on the basis of a list of 18 assets (such as fan, stove, vehicle etc.), the families were divided in the three levels related to income levels---low, medium and high. Association between assets and family income was made and found to be related \((p<0.01)\), i.e., families with higher income possess more assets which is the index of quality of life.

**Table 4.1.6: Association of Assets with Income (n= 111)**

<table>
<thead>
<tr>
<th>Assets</th>
<th>N</th>
<th>% Low</th>
<th>% Medium</th>
<th>% High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (0-6)</td>
<td>13</td>
<td>76.9</td>
<td>23.1</td>
<td>0</td>
</tr>
<tr>
<td>Moderate (7-12)</td>
<td>56</td>
<td>48.2</td>
<td>51.8</td>
<td>0</td>
</tr>
<tr>
<td>High (13-18)</td>
<td>42</td>
<td>11.9</td>
<td>57.1</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>37.8</td>
<td>50.4</td>
<td>11.8</td>
</tr>
</tbody>
</table>

As can be seen from the Table 4.1.6, the status of possession of assets was not dismal and 88 per cent families reported moderate to high assets.

**Physical Surroundings**

Water, sanitation and hygiene are intimately related to any plan for disease prevention and health promotion, especially in the case of children. In the context of extreme poverty and high illiteracy, poor sanitation and personal hygiene, water related diseases continue to be the leading cause for mortality among infants and children. In cognizance of this, these aspects were studied as an integral part of this analysis.

As opposed to the widespread problem of regular access to piped water in most parts of Delhi, 82 per cent of the families in the Basti reported regular access in their households, which was a good situation. However, during FGD with community members concerns were expressed regarding the quality of piped water, as at times it was found to be mixed with sewage water! This needs to be attended to by MCD with intervention of AKF, as it can be a serious health hazard.
Majority of the households had a provision of stored water (90 per cent). But, it is a matter of concern that despite plastic containers having so many ill-effects, almost all the families were using plastic. Using plastic containers can cause breast and prostate cancer, altered menstrual cycle, diabetes apart being potential environmental hazard (Bello, 2008). Plastics containers can be replaced by containers made of material such as glass, stainless steel etc. 27 per cent families further reported that they kept water uncovered, which could again be a major health concern for young children.

Sanitation is another weak aspect of the urban slum surroundings. Lack of proper drainages and sewage system are problems in rapidly growing slums which can severely influence children’s health. It was heartening to note that majority of households had pour flush toilets (89 per cent) out of which few households (15.2 per cent) shared it with their neighbors (Table 4.1.7).

<table>
<thead>
<tr>
<th>Type of toilet facility</th>
<th>% HHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own pour flush</td>
<td>73.6</td>
</tr>
<tr>
<td>Shared pour flush</td>
<td>15.2</td>
</tr>
<tr>
<td>Own flush</td>
<td>8.3</td>
</tr>
<tr>
<td>Shared flush</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Within the community, cleaning of the toilet everyday was not a regular process. Though at least 40 per cent reported to clean toilets regularly, more than half (52.2 per cent) of the families did not clean the toilet everyday and cleaned it only once in three days. By and large, during the field study it was noticed that due to congested dwellings, the toilets were kept satisfactorily clean and were not smelly. It seems the availability of water and social pressure was at work.

As also observed during the field visit, due to open meat shops, there seemed to be a problem of houseflies which is a well-known health hazard, especially for children, which can cause

diarrhea, food poisoning and can lead to severe dehydration. Another concern raised during the FGD with community members was an evident lack of civic sense among the basti residents.

**Fuel and Electricity:** There is no way of validating the responses given by the community in terms of fuel type and usage. 75 per cent of the families reported having LPG connection; however only 55 per cent used it regularly. Remaining used wood, kerosene and electricity. Only 3 per cent families indicated the usage of electricity for cooking. The common observation was contrary to the responses, as during household visits, we found that almost all the households had electric heater for cooking purpose. The repair shops in the basti too flourished in business with piles of electric heaters stacked for repair. It appeared that people had resorted to illegal connections for electricity. Having electric heater in the same room on the floor was a major safety hazard in the families with toddlers. All the families had regular supply of electricity available. However, information on authorized connections was not collected.

**Our Conclusions**

What do we conclude from this analysis of the proximal environment in which children in the Basti are spending their early childhood years? What emerges is a mixed picture of poverty but with a few silver linings. The silver linings are a positive gender ratio, most families with a regular source of income with fathers employed, many possessing a range of household assets facilitating the child’s life in the household and most children engaged in appropriate educational programmes. On the flip side, the concerns are the rising population and large average family size and high dependency ratio which are inevitably limiting the resources, physical and financial, available to the child. Despite poor sanitation, overall community awareness and action to address this issue is also limited. With 50 percent of the women illiterate, despite best intentions, their access to information related to optimal child care is bound to be affected and this has implications for the children’s development. The potential for enhancing household incomes through women engaging in income generating activities or employment is completely untapped and limits resources available at the household levels for child care and education. Lack of any vocational training available to the women, adolescents and the youth are additional issues.
A Way Forward

In cognizance of the above backdrop some recommendations for the way forward are being suggested: There is a need for a proper **advocacy plan** for parents, particularly mothers, to improve knowledge and awareness regarding health, hygiene and immunization to control basic preventable diseases such as diarrhea, flu, common fever, jaundice, malaria, etc. Use of audio-visual rather than print medium would be desirable in view of the low literacy rates.

- **Provision for Vocational Training and Employment** of women and young adults is extremely crucial for improving quality of life of the children to enable a more facilitative environment. Self Help Groups (SHG) can be created, especially for women who have basic skills like stitching, embroidery, cooking etc. Mediation to expand access to higher income earning jobs and providing specific training opportunities could be solutions to improve the socio-economic situation of the families.

- Feasibility of re-laying underground pipelines to ensure **clean drinking water** may be explored with the help of MCD.

- Promotion of **family planning** is extremely vital. However it is a sensitive issue and needs to be tackled with cultural consideration in mind.

- Regulation of **ration card** provision at the government level is important so that needy people are able to avail the benefits provided by the government.

*As the study provides a holistic view on the continuum of care, the next section deals with the beginning of life, and goes on to trace the processes which impact the lives of mothers and yet to be born child.*
CHILDHOOD IN THE BASTI: SAFE MOTHERHOOD FOR ENSURING HEALTHY HEADSTART
### Safe Motherhood:

#### Findings at a Glance

<table>
<thead>
<tr>
<th>Maternal Educational Level (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
</tr>
<tr>
<td>20.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Related Variables for Pregnant and Lactating Women (n= 83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current age (in years)</td>
</tr>
<tr>
<td>26±4.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History of Pregnancy for Pregnant and Lactating Women (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pregnancies</td>
</tr>
<tr>
<td>First pregnancy</td>
</tr>
<tr>
<td>18%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status of Weight Gain v/s Months of Pregnancy (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than normal weight gain</td>
</tr>
<tr>
<td>50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevalence of Anemia among Pregnant women (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No anaemia (&lt;11 gm/dl)</td>
</tr>
<tr>
<td>47%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration of pregnancy (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No registration</td>
</tr>
<tr>
<td>14%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of delivery (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
</tr>
<tr>
<td>39%</td>
</tr>
</tbody>
</table>
4.2 CHILDHOOD IN THE BASTI: SAFE MOTHERHOOD FOR ENSURING A HEALTHY HEADSTART

It is a well-acknowledged fact that life begins at conception. It would be logical thus to see the mother and child as a linked biological unit. The period from conception through the moment of birth is critical and influences survival and development during subsequent stages of the early childhood years. Our situation analysis of childhood in Nizammudin Basti therefore begins with tracing of children’s growth from the beginning of life, which is imperative for arriving at any realistic understanding of the children’s present status of development and their development needs.

Determinants of Safe Motherhood

The continuum of care during prenatal stage comprises maternal care, newborn and childcare practices used during infancy. It was this understanding that guided the information gathering process of the present study. Pregnant and nursing mothers became legitimate respondents within the sample of the study. An attempt was made to investigate some of the well-established determinants of safe maternal and child health during the foundation period. These included (i) maternal health status like nutritional profile and dietary patterns; (ii) maternal age; (iii) history of pregnancy; (iv) mother’s educational status and awareness; and (v) family and community support.

Since one of the mandates of the study was to suggest interventions needed for promoting maternal and child health, it was considered essential to study these antecedent variables for ensuring safe motherhood and a healthy start to life.
**Maternal Health Status:** Under-nutrition is a process which often starts in-utero, and may last particularly for girls and women throughout the life cycle. A stunted girl is likely to be a stunted woman. This poses not only a threat to her own health and productivity, but to adverse pregnancy and birth outcomes. Undernourished mothers have higher risk of developing low birth weight babies that heightens babies’ risk of death (Fisherman, Steven et al, 2004)\(^{10}\).

Recognizing the importance of nutritional status of the mother for the well-being of the yet to be born baby, height and weight of the mothers were used as indicators to identify healthy growth of foetus during the pregnancy as per ideal weight gain.\(^{11}\) This was calculated on the premise that average Indian women weigh 50 kilograms for the height of 150 cms. Based on this, the ideal weight for height was calculated and finally ideal weight gain according to the month of pregnancy was deduced (0.5 kg per week, starting from 3\(^{rd}\) month).

**Figure 4.2.1: Status of Weight Gain by Women during Pregnancy**

![Image of a pie chart showing weight gain categories: Less than Normal (33%), Normal (50%), More than normal (17%)]

Information obtained from pregnant and nursing women gave insight about the traditional diet given during pregnancy to ensure good health for the mother and baby in pre and post-natal period. Figure 4.2.1 above clearly illustrates that dietary practices of mothers were poor, as 83 per cent of the mothers had abnormal weight gain in both positive (overweight) and negative (underweight) direction. As inferred from case studies and FGD of mothers, their definition of


‘nutritionally healthy diet’ was the consumption of foods such as ghee, cream, and nuts which are rich in fats which led to obesity. On the other hand, half of the mothers were found to be underweight. This may be due to reasons such as frequent deliveries, lack of awareness, stressed economic conditions and customary practice of mothers eating in the end.


Studies indicate inadequate diet during pregnancy can cause **micro-nutrient deficiencies**, suppressed immune systems (Chandra, 1991), and in severe cases- organ damage, resulting in lifelong health problems. Micronutrient deficiencies manifest slowly but have severe handicapping consequences on maternal and newborn health. Thus care has to be taken from conception for preventing it through adequate consumption of foods such as green leafy vegetables rich in iron, citrus fruits like orange, pineapple etc for vitamin C and dry fruits comprising almonds, walnut and magaz (seeds of musk melon, cucumber, pumpkin and melon).

In the study when the blood samples of pregnant women were tested for hemoglobin levels, more than half of them (53 per cent) were moderately or severely anemic (Figure 4.2.2). The prevalence of anemia in the basti was found consistent with the national data (NFHS-III - 57.9 per cent). However, there is a need of raising awareness about consumption of iron-folate tablets

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**Expectant Mothers: Special Care**

Traditionally, in most cultures, the expecting mother is indulged and doted after. She is advised a rich nutritious diet, supplements and a lifestyle that takes care of her and the baby’s health. Additionally, the members in the family and well-wishers also recommend and advise her about the cares and precautions to be followed. Social customs and practices followed as a way of life are further impressed during such phases. Sudhir Kakkar, in his book The Inner World* enunciates in the last chapter Child in the Indian tradition, about the emotions of the pregnant mother and how she should be indulged  “The critical period for the psychological development is said to commence from the third month of pregnancy... For the future psychic well-being of the individual, it is imperative- the texts are unanimous on this point- that the wishes and cravings of the pregnant woman be fully gratified and the unit of expectant mother and foetus be completely indulged.”

and importance of the other trace elements like zinc for ensuring maternal and child health as supplement for prophylaxis.

The findings of weight status were correlated with the level of anemia in the study. Malnourished (underweight as well as overweight) mothers were anemic vis-à-vis normal weight mothers who had normal level of hemoglobin (Figure 4.2.2, p< 0.05).

This status was further probed through analysis of consumption of iron by women and utilization of prophylaxis.

**Figure 4.2.2: Prevalence of Anemia among Pregnant women (n=17)**

![Pie chart showing prevalence of anemia among pregnant women]

- No anemia (<11 g/dl)
- Moderate anemia (9-11)g/dl
- Severe anemia

**Prophylaxis:** Iron-Folate and Iodine prophylaxis is of utmost importance as their deficiency during pregnancy is associated with a higher incidence of stillbirths, miscarriages and congenital abnormalities. These risks can be reduced by ensuring dispensing of iron and iodine as per prophylaxis before and during pregnancy, which is an integral component of the health care during ANC.

The study accordingly attempted to get selected information on prophylaxis. It was observed that majority of women (90 per cent) were given Fe-Fo tablets. However, around half of the nursing mothers (58 per cent) had complete prophylaxis course. The reasons given by mothers who left prophylaxis course incomplete were side effects such as nausea, pain in abdomen and vomiting. These findings corroborate similar findings from several other studies. A study done in Delhi
showed that only 53.6% of pregnant women were showing compliance to Fe-Fo prophylaxis, and 47.4% of pregnant mothers not consuming Fe-Fo tablets at all (Talwar et al, 2005).  

**Maternal Age Profile:** Pregnancy and child birth are times of joy and celebration for families and parents. But premature pregnancy and motherhood pose considerable risks to the expectant young mother and her baby. Maternal mortality across the world is highest in girls aged 15-19 years. The study tried to ascertain the maternal age profile of the sample women for three aspects: current age of women, their age at marriage, and age at first pregnancy, which were considered as critical determinants for child care and maternal health. Accordingly the information was collected and analyzed (Table 4.2.1).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age range (in years)</th>
<th>Mean age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;18</td>
<td>18-25</td>
</tr>
<tr>
<td><strong>Current age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant mothers</td>
<td>-</td>
<td>69.6</td>
</tr>
<tr>
<td>Lactating mothers</td>
<td></td>
<td>51.7</td>
</tr>
<tr>
<td>Total (n=83)</td>
<td>21.6</td>
<td>60.2</td>
</tr>
<tr>
<td><strong>Age at marriage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant mothers</td>
<td>26.1</td>
<td>69.1</td>
</tr>
<tr>
<td>Lactating mothers</td>
<td>36.7</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>31.4</td>
<td>64.5</td>
</tr>
<tr>
<td><strong>Age at first pregnancy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant mothers</td>
<td>17.3</td>
<td>69.5</td>
</tr>
<tr>
<td>Lactating mothers</td>
<td>18.5</td>
<td>73.3</td>
</tr>
<tr>
<td>Total</td>
<td>17.8</td>
<td>71.4</td>
</tr>
</tbody>
</table>

Despite the legal requirements of 18 years as age at marriage for girls in India, almost one-third of total pregnant and lactating women got married before this age norm. It was a matter of serious concern to find that almost one-fifth of both pregnant and lactating women were pregnant

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for the first time before the age of 18 years. Needless to say, both early marriage and early pregnancy have adverse effects on the maternal health and childbearing, especially on those who are physically and psychologically immature. Further high fertility in India is attributed to marriage of girls at age less than 18 years. The current ages of pregnant and lactating mothers clearly indicated that pregnant women got married at later age than lactating mothers as indicated by mean age at marriage pointing to the possibly favorable changing trend of delayed age at marriage in the basti in the last one or two years!

The findings point to the fact that there is a need to raise awareness of the community of the basti regarding the adverse effects of early marriage and the need to give opportunity to ensure education for their daughters, as was found in the FGD with adolescent girls, who shared that they wished they could continue schooling. This was well supported by the responses of pregnant and nursing mothers of the study as only 30 per cent reached senior school before they got married.

**History of Pregnancy:** More than half of the mothers had three or more children (Table 4.2.2). It was not surprising to observe high number of pregnancies which was perhaps consistent with the believes of the community. This also clearly indicates that women in the basti were not practicing adequate birth spacing. Moreover, around thirty percent of women had previous history of miscarriages, which was found to be positively correlated to high parity ($r=0.64$, $p<0.001$). This was substantiated by the findings that rates of miscarriage were correlated to high parity and miscarriage risk and 24 per cent of women reported one or more miscarriages. In the present study, age of mothers when related to risk of miscarriages was found to be positively correlated ($r=0.4$ $p<0.05$), which was in line with the trend cited in literature (Pallikadavath & Stones, 2005).
Table 4.2.2: History of Pregnancy for Pregnant and Lactating Women (n=83)

<table>
<thead>
<tr>
<th>Variable</th>
<th>% Pregnant mothers (N=23)</th>
<th>% Lactating mothers (N=60)</th>
<th>Total (N= 83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of pregnancies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First pregnancy</td>
<td>26.1</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Second pregnancy</td>
<td>26.1</td>
<td>25</td>
<td>25.4</td>
</tr>
<tr>
<td>More than two</td>
<td>47.8</td>
<td>60</td>
<td>56.6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Miscarriages/ Induced abortion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>78.3</td>
<td>68.3</td>
<td>71</td>
</tr>
<tr>
<td>Once</td>
<td>8.7</td>
<td>21.7</td>
<td>18.2</td>
</tr>
<tr>
<td>&gt; Once</td>
<td>13</td>
<td>10</td>
<td>10.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

These miscarriages could thus be attributed to the early marriage, immature age at pregnancy, lack of awareness complications during pregnancy and need to access ANC services.

**Mother’s Educational status and Awareness:** Women’s education is not only a basic need and a right, but also a means of meeting the children’s needs and sustaining their development. Education and awareness of women is very important as it determines level and quality of food availability, nutrition, health of family and her own health. The study therefore tried to capture the education level of pregnant and nursing women.

**Figure 4.2.3: Maternal Educational Level (n = 83)**

- Graduate: 7.2%
- Senior Sec passed: 30.1%
- Middle Passed: 13.3%
- Primary passed: 7.2%
- Non Formal Literate: 21.7%
- Illiterate: 20.5%
In the study, almost 42 per cent of the mothers were either uneducated or non-formally literate. Since a woman is the principal provider of care and support to infant and children, her lack of proper education may influence the level of awareness and hence unknowingly put at risk the yet-to-be born baby and herself. The lack of awareness as observed during the study manifested in the following ways:

**Access to Services:** The lack of education of women limits their awareness about services and the ways to access these services. As observed during the baseline, half of the pregnant women (50 per cent) were unaware of the facilities from the *anganwadi* such as early registration after pregnancy, using ANC services and supplementary nutrition and referral services.

**Care during Pregnancy:** To ensure the birth of a healthy baby and safe motherhood, care during pregnancy is vital. In the present study, women were asked about the care to be taken during pregnancy such as nutritious diet, not lifting heavy objects, proper rest, and consumption of medicines, regular health checkup and visiting health facility in case of complications.

Almost all mothers had insufficient or no knowledge (91 per cent) regarding the need for change in dietary practices during pregnancy. Only few mothers (9 per cent) had adequate knowledge regarding the same as illustrated in Figure 4.2.4.

![Figure 4.2.4: Knowledge of mothers about dietary practices (n = 23)](image)

Although very few mothers had adequate knowledge about the dietary practices during pregnancy, they were aware of the fact that pregnant women should not lift heavy objects (70 per
cent) and should take proper rest (52.8 per cent). During FGD with mothers, it was found that although they were aware of care practices, they were not able to follow it due to lack of helping hands and support from other family members.

None of the women reported visiting a health facility, in case of complications. This may be due to the reason that they were not even suitably aware of the kind of possible complications, as evident in the next section.

*Complications during Pregnancy:* The common fatal factors for both mother and the unborn child range from diabetes, anemia, toxemia, lack of oxygen and infections.$^{13}$ Most of these are preventable, if managed at the right time. Thus, awareness about complications is important; but in our study, almost three-fourth nursing mothers and half of the pregnant women were unaware of the complications that women may face during pregnancy. Very few women knew about bleeding (8.4 per cent) and anemia (18 per cent). For the remaining complications such as convulsions, swelling, decreased movements of fetus, the values were insignificant. The findings pointed to the urgent need of raising awareness of the women. This should become an integral part of the home visits by health functionaries or ICDS functionaries, once the pregnant women are identified and encouraged to register with ANC or PNC.

*Birth Spacing:* High fertility rates increase the risk of death in women due to maternal causes. While mortality risks are associated with all pregnancies, these risks rise the more times with every subsequent pregnancy.$^{14}$ Female literacy and education are decisive for the steady reduction of maternal mortality and fertility. A strong correlation between literacy and fertility was established in this study ($r=0.27$, $p<0.05$); as mothers’ educational level elevated, reduction in parity was observed (Table 4.2.3).

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$^{13}$ UNICEF (1984) An analysis of the Situation of children In India

$^{14}$ UNICEF (2009), The State of The World’s Children
Table 4.2.3: Association between Woman’s literacy rate and Family size (n = 83)

<table>
<thead>
<tr>
<th>Educational level</th>
<th>No. of children</th>
<th>&lt;2</th>
<th>3-5</th>
<th>&gt;6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate or less that 5th grade educated</td>
<td></td>
<td>39</td>
<td>39</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>6th to 10th grade educated</td>
<td></td>
<td>43.3</td>
<td>36.7</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>More than 11th grade educated</td>
<td></td>
<td>63.6</td>
<td>36.4</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

It was noticed that almost two-third of both pregnant and nursing women were aware of the merits of small family birth spacing; however, it seems from the size of the family (Table 4.2.3) that knowledge has not helped in restricting the number of children in the family.

When inquired about the source of awareness about family planning, family members (30 per cent) played a major role. Thus, family members who were promoting family planning can be called as Positive Deviants (PD)\(^{15}\). It would be a process worth learning to identify effective motivations of these families for promoting such positive behaviors and should be replicated in the community.

**Promoters of Safe Motherhood- Family, Health Staff and Others:** As mentioned above, role of family members along with government health staff positively influenced safe motherhood vis-à-vis ANC, diet, immunization and birth spacing at some level (Figure 4.2.5). However, the efficacy of such promotion needs to be revisited.

Interestingly, as evident from Figure 4.2.5, one can clearly notice that private practitioners tend to limit their role only until delivery whereas the AWWs did not seem to focus on their advocacy role particularly with regard to birth spacing and nutrition. The presence of NGO in the _basti_ was found to moderately regulate practices concerning safe motherhood.

\(^{15}\) Families who experience successful outcomes despite cultural constraints’ are referred to as positive deviants in the study.
Figure 4.2.5: Promoters of Safe Motherhood

* For the figure, source of awareness for ANC services, birth spacing, diet and immunization during pregnancy was clubbed.

This finding needs to be considered in the context of the fact that the role of the community health workers and service providers like *anganwadi* workers, ASHAs, etc is to provide basic curative, preventive and promotive health care at the door-steps of the people; they are expected to serve as resource persons who can be trusted by the local population and who can provide a link between primary health centre and the local community. It is obvious that these service providers need to be trained and motivated to be able to perform at more optimal levels.

The Care Continuum: Ante-Natal Care (ANC)

Ante-natal care is vital for safe motherhood and wellbeing of the unborn baby. It refers to pregnancy-related care provided by a health worker either in a medical facility or at home. In theory, antenatal care should address both the psychosocial and medical needs of the woman in the context of the health care delivery system and the surrounding culture (WHO, 1996). The present study covered registration, checkups, frequency, and quality of ANC for pregnant mothers.

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**Registration of Pregnancy:** Early registration of pregnancy is the key indicator of ANC. It secures the basic rights of a mother to basic services such as health checkups, nutritious diet, immunization, and proper advice on care to be taken during this period. In the study, it was found that three-fourth of both pregnant and nursing mothers registered themselves in the first trimester, which was a desirable trend (Figure 4.2.6).

Figure 4.2.6: Registration of Pregnancy (n=83)

Out of 86 per cent women registered (Figure 4.2.6), two-third of the pregnant as well as nursing mothers preferred Government set-up for ANC (Figure 4.2.7), which in the context of the growing private sector, is a significant finding. This can be attributed in the Nizamuudin Basti context to quality services available free of cost at the nearby MCW centre Bhogal, as reported by the Medical Officer at the clinic. However, it was surprising to find that although women registered and availed ANC services, they still preferred home delivery over institutional delivery. Further probing provided the probable explanation of this phenomenon, as reported by field investigators (F.Is) and also inferred from case studies, it appeared that women in the basti considered delivery as a ‘normal phenomenon’ which did not require any medical intervention, unless there were complications.
Frequency of ANC: ANC provides an opportunity to reach pregnant women with multiple interventions such as immunization, micro-nutrient supplementation, and improved hygiene practices, and reduces the likelihood of under-nutrition and anemia in the mother and low-birth weight in newborn. The minimum number of ANC visits during pregnancy according to obstetrics care is three for ensuring safe, smooth and successful pregnancy. Sooner and frequent is the ANC visit, lesser are the chances of complications during pregnancy. Thus the information regarding the same was ascertained trimester-wise in the present study.

First ANC: It was a relief to know that more than half of the pregnant and lactating mothers in the study had received their initial ANC during the first trimester of their pregnancy (Table 4.2.4).

Table 4.2.4: Trimester during which ANC was received (n=83)

<table>
<thead>
<tr>
<th>Trimester</th>
<th>Pregnant women (n=23)</th>
<th>Lactating women (n=60)</th>
<th>Combined (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ANC</td>
<td>21.7</td>
<td>1.6</td>
<td>11.6</td>
</tr>
<tr>
<td>T₁ (0-3 months)</td>
<td>52.2</td>
<td>68.4</td>
<td>60.2</td>
</tr>
<tr>
<td>T₂ (4-6 months)</td>
<td>21.7</td>
<td>28.3</td>
<td>25.3</td>
</tr>
<tr>
<td>T₃ (7-9 months)</td>
<td>4.2</td>
<td>1.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Immunization: Tetanus remains a significant cause of maternal and newborn deaths. It is preventable through vaccination of pregnant woman. Tetanus toxoid (TT) has proved efficacious against the disease with two doses (one each in second and third trimester) providing protective concentration of anti-toxins. Almost all lactating women had taken two doses of TT (95 per cent) and all pregnant women in T2 or T3 had taken at least a single dose of TT.

**Frequency of ANC:** Most of the nursing mothers reported that they had visited doctor/ clinic more than 3 times during their pregnancy (Figure 4.2.8), which reveals a positive trend. However, it was appalling that 5 pregnant women had not even paid a single visit to the doctor/ clinic, out of which, three were in their second and third trimesters!

It was interesting to note that the figures for frequency of ANC visits obtained from the study were similar to the national trend (NFHS –III), which was 73.8 per cent for mothers who had received at least 3 antenatal care visits (do they visit the center or get visits) for their last pregnancy (Table 4.2.5).

<table>
<thead>
<tr>
<th>Table 4.2.5: Visits during Pregnancy (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary</td>
</tr>
<tr>
<td>Pregnant mother</td>
</tr>
<tr>
<td>T₁ (0-3 months)</td>
</tr>
<tr>
<td>T₂ (4-6 months)</td>
</tr>
<tr>
<td>T₃ (7-9 months)</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Lactating mother</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

A positive relationship was found between type of service providers for ANC and the frequency of health checkups (p< 0.05), as the results pointed to the fact that more number of health checkups were being done at MCWC Bhogal and private hospital/clinics. For further details, please refer to ‘promoters of safe motherhood’.

**Quality of ANC:** The quality of care delivered by a health facility is critical: to provide adequate assistance, it must have adequate medicines, supplies, equipments and personnel. In addition, it should be able to prevent complications during pregnancy. The checkups are
Mothers were served hot milk with butter, sweet water, almonds, jiggery, and ghee to ease out the birth process.

In the present study, the efficacy of ANC was estimated through tests performed during pregnancy. It included 9 tests, viz. weight measurement, height measurement, blood test, blood pressure, urine test, abdomen examination, internal examination, breast examination and sonography. Some tests require monitoring at regular intervals while others require to be done once during pregnancy. Checkups in which mothers had undergone at least 6 tests out of 9 were considered effective checkups; and less than that as ineffective ones.

Figure 4.2.8: Assessments of Checkups (n=83)

![Assessments of Checkups](image)

It was relieving to note that a majority of pregnant and lactating woman (70.5 per cent) had undergone effective checkups as per criteria described above. But, only 43.5 per cent of the pregnant women were satisfied with the quality of ANC checkups. Long waiting time in accessing the health facility was a major cause of dissatisfaction among mothers. It was a matter of great concern that 12.5 per cent of the women had not undergone any checkup or test (Figure 4.2.8) before delivery. 9% pregnant women believed it to be unimportant and 13% considered that it was too early for registration.

**Delivery**

Each year, more than half a million women die from causes related to pregnancy and childbirth, and nearly 4 million newborns die within 28 days of birth (UNICEF, 2009). The majority of these
Brave attempt, but.. could have gone wrong!

One of the mothers covered for the case study had given birth to all her children at home. She said she had managed all the deliveries on her own, and that there was no one at home when it happened! She did not experience labor pain, but asked her mother to assist in cutting the umbilical cord. The first child was a still birth, caused due to strangulation by the umbilical cord, yet the next two deliveries also took place at home.

Practices during delivery were not known to her, yet she had the notion that the delivery on no account should happen in a dargah or a mosque, unless an emergency. Mentioning the practices which should be followed while delivering the child, she stressed on the use of a blade that has been sterilized by a candle flame, and then tying the cord of the child with a thread.

Deaths could be prevented if professionally skilled health personnel were present during child-delivery.

**Place of Delivery:** Given the strong advocacy for institutional delivery, it was disheartening to find in the study, that while 61 percent of the nursing mothers did opt for institutional delivery, almost 40 per cent of nursing mothers still delivered their last child at home and 35 per cent of pregnant women were planning to deliver their next child at home (Figure 4.2.9). As learned through case studies and FGDs of mothers, they feared going to hospital because doctors reprimanded them for having more than two children and emphasized on family planning. Also, there was a general fear among mothers/families, that if they would go to doctor for delivery, they will do caesarian as it fetches them more money.

![Figure 4.2.9: Place of Delivery (n=23)](image)

The figures on institutionalized deliveries, as compared to the national data from NFHS-III, showed a poor state in the *basti*, as the rate of institutionalized delivery was 61 per cent in *basti* as compared to the national urban figure of 70 per cent.

**Skilled Attendants during Delivery:** Childbirth can be a time of risk not only for the baby, but also for the mother. Reducing maternal deaths is
possible through increasing number of births attended by skilled health worker—doctor, nurse or trained midwife. In the present study, only 60 per cent deliveries were done by skilled birth attendants available for delivery purposes, which was far lower than the national figure (75.3 per cent).

Complications during Delivery: In our study, almost half (48 per cent) of the women faced complications during delivery. The most common problem was severe anemia (28 per cent). However, very few women at the awareness level knew about the problems which they could face. Problems such as prolonged labor (20 per cent), placenta not being delivered within 30 minutes (25 per cent), water burst (11.7 per cent) was reported by a few of them. The ones who were aware by and large had experienced these problems during their previous pregnancies. The reasons for women opting for home delivery could also be due to their unawareness about complications during delivery. It may be pointed out here that during labour and birthing one of the major risks to the unborn child could be the lack of oxygen supply to the brain. It can have serious consequences of neurological trauma and brain damage, which gets reflected in seizure and other neurological problems subsequently. During home visits it was observed that the families had several children who were reported to be suffering from seizures. Since we had not collected specific empirical data related to it, these could not be directly attributed to delivery related complications. However, unawareness of mother regarding importance of institutionalized deliveries could be a plausible reason for several children seizures mere 111 households covered in the study. But we acknowledge that this is a mere conjecture and needs further probing and research.

What do we conclude from these findings? The issue we are addressing is---to what extent is the Continuum of child care from the period of conception to birth optimal for children’s growth and development in the Nizamuddin Basti. Our results do not exactly present a very heartening picture, with several risk factors emerging significant.

While anemia and malnourishment, which are by themselves major risk factors, seem endemic among the women, these factors are further compounded by early marriage and pregnancy at an immature age, possibly due to inadequate awareness and socio cultural beliefs. A related
determinant for this scenario could also be lack of education among women which was observed
to have a direct effect in terms of larger families, lack of awareness and inadequate utilization of
available health services and more morbidity and miscarriages. While these demand side factors
emerge significant, supply side factors also need to be considered particularly when we consider
the finding that the Anganwadi’s role in advocacy and information sharing among the
community has been at best, marginal. Any proposed intervention would need to address these
factors in a focused, comprehensive and context specific mode.

**Proposed Way Forward for Ensuring Safe Motherhood** -

**Creating a Supportive Environment for Women by:**

- Improving and strengthening existing services.
- Ensuring co-ordination between health and ICDS functionaries; and NGOs and private
  practitioners to work in unison to address major issues discussed above related to
  maternal and child health.
- Encouraging and promoting institutional deliveries while also ensuring that trained birth
  attendants are available in the case of home deliveries.

**Ensuring Health and Nutrition Promotion by:**

- Creating and raising awareness of adolescent girls, women and other family members
  about dietary needs, nutrition fortification through locally available foods and health
  caring and personal hygiene practices.
- Building a cadre of community volunteers and health functionaries to provide support
  needed for safe motherhood.

**Empowering Women and Girls by:**

- Creating adult education opportunities for women and for girls beyond elementary
  education.
- Providing and effective IEC package related to Reproductive and Child Health (RCH)
  issues.
- Providing income generation, vocational training to girls/women in order to enable them to supplement their income and have better access to resources.

**Involving and Educating Men, Adolescent Boys and other Significant Family Members in Maternal and Newborn Health and Care:**

- Birth of a child is equally important for a father; therefore, involvement of male members is needed in advocacy and ensuring care of the mothers during pregnancy by ensuring access to health services and providing support for meeting their dietary, emotional, recreational, rest and comfort related needs.

Creating a supportive environment for maternal and foetal health is critical for the birth of a healthy child. Within the dynamic continuum of care, the next section deals with the beginning of life and traces the trajectory followed through the first three years of life, which lay the foundation for a child’s lifelong personality development.
CHILDHOOD IN THE BASTI: FIRST THREE YEARS - A WINDOW OF OPPORTUNITY
First three years:
Findings at a glance

<table>
<thead>
<tr>
<th>Nutritional Status of 0-3 year olds (n=53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
</tr>
<tr>
<td>64%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevalence of anaemia among 0-3 year olds (n=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys (n=22)</td>
</tr>
<tr>
<td>23.8%</td>
</tr>
<tr>
<td>Girls (n=21)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status of immunization of children (n=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided on time</td>
</tr>
<tr>
<td>56.6%</td>
</tr>
</tbody>
</table>
The first few years of life are the most crucial in determining the growth and development of a child during subsequent years. It is a well established and recognized fact that the foundations for lifelong learning are also laid in these years. The care practices addressing the needs of the growing child therefore, play a critical role in having a favorable or unfavorable influence on the growth and development of the child.

Leaving the warm and secure environment of mother’s womb, the newborn begins a journey on her own; and only appropriate nurturance and care can ensure survival and optimal development. With this as a backdrop, we studied the nature of care received by newborns and children below the age of three years in the basti to get insights into the initial start these children have had in life. The information on care practices considered important was solicited from 60 mothers having children below three years of age in the sample. The findings that emerged are presented into two sub-sections, dealing with: (a) the neonate (until 1 month after birth), and (b) the child up to 3 years of age.

**The Neonate**, a fragile and delicate being, requires intensive care. The first seven days of life are marked as critical due to initiation of high impact life-saving behaviours, beginning with a birth cry that marks the functioning of the respiratory system, followed by initiation of elimination process and other regulatory systems of the body that make neonates extremely

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vulnerable. The care received by the newborn; can make the difference between life and death—particularly for babies who are born prematurely (UNICEF, 2009).

**Newborn Care** comprises of simple practices of providing warmth to avoid hypothermia, early colostrum feeding, hygiene, cleanliness and care of the umbilical cord, support for mother-infant bonding and relationship.

As soon as the baby is born, providing *warmth* is extremely essential to prevent newborn hypothermia (when the baby’s body temperature goes below 36.5º C) that can depress breathing. Our sample of mothers reported following various traditional ways to keep the newborn warm. The most common way was wrapping him/her in a warm blanket or cloth (96.7 per cent). More than half of the sample also reported placing the baby on the mother’s body to keep it warm, which was one the scientifically sound practice.\(^\text{17}\)

To prevent hypothermia mothers are advised against *bathing* a newborn within 7 days of birth. It was disheartening to know that the mothers in the *basti* were unaware of the implications of bathing a newborn before one week. More than 90 per cent of them reported to have given the first bath to their babies immediately after birth or within one or two days.

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*For enhanced lactation, mothers consumed carom seeds (ajwain), almonds, fennel, kalaunji, lentils and kheer.*

—Mothers in case studies

Other than keeping the child warm, initiation of breastfeeding within one hour and giving *colostrum* (the first thick yellow milk produced by mother) is a highly recommended early care behavior. Due to its low fat, high carbohydrates and protein contents, it is extremely easy to digest. Besides being the perfect first food for the baby, it has antibodies that protect the newborn from the invading infections.

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Traditional practices

As soon as the baby is born, most families dress up the child in new clothes. After the birth, the most common formal ceremony is on the 6th day, termed as chhatthi, where gifts and offerings are made to the baby. On the 21st day, the baby’s head is shaved. It also takes place on the 7th day in a number of families. The mother is not allowed to step out of the four walls of the house until 40 days, since it is believed that this way, she will avoid the evil eye. The 40th day marks the occasion of aqiqah which is a ceremony wherein relatives and friends are invited for a meal at home. An animal sacrifice (usually goat) is made, and the meat is distributed among the poor. Those who cannot afford such a meal, cooked rice is served to the needy. Additionally, some mothers reported the practice of lobaan (scented vapours), to protect the child from evil.

-As reported in case studies

In most cases they did not discard colostrum. Of the mothers who did not give colostrums, 10 percent did not give it due to lack of awareness and another 5 percent due to socio-cultural taboos.

Another revealing trend described both in the case studies and also in the interviews was the traditional practice of head shaving within a week’s time of the birth of a baby. Looking at the anatomy of the skull of the newborn which has fonanelles (soft spots) with bones that are yet to be fused and not fully calcified, one wonders how safe is this practice/ritual for the baby of shaving the head with a razor? We are not in a position to comment on it but this may be worthy of further investigation and probing.

Information was also solicited from mothers on seven questions related to hygiene practices they followed. These included basic practices like teeth brushing, bathing, combing hair, nail cutting, washing hands before and after eating, and washing hands after

There was a broad tradition in the basti of feeding newborn with prelacteal feeds like honey, janam ghutti, tea, and homemade ghutti made with ajwain, almonds, and castor sugar. The ghutti’s are dipped in cotton and given to babies.
defecation. The respondents were put in three categories based on the scores: good (6-7), needing improvement (3-5) and poor (<3). Almost all mothers reported following good hygiene practices (97 per cent), and only 3 per cent mothers were in the category of needing improvement.

Similarly, findings about the mothers’ perception of maintenance of cleanliness were found to be interesting. Almost half the mothers informed that they changed their baby’s clothes every time they got dirty, but it must be remembered that mothers’ perception of ‘dirty clothes’ may differ across the board. These responses also seemed very much influenced by the socially desirable trend.

The health status of neonates was also evaluated on the basis of mothers’ recall of the babies’ weight at birth. It was reported that almost two-third of the children were born with normal weight, but a few (15 per cent) were underweight. The health status of two new born babies brought for health check up during the study was observed to be within the normal range. Also, a significant association was found between the place of delivery and the practice of weighing the new born, as all neonates having institutional deliveries were weighed, whereas neonates born at home were not. In case of home deliveries, caregivers did a rough estimate of the new born baby’s weight; like - normal, underweight, or healthy based on their own experiences.

Finally, possession of a Birth Certificate ensures a child’s eligibility to various amenities and access to the services and entitlements in future. The process of procurement of such an official document was simple in case of institutional deliveries. But, as observed and reported during the FGD, parents of children born at home did not bother to get one made till their child was ready to be enrolled in a school and later had to face trouble on account of it. This is an issue which needs more advocacy.
The Child Under Three:

**A baby girl in a houseful of girls**

Ilma is the sixth daughter of Shakeel and Khushnuma. She is a naughty two-year old. She lives in a joint family, with five sisters. For most of the day, Ilma is in the company of her mother, and she enjoys playing with her sisters. The mother admitted that since it was her sixth child, she had not planned for her birth and was not very keen for this pregnancy, but bore it with a smile considering it as a gift from God. She gave birth in a Government hospital, as her blood pressure was high and the movement of the child was not much. Regarding breastfeeding, she shared that girls can be breastfed for about two and a half years; whereas it is less than 2 years in case of boys.

A good child, according to the mother, is one who respects everybody. She defines her daughter as an aggressive, short-tempered and bright girl. The mother wishes her to get educated, and then pursue what Ilma herself dreams of becoming.

The child’s developmental age according to the Denver tool was found to be about 7 months greater than her actual age. Specifically, she showed fairly good performance in the activities concerning the language domain. On account of being a part of a joint family structure, the girl has obvious sources of a rich linguistic environment. This, in turn has led to the development of clear language skills from an early age.

**Twin birth, separate living**

Atif and Yasir are twin brothers, the former being 20 minutes older. They are more than a year old, and their mother Shahnaaz says that their temperaments are extremely different. Atif is a quiet and submissive child; whereas Yasir is the naughtiness of the two. They live in separate houses; Atif lives with his parents, while Yasir stays at his grandparents’ house. Shahnaaz shared that Atif used to consume more of her breast milk than his twin brother and is more attached to his mother. Atif takes time to get friendly with others. Yasir, on the other hand, is highly social and fond of his grandparents. Since Yasir stays with his maternal grandmother (nani), he has some confusion regarding who the mother is. He calls his grandmother “maa” + “ammi”, but can’t speak it very clearly. Yasir does not like being fed by anyone, and eats on his own. However, his insistent habit of eating mud has been a cause of concern for the parents, but they have not found any solution. He also suffered from severe diarrhea once, due to the same reason. Yasir is not scared of his parents, and pretends to cry and shouts back when scolded; Atif, in contrast, gets upset and complains to the mother.

The parents wish to have both the children together at their home, once they start school. The mother’s aspirations for them are to get them educated properly and get a better job than that of their father’s who is a driver.

Proper feeding practices, regular growth monitoring, complete immunization, nurturance and early stimulation can go a long way in assuring optimal development of the child. This section reports on some of these aspects with regard to the children of the Basti.
Almost all mothers (91 per cent) in the study were aware of the importance of breast feeding and had practiced it. Two-thirds of the sample of mothers was also aware of the fact that the child should be given feed on demand. However, the duration of exclusive breast feeding could not be ascertained correctly. But as reported and observed, mothers did keep breast feeding the child beyond two years and in some cases even until the age of three years. When inquired about kind of the advices mothers received on breastfeeding, varied responses were obtained. Mothers received advice on how to take care of breast (67%), importance of colostrum (30%) and advantages of breast feeding (60%).

After 6 months of birth, breast milk is no longer enough to meet the nutritional needs of the infant and complementary foods should be added to the diet of the child. This transition from exclusive breastfeeding to family foods, referred to as Complementary Feeding, was investigated in the study. As has been empirically established, 6 months onward is a vulnerable period referred to also as the ‘growth faltering stage’ , as in the absence of adequate complementary feeding and diarrhea due to poor sanitation, malnutrition sets in during this time.18

It was disheartening to find that more than half (57 per cent) of the mothers in our study did not know the exact duration until when the child should be breast fed exclusively, and the appropriate time period of the onset of complementary feeding. Research reports severe consequences of this, leading to malnutrition among children. For early detection of growth faltering and prevention of under-nutrition, Growth Monitoring should also be done regularly involving measuring height and weight and comparing it with the age appropriate standard.

In the study, it was observed that although 81.7 per cent of the 0-3 year olds possessed health cards, these were not updated for 70 per cent of the children. Most of the children having health cards were those born in the institution and were weighed only at the time of birth. In order to

18 http://www.who.int/nutrition/topics/complementary_feeding/en/index.html
assess the current health status, height and weight of 53 children aged less than 3 years were measured (See box). Children were assessed on two parameters: weight-for-age and BMI-for-age.

Disturbingly, there was a high prevalence of undernutrition in terms of underweight (49 per cent), wasting (44 per cent) and stunting (64.2 per cent) among basti children. The figures were found to be alarmingly higher than the national data (NFHS-III). [Figure 4.3.1]

**Figure 4.3.1: Comparison of Nutritional Status of 0-3 year olds between NFHS-III data and Basti**

A similar trend is observed from Figure 4.3.2, which shows a distinct shift of the curve towards the left side of the global reference standard, indicating poor nutritional status. On classifying children sex wise, it was surprisingly found that girls showed comparatively better nutritional status than boys, contrary to the expected trend of discriminatory feeding practices for girls.
Stunting (low height for age), is caused by chronic food deprivation, frequent infections, and poor health. Stunting mainly occurs in the first three, and its effects are largely irreversible! The implications of stunting are severe, as it is also associated with lower educational outcomes. In our study, it was observed that children were born healthy, but showed a steady decrease/deterioration of height with age, an indicator of chronic undernutrition (Figure 4.3.3). The plausible explanation of this decline is the insistence of mothers' on breastfeeding until the child is 2 to 3 years old, as this delays introduction of complementary food which may be low in nutrients. This re-affirms the lack of knowledge among the mothers about appropriate infant young child feeding practices and its importance for physical growth and cognitive development. The role of AWW has been found to be minimal in terms of advising mothers about child care practices, as highlighted through FGD of mothers.

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19 Federal Ministry for Economic Cooperation and Development. Getting the basics right: Contribution of ECD to quality, equity and efficiency in education.
Additionally, high prevalence of anemia among children (both boys and girls) was observed. Only 23.7 per cent were found to have normal hemoglobin count. Poor environment and unhygienic personal habits appear to predispose them to the risk of infection, worm infestation and thus, anemia. Interestingly, the incidence of anemia was found more in boys than in girls (Figure 4.3.4).

**Figure 4.3.4: Prevalence of Anemia among 0-3 year olds (n=43)**
The feedback from the FGD and the mothers was that supplementary nutrition to children (0 to 3 years) was not being provided by ICDS in the Basti. This was a disturbing feedback since the Basti has seven AWs, which should, as a part of its services, provide regular SNP. If the AWWs were doing so, there may not have been so many stunted and malnourished children.

Figure 4.3.5: Malnutrition infection cycle

Malnutrition increases the risk of infection and infectious disease. Figure 4.3.5 explains how malnutrition and infection are inter-related. In communities that lack access to clean drinking water, the additional health risks present a critical problem. Thus timely **Immunization** is the key to preventing infections and disease. A routine immunization schedule (against 6 harmful diseases) recommended by Ministry of Health, and used by health centers across the country, has been used in our study to determine the **Status of Immunization** of the children in the Basti.

Table 4.3.1: Status of Immunization (n=60)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>per cent provided on time</th>
<th>per cent Delayed</th>
<th>per cent Not vaccinated at all / Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>54.9</td>
<td>43.1</td>
<td>3</td>
</tr>
<tr>
<td>OPV-0</td>
<td>49.9</td>
<td>35.1</td>
<td>15</td>
</tr>
<tr>
<td>DPT-1</td>
<td>11.8</td>
<td>76.5</td>
<td>11.7</td>
</tr>
<tr>
<td>Hepatitis B-1</td>
<td>15.1</td>
<td>74.9</td>
<td>10</td>
</tr>
<tr>
<td>OPV-1</td>
<td>8.4</td>
<td>69.9</td>
<td>21.7</td>
</tr>
<tr>
<td>DPT-2</td>
<td>10</td>
<td>61.7</td>
<td>28.3</td>
</tr>
<tr>
<td>Hepatitis B-2</td>
<td>10</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>OPV-2</td>
<td>3.4</td>
<td>61.6</td>
<td>35</td>
</tr>
<tr>
<td>DPT-3</td>
<td>5.1</td>
<td>51.6</td>
<td>43.3</td>
</tr>
<tr>
<td>Hepatitis B-3</td>
<td>5.1</td>
<td>48.3</td>
<td>46.6</td>
</tr>
<tr>
<td>OPV-3</td>
<td>6.7</td>
<td>41.7</td>
<td>51.6</td>
</tr>
<tr>
<td>Measles</td>
<td>14.3</td>
<td>20.7</td>
<td>65</td>
</tr>
<tr>
<td>MMR</td>
<td>10</td>
<td>6.7</td>
<td>83.3</td>
</tr>
<tr>
<td>DPT-B</td>
<td>-</td>
<td>6.7</td>
<td>93.3</td>
</tr>
<tr>
<td>OPV-B</td>
<td>-</td>
<td>5</td>
<td>95</td>
</tr>
</tbody>
</table>

*Values in per cent*

20 [http://icmr.nic.in/fignov1.gif](http://icmr.nic.in/fignov1.gif)

103
A positive finding was that the benefits and importance of immunization to prevent diseases was well-known by most community members (96.7 per cent), and the main sources of such awareness were either the doctor (43 per cent) or they were self-informed (36 per cent) [Table 4.3.1]. Although almost everyone knew about the importance of immunization, only 3 children had received full immunization for age.

From the trends of immunization in the basti, it could be observed that the vaccination scheduled at birth (BCG and OPV-0) was given on time to almost 55 per cent of the babies. The possible reason for the time appropriateness, coverage and timely administration of these vaccines was perhaps the availability of babies immediately just after delivery in the health facility. However, consideration needs to given on other 45%, since this figure is not insignificant. As reported earlier, more than 40 per cent of women in the basti delivered children at home; this explains the underutilization of these two vaccines.

Similarly, the vaccines {OPV(1-3), DPT(1-3), Hepatitis B (1-3), Measles, and MMR}, which had to be administered at varying stages of early years and which required parents’ involvement in terms of their time and effort were found to be delayed or were not provided at all. One of the major reasons as quoted by parents for this was that they didn’t get time to take their child for vaccination (43 per cent).

In addition, parents in the basti were aware about the pulse polio campaign, but their casual attitude could be observed here too. More than one-third of the sample population did not take their children to the polio booth since they knew that health volunteers/workers visited homes to administer it at their doorstep. Vitamin A supplements too were received only by a meagre one-third of the population, owing to the lack of knowledge about its benefits.

**Developmental Milestones** are a measure of children’s age-appropriate development, based on a sequential pattern. According to the principles of development, these are broad general norms
with due recognition given to individual differences. However, nonattainment of these milestones within the age range is indicative of delayed development; thus these are often used for screening for early detection of disabilities in children.

In the present study using the actual age of children in months against a few identified developmental norms, an appraisal was made for their attaining these milestones. The selected milestones were based on the norms prescribed by Bayley (1993) in Table 4.3.2

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Age for achieving milestone</th>
<th>Achieved</th>
<th>Not achieved</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social smile</td>
<td>&lt;1 month</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Head control</td>
<td>3 weeks-4 months</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Sitting with support</td>
<td>4-6 months</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Sitting without support</td>
<td>5-9 months</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Crawling</td>
<td>5-11 months</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Stand with support</td>
<td>5-12 months</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Walking with support</td>
<td>9-16 month</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Speaking first words</td>
<td>10-14 months</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Speaking sentences (two words)</td>
<td>18-24 months</td>
<td>3</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

As can be seen from table above; that milestones related to motor and physical development were achievement by majority of the children. Needless to say; that these aspects are influenced mainly by maturation and environmental variables relatively have relatively less bearing on achieving these competences. However, linguistic and communication skills require exposure to a linguistic environment, verbal interaction and opportunities to learn language with adult stimulation. These developmental competencies showed delayed achievement in case of quiet a number of children in the age group of 18 to 24 months.

These findings are consistent with research evidence that confirms association of neurological and motor developmental delays with poor nutritional status of the child. However, the other well acknowledged variable that plays a crucial role is early stimulation, which supports linguistic development and achievement of milestones related to communication. This requires optimal parent/adult child interaction. It was disheartening to find that 75 per cent of the children in the age range of 18-24 months could not even express themselves in meaningful sentences.

**Snapshot: Life in the basti**

Abu Bagr is a one year old young boy, who lives with his parents and sister in a nuclear setup. He does not have a fixed daily schedule, but sleeps usually late at night, after his father comes home and plays with him. The child stays most of the day with the mother. When Abu was about four months old, he suffered from seizures for 2 months, during which the parents took him to a local private doctor. The parents got his CT scan done, and he was given medicines, multivitamins, calcium tablets and powders for strength. He has an elder sister Aamna with whom he loves playing with cars, dolls and utensils. He does share his toys with others, but often pulls from them too. The mother tries her best to teach her children poems and stories. However, on account of an early marriage, (when she was just in Standard 4), she had to quit schooling. She still feels the loss and her incapability to teach them worthwhile things like poems and so on. The mother wants Abu to go for higher education and aspires for him to pursue engineering or a computer course. She also wants her children to learn good manners and be polite to all elders.

Mentioning the practices which should be followed while delivering the child, she stressed on the regular massage of the arms and legs of the body. The mother began breastfeeding Abu immediately after birth. She consumed ground kalaunji with rice or bread for enhanced breast milk production. The child’s grandmother did the household chores for the first two months, while the mother rested. Abu has still not been toilet trained, and is learning to inform the mother. He is able to eat rice and pre-cooked noodles on his own; the mother helps him with the rest. The disciplining of the children is handled by the mother herself. She admitted hitting the daughter more than Abu, when they don’t listen to her. She tries to warn them once or twice, but usually, she ends up hitting them twice or thrice a day. The children, according to her, become quiet only for a short while when scolded, but they return to their pranks once she is done. She describes Abu as a naughty and active child, and wants him to grow up into a well-behaved person.

During the assessment of the child, it was found that he could achieve all tasks according to his age. However, in terms of his gross motor skills (involving larger muscles of the body), there was an evident lack especially even to walk about. This may be attributed to the general weakness in the child because of his physical condition and ill-health.

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Summarizing this section, our conclusions from our study of ‘infancy’ in the Basti are not very positive and throw up many concerns. Despite seven AWS and a health facility in the Basti it is disturbing to find that the mothers lack knowledge about exclusive breastfeeding and delayed introduction of complementary feeding. This was reflected in the poor nutritional status of the children, with majority having low weight for age and many had stunted growth. Growth faltering was observed in 49 per cent of the basti children. The immunization status was unsatisfactory but showed some good coverage only in the case of BCG and OPV vaccines. Based on mothers’ feedback the use of hygiene and cleanliness habits was as per desired levels but could not be substantiated by general observation and upkeep of children during home visits. As was evident in the basti population, the newborn enters into the family with multiple caregivers to take care of him/her. The family environment after birth may have allowed for interactions with siblings and adults, and the child grew amidst much liveliness provided by siblings. The detrimental effect of unsupportive environment on growth and development of the young ones was reflected in delayed developmental milestones. But mothers were unable to understand the importance of one to one interaction with the infant and of providing stimulation. They considered their mere presence or routine caring as adequate for infant’s all-round development. The service provided by ICDS through seven AWCs for birth registration, postnatal care, and supplementary nutrition was negligible and was not even available in most cases!

A Way Forward:

Since the first three years are most crucial in determining the child’s developmental trajectory, and at times can result in irreversible effects, appropriate intervention is required for safeguarding the survival and development of the young children. This should be given priority in any intervention being proposed for the basti. Some suggestions for planning an intervention are

- *Early Contact of Health Personnel/AWW/Health Volunteers with Mothers and Babies* and they must visit the newborn and the mother thrice in the first month after delivery. The first visit must be made ideally within 24 or at most 48 hours of birth. Birth weight must be taken at the earliest to provide interventions in case of LBW babies.
- **Exclusive Breastfeeding and Timely Introduction of Complementary Feeding** should be promoted aggressively. Weaning foods made with local culturally available products must be introduced at an appropriate time to ensure proper growth, based on developmental norms.

- **Opportunities for Early Stimulation:** Mothers be counseled and made aware of providing sensory and language stimulation during routine child care activities. Indigenous and traditional lullabyes, infant games and play based interactions between adults and children should be revived. Appropriate low cost play material and infant readers should be made available.

- **Regular Immunization:** Major gaps that exist between knowledge and practice of immunization among the basti people must be bridged with multi-pronged strategies of appropriate awareness campaign, use of IEC non-print material, making health and ICDS functionaries work as change agents and improving efficacy of services providers.

- **Improvement of the Health Status of Children:** The problem of undernutrition must be dealt with proper mechanisms. Effective nutrition awareness tools should be used within community to raise their knowledge about IYCF practices. Locally available and culturally accepted food items such as seasonal fruits and vegetables must be promoted. A survey should be done to find about traditional food. Mothers Self Help Groups should be set up to be used as platforms for communication. Secondly, the consumption of unhealthy snacks among children needs to be prevented. The food items available on street and by hawkers can be a great risk. The general unclean and unhygienic environment of the basti is a matter of serious concern and needs to be addressed through participation of community and civic authorities.

The next section makes an attempt to see how the early experiences of growing in the Basti affects the next sub stage of 3 to 6 year olds and how they confront the challenges of growing and developing during their preschool years that further mark the threshold of the foundation stage for lifelong development.
CHILDHOOD IN THE BASTI:
THE PRESCHOOLER
The preschooler:
Findings at a glance

### Nutritional Status of preschoolers (n=48)

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
<td>64%</td>
</tr>
<tr>
<td>Wasting</td>
<td>44%</td>
</tr>
<tr>
<td>Underweight</td>
<td>49%</td>
</tr>
</tbody>
</table>

### Preferred Health Service Centre (n=67)

<table>
<thead>
<tr>
<th>Centre Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyclinic</td>
<td>28%</td>
</tr>
<tr>
<td>Government facility</td>
<td>8%</td>
</tr>
<tr>
<td>Private doctor/ Hospital</td>
<td>64%</td>
</tr>
</tbody>
</table>

### Type of Preschool Attended by Children below Five in Basti (n=67)

<table>
<thead>
<tr>
<th>Preschool Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anganwadi centre</td>
<td>16.4%</td>
</tr>
<tr>
<td>Private Nursery school</td>
<td>35.8%</td>
</tr>
<tr>
<td>NGO balwadi centre</td>
<td>22.4%</td>
</tr>
<tr>
<td>Nursery class in MCD school</td>
<td>4.5%</td>
</tr>
<tr>
<td>None</td>
<td>20.9%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Children’s performance on School Readiness Instrument (n=32)

(Max. marks: 40, Mean score: 19)

<table>
<thead>
<tr>
<th>Category</th>
<th>Govt./AWC (n=8)</th>
<th>Private (n=8)</th>
<th>NGO (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children above mean score</td>
<td>50%</td>
<td>87.5%</td>
<td>50%</td>
</tr>
<tr>
<td>Children below mean score</td>
<td>50%</td>
<td>12.5%</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Minimum score achieved</td>
<td>2</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Maximum score achieved</td>
<td>31</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>
The preschool years (3-6 years) are not as dramatic as the first three years. Nothing in the preschooler’s physical growth could match the drama of an infant who learns to sit, stand and walk for the first time. That does not mean physical and motor development stops but just that it is more gradual, more varied and more related to achieving of specific skills. These involve sensory motor control and coordination of large and small muscles required for jumping, running, pulling, scribbling etc. Height and weight gains are at slower rate than in infancy, but faster than what it would be during middle childhood.

Preschool stage is marked with remarkable, cognitive, social and emotional changes. From the first two words uttered at two years, the child begins to by communicate proficiently by the age of five years! Preschoolers are active, curious and eager to learn by exploring, having experiences for the sheer pleasure of sensing and knowing (Sood23 N. 1992). It is the onset of preoperational stage of cognitive development as per Piaget’s theory, with a qualitative leap in thinking and symbolic functions. Preschooler’s become distinctively social individuals in their interactions with others. There is a desire to be autonomous and independent and there is a noticeable emergence of power and self awareness. Preschoolers with these new competencies negotiate the challenges of early childhood through play and interaction with others, and with the environment.

Children between the ages of 3 to 5 years, like the infant, need a stimulating environment along with proper nutrition and health care; in addition they also need to be exposed to an ECE programme which should cater to their all-round physical, cognitive, social and emotional development. Early Childhood Care and Development (ECCD holistically encompasses all this and more -- it ensures the essential support a young child needs to survive and thrive in life, as well as the support the family and community need to promote the children’s healthy development. This includes integrating health, nutrition and intellectual stimulation, providing opportunities for exploration and active learning as well as providing social and emotional care

and nurturance to enable children to realize their full potential, so as to play an active role in their families and later in their communities.24

Are the Basti preschoolers healthy?

We tried to ascertain the health status of the children through height and weight measurements of 48 preschoolers (figure 4.4.1). Our findings were disturbing! About 64 per cent of the children were found to be stunted, indicating long-term chronic undernutrition. Sadly, the situation of children in the basti was found worse than the national average of 45 per cent! Given that the malnutrition had already set in at the earlier stage, which is the stage at risk for growth faltering; this status is indicative of a cumulative impact.

Figure 4.4.1: Comparison of children in the basti with National Average on nutritional parameters (n=48)

When sex-wise distribution was done, boys in the preschool years were found to fare better than girls in terms of nutritional status. This finding was contrary to the findings of children below 3 years of age, where girls’ health status was found to be better (Figure 4.4.2). This reversal of trend suggests possible impact of changes in dietary practices in the family favouring boys, an aspect which needs to be probed further.

Anemia is another important indicator of malnutrition. During preschool years, the requirement of nutrients, especially iron is high as reserves are being laid for subsequent rapid growth and development. To assess this parameter, preschool children (n=48) were tested for iron deficiency. More than four out of five preschool children (81%) in the basti were found to be suffering from anemia. The value for the basti when compared to studies done in other Delhi slums was found to be higher and more severe. Further, it was anomalous to observe that boys were more severely anemic than girls, which could be attributed to intake of diet not rich in iron and consumption of junk food from the streets, which perhaps were consumed more by boys than girls as part of indulgence.

**Predisposing factors for ill-health**

Overcrowded living conditions, poor environment and unhygienic personal habits appear to predispose children to the risk of infection, worm infestation and thus, anaemia. Information was therefore, solicited from mothers regarding hygiene practices followed for their children like washing hands before and after eating, brushing, combing hair and trimming nails and washing

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hands after defecation. The responses were also supplemented with the observations made by the field investigators during the home visits.

**Figure 4.4.3: Hygiene practices of children (n=67)**

The respondents were put in three categories based on the scores: good (6-7), needing improvement (3-5) and poor (<3). Almost all mothers believed themselves as following good hygiene practices (97 per cent), and only 3 per cent mothers reported as needing some improvement. Majority of the children in the age group of 3-5 years (92.5%) scored good results. As is evident from the figure 4.4.3, parents’ perception of hygienic practices for children did not match with the observations of the investigators, who visibly saw children wearing messy clothes, with unclean nails and running noses. This suggests two possible explanations for such a discrepancy; one may be a distorted opinion of the parents regarding what they consider as “hygienic”, and the other may be a possibility of parents giving socially desirable answers since they know what is right but this is not backed by actual practice.

**Are the preschoolers in the Basti really ready for school?**

To answer this question, we administered the School Readiness Instrument (SRI), a tool developed and standardized by the World Bank, which was further adapted for this study on 5 year olds who are just at the stage of entering primary school. The tool assesses a child’s preparedness for school on his/her cognitive and linguistic concepts and skills which any good ECE programme should be able to help develop in children. These include pre number and space
concepts, sequential thinking, seriation, pattern making, word and sentence making, and following instructions.

The maximum score for the test was 40. Given that the competencies assessed were not academic but more developmental, it is a matter of concern that only 3 children out of a total of 32 children were able to score over 30. It was further disturbing to note the skewed distribution wherein 40 per cent of the children scored less than the mean score (19), out of which nearly half scored below 8 i.e. less than 25 per cent of the total score (Table 4.4.1).

However, one in every third child did obtain a score of more than 25 which points to the fact that with some scaffolding through strengthening elements of school readiness in the preschool programme, they could have performed better. Further analysis of data showed that mothers of most children, who scored more than 25, (except one mother) were educated and the overall education level of the family was good, which may have been an influencing factor rather than the preschool quality.

<table>
<thead>
<tr>
<th>Type of school</th>
<th>Above Mean</th>
<th>Below Mean</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 30</td>
<td>25 to 30</td>
<td>19 to 24</td>
</tr>
<tr>
<td>Govt./AWC (n=8)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Private (n=8)</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>NGO run (n=16)</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>
If we analyse the disaggregated picture in terms of different categories of provisions, the children in private preschools perform relatively better, with no child in the lowest score category. But interestingly in this group there were also no cases in the highest score category, indicating a convergence of the distribution towards the mean. In comparison, the NGO sector children appear to be more evenly distributed along the continuum. A significant observation is that 2 out of a total 3 students registered in an AWC scored well. But, again as discussed above, their performance cannot be credited to the preschool education of AWCS.

When both these children were studied in detail through case studies, they were found to have an exemplary family support system in place to back them in their learning and readiness activities!

Table 4.4.2 Extensive Concept-wise Analysis of School Readiness Instrument’s data

<table>
<thead>
<tr>
<th>Concept</th>
<th>Skill Stage</th>
<th>AW/Govt. Nursery (n=8)</th>
<th>Pvt. Nursery (n=8)</th>
<th>NGO run Nursery (n=16)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-number concept</td>
<td>Good skill</td>
<td>7</td>
<td>8</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Moderate skill</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Need skill development</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Space Concept</td>
<td>Has concept</td>
<td>7</td>
<td>8</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Needs to learn concept</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Sequential Thinking</td>
<td>Good skill</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Moderate skill</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Needs skill development</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Classification</td>
<td>Good skill</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Moderate skill</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Needs skill development</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Following</td>
<td>Can follow complex instructions</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Instructions</td>
<td>Can follow simple instructions</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Unable to follow instructions</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Zainab is a 4 year old girl who lives in a joint family. Zainab attends an NGO-run preschool “Mohabbatein” in the basti from ten in the morning to one in the noon. Going to a preschool is well-liked by her, however, she dislikes that there are only studies in the school and no play. The mother is not very happy by the quality of education being imparted there, nor is any food given to her daughter, but sends her despite all this, for lack of better options.
Mohd. Kaif is a 4 year old bright boy who lives in a nuclear family with four elder brothers. He is from a poor family, which follows the tenets of religion closely. He goes to Anganwadi of his choice and is most favourite among AWWs. He likes drawing; his brothers encourage him to observe and learn. Though parents are illiterate but they want their children to be highly educated and are working hard to accomplish their dreams.

From the point of view of identifying specific competencies needing further strengthening, the data obtained on school readiness was disaggregated for further analysis (Table 4.4.2). Three key areas of school readiness that stand out as extremely deficient across all three categories of provisions, private, Govt./AWCs and NGO are phonological awareness (identifying beginning sounds of words) and sequential thinking. In addition, competencies needing further strengthening include skills of classification and pattern making and relative comparisons in the case of children from the NGO centers.

Similar findings have been obtained from the World Bank study (2007). These competencies have been empirically found to have significantly positive correlation with subsequent learning of reading and mathematics at the primary stage. These deficiencies therefore indicate the need for strengthening of the preschool programmes being offered by all categories of preschools, from the perspective of preparing children for the primary school.
A. Health services for children:

An ideal health situation

Aman was a 3 year old suffering from high fever. He had severe bouts of diarrhea, and his body temperature was high, as his worried parents looked on. The neighbors suggested them to go to the nearby health facility. Going there for the first time, they were apprehensive of the benefits of the services.

On reaching the health facility, they saw a queue of people standing in front of a counter. On enquiry, somebody directed them to get a health card made first, if they wanted to avail the services of the centre. After it was made, they were called by the doctor, where a routine check followed. The doctor advised them to get a few laboratory tests done in the adjacent room. Aman’s parents walked out worrying that the cost for getting these tests done will compromise their savings of the month. It was then that the lab technician came up to them and comforted them saying that the tests were for free. The parents smiled, received the medicines free of cost and within a day’s time, Aman recovered.

What are the health services available?

There are presently two major Government health services offered through an MCWC (Mother and Child welfare Centre) at Bhogal and the Polyclinic, both of which are located in and around the basti. A few private clinics also function within the area. The nearby larger Government-run hospitals that basti residents access are: Safdarjung Hospital, AIIMS and LNJP.

What does the community utilize?

In the present study, the findings pointed to the fact that parents did not show a preference to avail government facilities and instead relied on private clinics whenever needed (Figure No. 4.4.4).

Sohail is a special child of 4 years and 2 months. He suffers from frequent convulsions, and although the family has got medical tests and CT scan done for him, there is no specific cause that can be traced as the origin to his condition. Each time the child gets such fits, he is taken to a local doctor, who immediately gives injection which helps the child to sleep and later prescribes medicine. He is not going to AWC or preschool but mother plans to send her child to the HOPE project NGO working in the basti, which offers some services for special children.
The possible explanation of the above trend may be derived from the responses of the parents during the FGD. They quoted the following reasons for not accessing the polyclinic/ government centres: firstly, they considered the medicines dispensed as ineffective in treating illnesses; secondly, many people were unaware of the free laboratory services available at the center and furthermore, the location of the polyclinic was not considered safe by the residents. Parents reported that they accessed government hospitals only in cases of serious illness. The amount spent in transportation, as reported by them was equivalent to the fee of a private doctor; hence, they preferred local private doctor for common infections. Services lose their meaning if they are not properly utilized.

Effective health facilities and skilled health providers can have a positive influence on the reduction of infection and promotion of the general well-being of the community, especially the vulnerable child.

B. Educational Services for children

How good are the ECED services for the preschoolers?

“Before you can build a house, it is necessary to lay the foundation stones to support the entire structure.” ECED between the ages of 3 of 5 years holds great importance, because before the child enters primary school, a similar foundation must be laid. Embedded within their family, their community, and their cultural values, very young children need to be supported in the
development of physical, mental and social abilities that will enable them to survive and thrive in later years. The successful education of the child during its years of schooling depends to a great degree upon the foundation stones laid during preschool years. In this section, an attempt has been made to describe services available in the basti related to health and ECE and the access and utilization of the same.

**What is available in the Basti?**

Within the basti there are seven anganwadi centres, 2 NGO run nursery schools and one Nursery class in an MCD School and some private-run preschools in the nearby area. The Government initiative of preschool education is implemented through anganwadi centre (AWC) under the Integrated Child Development Scheme (ICDS). One AWC in an urban area is supposed to cater to a population of 1000 people. There were only 7 AWCs, which were inadequate for the population of nearly 12,500 people. AWCs need to provide an integrated package of services, namely health check up, immunization, SNP, referral services to children below 6 years and to their mothers along with preschool education to 3 – 6 year olds. Other than AWCs, and MCD School’s nursery section, there are two NGO run preschools - “Mohabbatein” and “Sufi Inayat” which are also providing preschool education. There are private schools in the neighbouring area of the basti such as “New Horizon”, “Mata Sushila devi”, “Banyan Tree”, which have nursery classes.

**What does the community prefer?**

In the present study, 79% of the children were receiving preschool education, out of which 16.4% were enrolled in Anganwadis. However, a sizeable 21% of children were found to be not enrolled in any preschool (Table 4.4.3).

---

Table No. 4.4.3: Type of preschool attended by children below five in basti

<table>
<thead>
<tr>
<th>Type of preschool</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anganwadi</td>
<td>11</td>
<td>16.4</td>
</tr>
<tr>
<td>Pvt. Nursery school</td>
<td>24</td>
<td>35.8</td>
</tr>
<tr>
<td>NGO balwadi</td>
<td>15</td>
<td>22.4</td>
</tr>
<tr>
<td>Nursery class in MCD school</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>None</td>
<td>14</td>
<td>20.9</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The reasons given by parents for not sending their children to preschools have been shown in Figure 4.4.5. Some parents did not send their children to pre-school as they felt that the quality of education was not good, as can be seen from the reasons and feedback informally collected through interaction. Most parents were unaware of the merits of sending a preschooler to an ECE centre. This points to the need for advocacy and counseling of parents related to this aspect.

Figure No. 4.4.5: Reasons for not going to AW/preschool

During FGD of the mothers, it was observed that mothers preferred sending their children to NGO run preschools, since they considered the quality of education imparted there as good.

How good are the services?

It is a well known fact that transition to primary school can be greatly helped by providing quality services for young children, such as parental support, play groups, home visiting or centre-based care. It was therefore imperative to assess the quality of the educational facilities.
We could assess only the 7 *anganwadi* centers and 1 government-run Nursery school in the *basti* since the remaining facilities could not be covered as the required permission from the authorities could not be gained.

A scenario described above was not extraordinary. It was the norm, or an average; most *anganwadi* centers that were visited had more or less a similar story to tell, if not worse.

The quality of the AWs and other preschool/nursery school in the *basti* was assessed using a modified and adapted version of an international tool- *Early Childhood Environment Rating Scale (ECERS)*. (The full details of the findings are given in Appendix No. 04). It is a standardized measure that includes major aspects related to quality namely, infrastructure, activities and pedagogical practices, the findings are reported below:
In terms of Infrastructure:

Physical infrastructure facility in the AWCs was dismal, as it had shortage of space for children to sit properly, leave aside the availability of a toilet. Sitting mats for children were torn and in most cases unclean; and, in one case was full of bugs. Hazardous surroundings could be observed around such as electric heaters (with cooking going on inside the room itself) which were hardly 4-5 feet away from the seated children. Safety of the building too was questionable, with houses perched one on another, and noticeable dilapidated walls and ceilings. In almost all AWs, the AWW had limited or no storage space, to store registers, toys and play materials.

On the contrary, the nursery class in the MCD School which had hardly commenced a fortnight ago showed a marked positive deviation to the miserable state of affairs in the AWs. It was a welcome break to observe a large classroom with colourful child-friendly set up, and the room designed for children with low furniture and blackboard. Painted walls and numbered stairs enhanced the beauty of the building. The bathrooms were clean too, and the materials in the classroom were well-organized and stored.

On Activities and pedagogical practices:

During the observation it was found that although the AW centre’s timings were scheduled from 9:00 a.m. to 12 noon; most AWCs did not start functioning before 10 a.m. The AWWs trickled in by 11 a.m., until then the helper ran the show. The usual routine comprised of making children sit in rows or line, filling of registers and record books by the AWW, distribution of food by the helper, and the day was over. Activities to develop cognitive skills, creative skills, social development and gross and fine motor development of the children were not observed. Authoritarian control was exercised at times, to keep the children quiet and in order. Sometimes, for a change, singing a few rhymes repeatedly was observed in most AWCs as part of the activities of preschool. In contrast, the teacher in the nursery school was observed conducting small age-appropriate activities in groups. The children too appeared to be taking active interest and enjoyed the activities and showed some deference towards the teacher.

During the FGD with AWWs it was interesting to observe that on enquiry about the time spent by them to impart preschool education to children there was silence/ ‘no answer’, but a quick
A lot of parents in the basti reported sending their children for private tuitions. The most common reason for this was the low educational level of parents and lack of time to devote for their children’s education.

change of subject gave them enough opportunity to complain about the infrastructure facility. From the observation as well as the FGD, it was clear that there was no fixed plan of activities to be performed in the centres. Other than the Pre-school Education (PSE) component, an anganwadi worker has to deliver services for pregnant and nursing mothers and adolescent girls, but on being asked to name the services that AWs should deliver –recall of all services was a difficult task for them and none of them could name all of those. Most of the time spent by the AWW, instead, was on maintaining records and filling the registers.

Thus, there is a need to improve the overall situation of Anganwadis in the basti. The training and monitoring of AWW as well as helper is essential and as they spend most of the time with children and can have an influential role in shaping their development.

**What is the contribution of the parents?**

As we have already observed in the study and is a well known fact, the nature of parent-child interaction has a significant influence on the development of the child. Parents shape their children’s attitudes, beliefs and values, and are the main source of socialization. It also aids in learning of child.

In the present study, parents were asked if they got opportunities to spend time exclusively with their children. 85% of the parents responded in the affirmative. It must be mentioned here that these responses could be inflated as many parents may have interpreted spending time with their child as synonymous to being in the same room as him/her. Three-fourth of the parents mentioned the average time spent with their children varied between 4 to 18 hours.

However, 15% of the mothers who stated that they did not get time to spend with their children belonged to nuclear families and mentioned overload of household chores as the reason, which did not leave free time for them to spend exclusively with their children.

For the purpose of analysis, activities that parents engaged with children were categorized as **pro child development** which included playing with child, reciting stories, outings; **no learning activities** comprised sleeping, eating with child.
and learning activities included teaching the child. It was found that 71% of the families engaged with children in pro-child development activities; while one-fourth of the families were found to be engaged in no learning activities for children.

**Parental dreams/aspirations**

Even in the midst of a challenging environment, the aspirations of the basti parents for their children were not low. They wanted their children to become doctors, engineers, teachers, pilots and so on. Young children and adolescents too showed high levels of hope. Some wanted to be doctors while some wanted to become “someone big” when they grow up. During the FGD with young adolescent girls of the basti, it was fascinating to know that nothing held them back from dreaming of a variety of ambitions, ranging from interior decorators to air hostesses and models. The FGD with parents revealed their desire to see their children study hard and to be successful in whatever they take up in life.

In conclusion, how are the preschoolers faring in the Basti? Despite ECCD facilities provided for in the Basti, their physical and nutritional status at this crucial stage of development presents a really dismal picture. 64 per cent of the children were found stunted and 81 per cent anemic, possibly a cumulative impact from the previous sub stage, suggesting the critical importance of focusing on health and nutritional status as a priority for children below 3 years. With regard to the psycho–social component, 21 per cent of 3 to 6 year olds were not accessing any PSE services. And even for those who were accessing, the quality of preschool services was not found to be satisfactory, neither in terms of infrastructure nor the activities conducted; on account of which parents had to send their children to preschools outside the basti. The state of AWCs was dismal, especially on issues concerning safety, utilization of space and lack of application of knowledge received by AWW. Parents’ awareness about what was “good” for their children about quality education was also amiss. The same can be said for the health facilities. Their unawareness about good quality checkups already available in the basti led them to spend more on private facilities.

Despite all this, children’s preparedness for primary school was overall not very discouraging, largely in cases where children had parental support. But this again points to the need to enhance the quality, effectiveness and utilization of the ECED related services in all sectors and ensure
that every child is able to get the benefit of a sound early childhood education, which is not only a necessity but a right of every child. The parents’ awareness about the ways to promote children’s development might have been low but they had high levels of aspirations from their children and wanted them to make a mark in life.

**Recommendations:**

Given the fact that services are available yet child related outcomes are poor, the focus of any intervention will need to be on improving the effectiveness and utilization of services. Some suggestions are as follows:

**Infrastructure:**

- There is an urgent need to improve the condition of the existing AWCs in the basti, and build more AWs to address the needs of the population of the community. The quality of the AWCs must be maintained through regular checks by community volunteers or leaders.
- The area around the ECE centres as well as health centre should be made more accessible and safe for the community.
- Availability of materials and storage space is a must. Local indigenous resources may be used as play and learning materials for children. Materials for play, activity worksheets, weighing scale and other equipment must be provided for.

a. **Services/facilities:**

- Mere attention to building and infrastructure to build a successful program is not enough; efforts must be made to provide intensive ‘hands on’ trainings to the service providers. AWW and health workers and they must be given practical trainings on a regular basis. Monitoring and supervision to assess the effectiveness of the trainings should be done by Early Childhood professionals.

b. **Parents involvement/ Community participation**

- Although the basti had enough ECED services available, lack of knowledge among parents led to underutilization and decline of the available services. The service
providers appeared to be de-motivated and hence did not make further efforts to improve their quality of work. Hence, regular interaction with community members is needed to spread awareness about what exists and how important it is for their well being, and how the participation and involvement of the community members in managing the services can contribute to improving the quality of the services and getting them the kind of service that is rightfully theirs.

In the next section, we track children into the next stage of their development i.e. the early primary years from 5 to 8 which are now globally considered to be an extension of the ECCE stage since the child is still developmentally more similar to the preschool child and is in the process of making a transition to the next stage of formal operations.
CHILDHOOD IN THE BASTI:
THE SCHOOL GOING CHILD
## The School-going child:
### Findings at a glance

| Type of school attended by *basti* children (n=51) |  |
|---|---|---|---|---|
| Government | Private | NGO-run | NFE | Madarsa |
| 35% | 43% | 16% | 4% | 2% |

### Grade 2 children’s performance on School Achievement Test (n=20)

<table>
<thead>
<tr>
<th></th>
<th>Govt./AWC (n=10)</th>
<th>Private (n=7)</th>
<th>NGO (n=3)</th>
</tr>
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<tbody>
<tr>
<td>Language</td>
<td>Children above mean</td>
<td>40%</td>
<td>71.4%</td>
</tr>
<tr>
<td></td>
<td>Children below mean</td>
<td>60%</td>
<td>28.6%</td>
</tr>
<tr>
<td></td>
<td>Min. score achieved</td>
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</tr>
<tr>
<td></td>
<td>Max. score achieved</td>
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<td>34</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Children above mean</td>
<td>30%</td>
<td>71.4%</td>
</tr>
<tr>
<td></td>
<td>Children below mean</td>
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<tr>
<td></td>
<td>Max. score achieved</td>
<td>29</td>
<td>28.5</td>
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### Sex-wise Distribution of BMI-for-Age (n=41)

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Mild Underweight</th>
<th>Moderate Underweight</th>
<th>Severe Underweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>33.3%</td>
<td>38.1%</td>
<td>14.3%</td>
<td>14.3%</td>
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<tr>
<td>Girls</td>
<td>60%</td>
<td>30%</td>
<td>10%</td>
<td>0</td>
</tr>
</tbody>
</table>

### Prevalence of Anaemia among School Going Boys and Girls (n=41)

<table>
<thead>
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<th></th>
<th>Normal anaemia</th>
<th>Moderate anaemia</th>
<th>Severe anaemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>31.7%</td>
<td>22.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Girls</td>
<td>24.4%</td>
<td>17.1%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>
As the child moves on from the preschool to the school going age, these transition years i.e. 6 to 8 years of age, continue to be considered as an extension of the early childhood stage itself, since developmentally children continue to demonstrate characteristics which are more in common with the early childhood rather than the following stage of development. This is the rationale for including this age group in the present situational analysis of children in Nizamuddin Basti. After the first six years, this stage is growth wise, a stabilizing period. It is a stage when children begin to demonstrate greater autonomy and industry and a capacity for logical thinking, albeit at a concrete level. It is therefore considered the prime period for instructing children in certain skills and knowledge that they will eventually need in order to function effectively in life and society. In the Indian cultural context, traditionally children from the families of artisans and artists get socialized from this young age in family craft and trade and begin their training. From the education perspective it is the period when children are ready to learn the basic skills of reading, writing and arithmetic.

At this stage, children need support in getting gradually accustomed to the formal routine of the school as well as in learning the basics of literacy (reading and writing) and numeracy i.e. understanding and applying mathematical concepts and gaining systematic knowledge of the social and natural environment (NCF, 2005). ECE exposure before joining primary school has been reported universally to have facilitated smooth transition from home/preschool to the formal learning set up, as evident from the fact that it reduces absenteeism and dropouts, and improves learning levels. In case of children who have not had the benefit of pre-schooling, rapid
school readiness programmes of 6 weeks’ to 3 months’ duration have known to also be very beneficial in preparing children for primary schooling.

Given that the preschoolers in the Basti were not optimally performing at preschool, as discussed in the previous chapter, we next focused our attention on the 6 to 8 years old to see how they were faring in terms of schooling provisions and opportunities and what was the extent to which they were learning the basic skills and competencies of language and mathematics.

---

**All work, and no play...**

Reshma is a 7 year old girl. Her day starts early with waking up at around 5 a.m., and offering prayers. She eats her breakfast, gets ready and leaves for school by 7. She returns home by 2 in the afternoon from school, which is located far off from the basti. She finishes her lunch and leaves for private tuitions offered by a neighbouring tutor. She spends about 2 hours there and returns home by 6. In about half an hour’s time, the child goes to the local religious tutor for learning to recite “sipaara” (religious education) and returns by 7:30. By this time, a tired Reshma switches on the television, eats dinner and goes off to sleep.

A lot of children in the basti have a lifestyle similar to Reshma’s. Their day is packed with running from one place to another, leaving them no time for rest, play or any interaction with family or friends. Stress and no free time at such an early stage can be an extremely detrimental factor in promoting a child’s healthy development. The life of the child at this age centres around the school, and for the same reason, there has been an attempt to explore schooling experiences of children in the present study.

---

**What is Available for the School Going Child?**

The school as an institution can have far-reaching consequences on children’s cognitive and social development. It has the potential to provide the child opportunities for expression, play and building capabilities in social, cognitive, linguistic domains. The quality of the school can therefore have a significant impact on children’s lifelong learning and development.
We surveyed provisions for schooling in the Basti. The school located within the basti is a primary school with classes up to Grade 5 and is managed by Municipal Corporation of Delhi (MCD). Other Government schools in the vicinity, which most children of the basti attend, are “Navyug School”, “Kamla Nehru Sarvodaya Vidyala”, and “St. Michael’s Government school”. These are all government senior secondary schools run by Delhi UT Education Department, Sarvodaya Vidyalaya Sangathan. Most children of the Basti were found to be accessing education in these Institutions. The private schools located near the basti were a mix of known and relatively unknown institutions, such as “South Delhi Public School”, “New Horizon”, “Delhi Public School-Mathura Road”. Ibteda, was an evening school for socio economically weaker section of society, which functions as a non formal educational institution on the campus of Delhi Public School, Mathura Road. Other than these schools, tuitions and coaching classes are also offered at homes and in the tuition center. There is also the provision of a Madarsa in the basti.

What does the Community Prefer?

On investigating the status of school enrolment of 6 – 8 year olds of the basti, the finding was overall heartening. Of the 53 children identified in this age group, 51 were found to have some or the other schooling experiences (96 per cent). With an exception of one child who had a physical impairment, and another who went for private tuitions all were accessing schooling in one or another educational set up. It was observed that most parents preferred private/ public schools and these were mentioned as the most popular place to send children (43 per cent), followed by Government schools (35 per cent) [Figure 4.5.1]. Most of the children reported that they liked going to school (83%) and their parents by and large expressed satisfaction with the learning experiences their children were receiving in these schools. It was good to observe that 75% of the children attended preschool before joining the school.
Moreover, as reported by school teachers, it has emerged that mid-day meals in govt. schools have played a significant role in reducing drop-out rates among school children. Attendance in Govt. schools has also increased substantially as a result of mid-day meals. In the present study, it appeared that parents preferred private schools (43 per cent) over government-run even though food as an incentive was not served in these schools. It indeed was suggestive of parents’ value for quality education, which was reflected in their priority to learning over free food. On similar lines, even though children travelled more distance from home to school, 67 per cent of parents spent money on transportation of their wards so that their children could go to school, which they felt was better (Table 4.5.1).

<table>
<thead>
<tr>
<th>Type</th>
<th>&gt; 2 Km.</th>
<th>&gt; 1 to &lt; 2 Km.</th>
<th>&lt; 1 Km.</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Govt.</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Madarsa</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>NFE</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>NGO run</td>
<td>-</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Private</td>
<td>2</td>
<td>14</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Grand Total</td>
<td>8</td>
<td>26</td>
<td>17</td>
<td>51</td>
</tr>
</tbody>
</table>
Are the Educational Services Effective?

Since schooling is a crucial experience for development during this stage of life. It was considered important to take views of teachers, the key service provider. The school teachers’ dedications, attitude, teaching methods have been found to influence quality of learning outcomes of the young pupils. In the present study, school teachers of Grade I and II from the MCD School were interviewed and their perspectives taken about what they considered as their primary responsibilities and how they proposed to practice the knowledge gained through trainings. The following key areas that emerged have been discussed in detail below:

**Classroom Transactions:** The teachers interviewed did not throw much light on the classroom transaction. The response with respect to giving equal attention to children was answered vaguely by one of the teachers who said ‘I give equal attention but whether kids take it or not is up to them’. More than the quality of interaction provided or not provided, it reflects an attitude of indifference.

Despite the Equal Opportunity to Education Act and emphasis on Inclusive Education, both Grades 1 and 2 did not have a single special child enrolled. It may be recalled that during the household survey it was discovered that there were a few children with special needs; within the 6 to 8 year old age range one child was not enrolled in the school. In view of this an attempt was made to discuss the issue with teachers of the MCD school. Teachers reportedly have not received any training to manage special children, and did not feel well equipped in this regard. Interestingly, the complete makeover of the school building too has not made provisions for children with special needs in its design, with no ramps or other facilities for special children.

**Student Absenteeism:** Teachers reported 50 per cent attendance during regular school days; however all students were reported to turn up for examinations. One of the teachers described in detail the measures taken to regulate absenteeism, which was to make an ayah visit the child’s
home if the child is absent even after prior notice being sent at home; this is followed by a teacher’s visit after 21 days to know the reasons of absenteeism. After that if the child does not attend school for 45 days then his/her name is struck off from the school records. Strangely, the other teachers were perhaps unaware of this measure and reported no action was taken in case of long absenteeism till the academic year ends; after that the child is not listed in the new academic year’s school records.

**School Supervision vis-à-vis Teachers’ Perception:** The Vice Principal claimed regular check up by the supervisor has resulted in good outcomes and has been done without disturbance to any school activity. However, other teachers had a different story to tell. They reported erratic visits (at times one visit in 2-3 months or otherwise twice in a month), which were ‘somewhat’ beneficial but caused some disturbance and inconvenience in the ongoing teaching process.

**School and Community/ Parent Interactions:** There was no regular interaction forum or system for parents/community to be in touch with school. Lack of knowledge among parents about their wards may be a possible explanation to the non-committal attitude of the teachers. On a positive note, the vice principal mentioned about the satisfaction among parents due to improved infrastructure and new building; the same was also reiterated by parents during the FGD.

**A Reality Check!**

It was interesting to find out that almost half of the school-aged children were taking private tuitions (49%). The main reasons for such a trend as reported by parents were that services in schools were ineffective and many parents being illiterate were unable to teach their children on their own.

The impact of these tuitions on children was that children hardly had any opportunities and time to play, since their daily schedule was extremely packed. After tuitions, children sought help from parents (23%) and siblings (15%) for studies. During the FGD, parents expressed their concerns

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**An out of school girl**

Ilma, a six year old girl, is the only daughter and lives with her mother at her maternal grandparents’ home. The mother has been living separately as she was thrown out for giving birth to a girl child. Ilma at present does not attend any school, but her mother claims that she is about to get her admitted in school. Ilma is passionate about studying and attends tuition classes offered at her residence.
regarding private tuitions being expensive. Instead, they suggested having group tuitions from an educated volunteer in the community who would ensure quality and that would suit their pockets too.

**How are the Children Faring?**

Are the *Basti* children’s learning levels satisfactory? The sample of Grade 2 children were administered Language and Mathematics tests. The **School Achievement Test** was designed using NCERT textbooks & was based on the model of assessment tool developed by NCERT for Grade 3. It was administered on children who were completing their Grade 2 to assess their Math and Hindi achievement levels.

A total of 20 children (13 girls and 7 boys) were administered this test, which roughly lasted for a duration of 40 minutes to 1 hour. Similar trends to SRI were observed here (as mentioned in the previous section), with the Government school children performing at extremes. Of the 5 children who performed the poorest with a score of less than 6 on the Language test, 4 were from the government school; at the other end of the spectrum, of the 8 children scoring greater than a score of 25, while 3 were from private schools another 3 students were from government schools, as well. All students from the NGO run school (100 per cent) and most (71 per cent) from private school scored above the mean score of 18. While analyzing the performance of Government school children, it was seen that only 40 per cent could score above the mean and a sizeable 40 per cent scored less than 6 marks.

In Mathematics too, Government School children were found to score poorer than the NGO-run and private schools. In terms of distribution, 60 per cent of them scored above the mean of 25, whereas 40 per cent scored the minimum marks. On the other hand, 100 per cent of the children from NGO-run schools and more than 70% of private school going children scored much higher than the mean scores. Another interesting observation was that the performance of children tended to be polarized with high variance and hardly any scores around the mean score. [as shown in Table no. 4.5.2& 4.5.3] Overall, in terms of distribution of marks, children from private and NGO run schools tended to perform far better. These finding explains and re-affirms the choice of the parents for private and NGO-run schools, as reported earlier. Among good scorers,
girls outperformed boys with 69 per cent achieving maximum scores for both the tests as compared to 29 per cent of boys. This may be attributed to the distraction boys have in the Basti due to more freedom to move around and indulge in play and entertainment/recreational activities whereas girls were mostly homebound doing chores and utilizing time available to study. The trend was observed by the research team as boys were found engaged more in playing on streets or loitering around. It would be useful to probe further in terms of a possible link of poorer performance with poorer nutritional status of boys (as discussed in the later section) which can negatively affect school performance and cognitive capabilities.

Table 4.5.2: Language scores of Children for SAT (n=20)

<table>
<thead>
<tr>
<th>Children</th>
<th>Marks</th>
<th>&gt; 25</th>
<th>16 to 25</th>
<th>7 to 15</th>
<th>&lt; 6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Govt. school</td>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Private School</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>NGO run school</td>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4.5.3: Mathematics scores of Children for SAT (n=20)

<table>
<thead>
<tr>
<th>Children</th>
<th>Marks</th>
<th>&gt; 30</th>
<th>26 to 30</th>
<th>21 to 25</th>
<th>16 to 20</th>
<th>11 to 15</th>
<th>6 to 10</th>
<th>&lt; 6</th>
<th>Total</th>
</tr>
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<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>Private School</td>
<td></td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>NGO run school</td>
<td></td>
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<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>20</td>
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</table>
Among primary school children, unhygienic living conditions, poor nutrition, and resulting ill-health are frequent causes of poor enrollment, absenteeism and early dropout. Conditions like worm infestation and deficiency of iodine and iron tend to be very common at this stage (World Bank, 2004). Therefore, an effort was also made to finding out the nutritional status and hygiene practices of school going children and probe into its association with for school absenteeism.

In terms of nutritional status, children continued to demonstrate significant levels of undernutrition (as has been evident in the previous sections). Strangely, the boys of the basti were far more undernourished than the girls (Figure 4.5.2). Possibly, higher consumption of processed and unhygienic food products (available in the small shops of the basti) could be the reason of this high level of undernutrition among boys. Interestingly, girls were found to be faring far better than boys on the scale of nutritional status. However, the fact that 40 per cent girls were also found to be malnourished is a matter of concern.

Figure 4.5.2: Sex-wise Distribution of BMI-for-Age (n=41)
As expected from research findings elsewhere, anaemia among girls was more prevalent than boys (Figure 4.5.3). This clearly indicates the need for micro nutrient supplementation and need for enhancing the knowledge level of mothers and adolescent girls.

Figure 4.5.3 : Prevalence of Anaemia among School Going Boys and Girls (n=41)

A nutritious diet along with practice of hygiene methods can ensure the healthy upbringing of children. It was interesting to note here that all the mothers of children in the school-going age considered their children’s hygiene practices as being good and thus needing no improvement.

Figure 4.5.4: Hygienic practices of children

However, the field investigators’ observations of the general hygiene conditions present a contrary picture (Figure 4.5.4) with 49% of children needing considerable improvement and 8%
falling in the poorest category, demanding urgent attention. Give examples of what is good, poor and needs improvement.

In **Summary** again as in the previous sub stages, specific issues do emerge from this analysis which demands intervention. The positive finding is that almost all children were enrolled in school, indicating that parents in the *bastian* do place a value on education for their children. Possibly their aspirations for their children to do well in life and disillusionment with government schools, and more so over basti’s MCD school is only for primary grade, which may have compelled them to choose private or NGO run school and bear the high fees in these schools.

The results indicate a perceptible return for this investment, as children of the private schools fared much better than Government run schools. While malnutrition continues to be an issue, more so with boys, the need to educate parents, particularly mothers on a balanced diet and nutritive value of foods is very evident.

**Emerging Areas of Intervention:**

Children’s needs must be addressed in a timely manner to reduce the negative influence on precious years of childhood.

- Special children should have access to schools and be given opportunities for schooling experiences. The teachers must be sensitized and trained to teach them in an inclusive mode.
- Basic health cards should be made available for all children. Regular growth and health monitoring should be done for all children from birth to 8 years, for assessing basic haemoglobin levels and growth status of the young child.
- Regular meeting with parents/community members should be planned by school authorities. These meetings could have some agenda; and act as a forum for discussing and seeking solutions for problems and issues concerning children. This will also enable parents to be more concerned about the progress of their children and be more active partners with the school.
In the next section we bring all our findings from the previous sub stages together to draw an overall profile of the ‘child in the Basti’. On that basis we identify areas of concern from a developmental perspective and suggest interventions within a more holistic frame.
SCAFFOLDING CHILDREN’S DEVELOPMENT: RECOMMENDATIONS TO AKF TO DESIGN ECCE INTERVENTIONS
In this concluding chapter we try to take an overview of what the Situation Analysis tells us about children growing up in Nizamuddin Basti? Are they growing optimally? Are they getting the kind of environment and nurturance that is conducive for their development?

Unfortunately, the overall picture that emerges is not very heartening. The study brings forth many crucial and critical concerns regarding children’s well being; most predominantly the low levels of health and hygiene awareness among the basti residents, the persisting prevalence of malnutrition and anemia among children and women, poor school preparation and educational performance of young children and inadequate access to quality educational and health facilities. We analyze these, particularly the health and education outcomes, from a life cycle perspective.

a) Inadequate Health and Hygiene awareness and Access to services

Since development proceeds at a very rapid pace during early years, unfavourable experiences of living in unhealthy living conditions, inadequate access to health care, educational facilities, nurturance or stimulation, and exploitative working conditions are likely to hinder development of the child to a considerable extent, and for life. In the case of the Basti, the population has been increasing at an alarming rate, thus posing a marked constraint on the resources available to the community. There is an evident lack of a proper drainage and sewage system, which can severely influence the health of the community and in particular, that of children. Unhygienic and crowded living conditions along with poor personal habits appear to predispose children to the risk of infection, worm infestation and thus, anemia and other related infections.

Our analysis indicates that in terms of access to services, parents of these young 0 to 8 year old children showed a preference for private over public services, as and when needed, even though these were more costly. They were not inclined to avail government facilities for education and health care, despite these being available locally. A fallout of this was that despite being aware of the importance of immunization and the recommended schedule, only a negligible number of
children in the age group of 3 to 6 years had received full immunization for age. Even though a sizeable majority of the 0-3 year olds possessed health cards, these were not updated in most cases.

None of the women reported visiting a health facility, except in the case of life threatening complications, as most nursing mothers and pregnant women were unaware of the complications that women may face during pregnancy. A disturbing finding was that although most women registered and availed ANC services, they still preferred home delivery over institutional delivery. A very low number of deliveries were conducted by skilled birth attendants, far lower than the national average. Almost half of the women in the survey had faced complications during delivery, making a strong case for improving civic facilities, raising knowledge and awareness related to health and hygiene amongst the community, revamping existing educational and health services for better coverage and accessibility.

b) Cumulative persistence of malnutrition and anemia: The overall high level of malnourishment among children comes through as another serious concern. If we track the origin of this problem in terms of the developmental continuum, it can be tracked to the pregnant women, more than half of whom (53%) were found to be moderately or severely anemic. While anemia and malnourishment, which by themselves are major risk factors, seem endemic among the women, these factors were seen to be further compounded by early marriage and pregnancy at an immature age, possibly due to inadequate awareness and socio-cultural beliefs. Lack of education among women was also observed to have a direct correlation with larger families, lack of awareness and inadequate utilization of available health services, greater morbidity and miscarriages and poor dietary practices.

Maternal health status can have a significant impact on the health of the new born. Interestingly, low birth weight was not identified as an issue in the situation analysis, which may perhaps be an artifact of selective sampling; the birth weight of only those newborns was tracked whose record had been maintained. However, growth faltering was observed in almost half of the Basti among children within the first three years of life, as evident from a steady deterioration in their weight for height. This could be possibly traced to mothers’ lack of knowledge about the exact duration until when the child should be breast fed exclusively, and the appropriate time period for the
onset of weaning and quality of complementary feeding. This period of ‘birth to 3 years’ thus emerges as ‘the window of opportunity’ for growth promotion and addressing and preventing malnutrition in children. This trend of malnourishment was seen to cumulatively persist in older children as well, among whom anaemia also continues to be an issue. Overall boys were found to be far more malnourished than girls till the preschool stage. Among preschoolers almost 64 percent were found to be stunted, indicating long term chronic under nutrition. At school going stage, girls were found to be more anemic than boys.

Additionally, a strong correlation was found in our study between literacy and fertility; as mothers’ educational level rose there was a corresponding reduction seen in the fertility levels. This finding points to the need to focus on adult literacy campaigns and aggressive communication for awareness creation and behavioral change related to nutrition and health concerns. This is applicable across the life cycle stages beginning with adolescent girls to pregnant and lactating mothers, particularly with specific reference to appropriate age of marriage and use of conducive feeding and nutritional and health practices.

c) Inadequate preparation for schooling and low learning levels. If we take a developmental perspective in the context of cognitive learning and psycho social development, right from the infancy stage the quality of parent child interaction was not found to focus on psycho-social stimulation through infant games, lullabies or immersion in a language rich interactive environment. Linguistic competencies showed delayed achievement in case of large number of children in the age group of 18 to 24 months. At the next stage of development, quality of preschool experiences and school readiness were assessed and these were again not found to be entirely adequate for children’s development and preparation for school. Despite a range of facilities available in the basti for preschool education, a significant 21 per cent 3-6 year olds were not found to be accessing any PSE services at all. Of those accessing also, whether in private, public or NGOs sectors, the developmental appropriateness of the curriculum is in question. Although on the whole children in private preschools performed somewhat better on some of the parameters of school readiness, across the board all five year olds did not show adequate proficiency in skills related to number and reading readiness especially sequential thinking, pattern making and phonological awareness.
With this cumulative deficit, once in school the performance of children in Government schools as compared to the private ones was not satisfactory. Both for school readiness and school achievement levels it was observed that in rare cases where children did better in the government system, there was evidence of significant home support. In terms of services, the state of AWCs was found to be dismal, especially on issues concerning safety, utilization of space and lack of application of training received by AWWs.

It needs to be appreciated that the care of the young child is the primary responsibility of the family. As an institute it meets the physical, emotional, intellectual needs of the child and hands over the cultural and traditional values to him/her. Parents thus must be supported in performing this role adequately by building their capacity and competence in using appropriate proven child care behavior and practices that are technically sound. This only can ensure realization of their children’s potential. Society comprising of stake holders, such as communities, state/government systems service providers and religious and voluntary organization/NGOs have a moral responsibility to create supporting and enabling environment for survival, growth and development of the young child. This approach should be based on the Child Rights perspective that all children need to be given optimal and equal opportunities for their holistic development. When family, community or culture is unable to meet the developmental needs of children and constraints the natural pace of development of its young children, as in the case of Nizamuddin Basti, it becomes imperative for all stakeholders to intervene. The issue is, what should be the priorities for intervention to ensure optimal development for the Basti children who are the future of that community, and what would be the most cost effective way of doing so?

**Emerging Priorities for Intervention:**

High levels of malnutrition and inadequate learning levels across age groups, all the way upto the school going age, emerge as the most significant concerns with regard to children’s growth and development in the Nizamuddin Basti. Both have their genesis in the earliest stages of life from a life cycle perspective, and demonstrate a cumulative deficit over the years, which, if unaddressed, will persist not only to adversely impact on the life chances of these children but will also have inter generational implications. While both malnutrition and inadequacies of early
learning are significant concerns, each in its own right, they are also significantly interdependent. Global research has demonstrated the adverse impact of malnutrition on early learning and school performance of children in terms of attention/memory span, activity levels, perseverance on a task, school attendance and so on. Conversely, low learning levels impact on the extent of access and utilization of knowledge children are able to have which can enable them to lead more fulfilling lives and be a part of a Learning society.

What are the key factors that seem to be responsible for this status of children in the Basti? The factors, as discussed in the report earlier, can be identified as being both on the demand and the supply side. While low levels of literacy especially female, non conducive cultural practices like early marriage, uninformed decisions regarding health care and nutrition, congested and overcrowded living conditions and inadequate health and hygiene practices may be identified as some significant demand side factors, the poor quality of services offered in the public sector, and particularly so in the AW are critical supply side factors that need attention. Some major priority areas for intervention that emerge from this discussion are as follows:

(1) *Nipping malnutrition in the bud: Need for a comprehensive package:* The findings of the study clearly endorse global research that the growth faltering stage is within the first three years of life when the infant is either not exclusively breast fed for six months and/or weaned from the mother without adequate nutrition supplementation. Providing a meal in AW at the preschool stage as is now done, would thus be a case of “too little, too late”. Related factors are the health and nutritional condition of the pregnant women and young mothers who were also found to be very anemic. It is therefore imperative to address this issue with planning of a package of support interventions which should focus on children between 0 to 3 years through (a) regular growth monitoring, (b) raising the knowledge and awareness levels of the pregnant women, and (c) ensuring reach of health and nutritional support services to them to which they are entitled through the AW and the health center.

(2) *Promoting behavior change rather than mere knowledge sharing:* In the context of building knowledge and awareness levels for care of the new born and young infant, the study points to the need to move beyond just raising awareness levels to promoting behavior change in the area
of developmentally sound child care practices, within the cultural context of the community. This would include specific aspects like the care of new born, growth monitoring, health and nutritional needs and possible modes of easy-to-prepare nutritional supplementation and maintenance of personal hygiene by all. It is imperative that multiple strategies be used for capacity building and awareness, particularly considering the low literacy levels of the women. Any effort at promoting behavior change and ensuring regular growth monitoring needs to be an intensive and concentrated process, not a one-time activity. Experience from other projects indicates that identifying and training community volunteers for this task to support the AWW can prove to be a successful model. Involving the women in literacy programmes, formation of self help groups or skill development workshops could be other avenues for initiating and promoting behavior change, since these could indirectly provide a forum and an incentive for sharing and learning.

(3) **Improving AW and Health center outreach and service quality**: While promotion of behavior change is an important and process based intervention, the improvement of services for children need to be improved too in a complementary mode. While the concern has been raised that the community in Nizammudin Basti preferred private over public services, it must be appreciated that this preference indicated a perception of better quality services of the private providers. This perception needs to change if quality of access and utilization of services have to improve. The study clearly points to a failure of the AW and health providers in being able to reach out to the community with the six services. The package of interventions must therefore have a component of improvement of services quality in collaboration with the line departments. In this context mere training of AWWs or health providers will not be sufficient. Supportive supervision and monitoring and periodic evaluation of the baseline levels in terms of inputs, outputs and outcomes will also be required as key ingredients of this package.

(4) **Ensuring Psychosocial development and early learning**: The dismal performance of children from government schools in language and mathematics again raises the issue of both lack of school preparedness among children and school related factors. From a developmental perspective, the early years of life i.e. the first 3 years of life which are critical for brain
development are marked by high malnutrition levels and inadequate psycho social stimulation in terms of quality of parent child interaction. The child thus begins with a disadvantage and this is further consolidated by a preschool program, particularly in the AW, which does not offer a developmentally appropriate curriculum for school readiness or overall development of the child. The school related deficits in the next stage further compound the problem. These developmental and educational needs of the child must be urgently addressed at all sub stages of the child’s development. Starting from the infancy stage orienting mothers /caregivers in the importance of reviving traditional infant games, lullabies, songs and short stories and preparation of low cost toys would be very desirable. Possibilities of involving and orienting the elder women in the community as a resource for children in this respect can also be explored as has been successfully demonstrated in an ICDS project in Kerala.

At the preschool stage it would be important to develop a balanced developmentally appropriate curriculum with a major focus on school readiness through the play way method. Since the curriculum in the private preschools and NGO run centers also do not prepare children in this area, it may require some element of advocacy with them on reforming their curriculum in this direction. Joint trainings, workshops may be considered in this regard, if feasible. Moving on to the school stage, for Grades 1 and 2 it may be ensured that the constructivist and activity based approach underlying the new textbooks which are being used is followed in the classrooms and children’s learning is optimized. Setting up teacher sharing sessions, reorientation of teachers, facilitating interaction of teachers with the textbook writers and orientation of supervisory staff could be some ways forward. It may be useful also to conceptualize an effective system of continuous assessment of children which could provide ready feedback and opportunities for mid course correction.

(5) Seeking Active involvement of the community
Community involvement can be conceptualized in two ways—(a) community involvement and participation and (b) community orientation/education. Community involvement is key to effective, sustainable and contextualized programming and interventions. The sense of ownership of the programme is a necessary condition for it to be
implemented effectively and for its sustainability. This condition becomes even more imperative if the interventions are process based and focused on behavior change and change in attitudes and perceptions of the community. As a first step in this regard, it would be desirable for AKF to share the findings of the study with the community through a planned forum, raise concerns and design the interventions in consultation with them. This would make the process participatory and content need based and as per felt needs of the target groups i.e. – children and mothers. This is particularly emphasized based on discussions/ FGD with the community leaders who expressed their reservations about most developmental activities that happen without informing them or taking them along. This approach had raised doubts and fears to the extent of even doubting the motives behind these interventions.

Involving the community is recommended not only at the planning stage but also in terms of seeking their active involvement during implementation. Experiences elsewhere have demonstrated the efficacy of identifying Community Resource Persons (CRPs) for each cluster among the habitations who could be given specific responsibility with training to provide supportive supervision. These could be in different thematic areas like health and nutrition of the pregnant women and lactating mothers; organizing mothers’ groups for preparation of toys and learning materials for providing meaningful play and fun opportunities for infants and children; helping AWW/teacher as a Community teacher in the classroom by rotation etc. Possibility of setting up a Community management Committee of elders may also be explored. The objective is not to replace government systems but strengthen them, given the constraints in which they function.

Community management committee and other community members may be encouraged to initiate a civic campaign for approaching the appropriate authorities to address issues of sanitation, hygiene, and improvement of existing health and educational services. Possibilities of setting up a recreational centre, library and facility for play for basti children could be explored with the school authorities, since at present there are no such facilities for children.

To this effect, community dialogues may be initiated to get community commitment. A planned follow up and fixing accountability could be proposed, roles assigned or volunteered by people, say, for cleaning surroundings, creation of recreation club, providing manpower of services to
run health or educational services etc. as a contribution of the community. Priorities could be spelled out clearly by drawing a road map with a viable time frame for the proposed interventions.

**Community orientation/education:** To ensure effective community involvement and participation it is important to orient them in what are the developmentally appropriate needs, practices and behaviors desired for children below 8 years. A package of interventions may be conceptualized in this regard which addresses different stakeholders within the community and through multiple channels. It would be important to ensure local sensitivities in undertaking this so that whatever are the agreed child outcomes and behaviours are owned and approved by them and culturally relevant. The orientations should seek to emphasize the balance required between some good traditional child care practices which have developmental significance like infant games, lullabies, story-telling, massaging etc. and the new knowledge coming in on child development, child care and early education. The commonly seen perceptions of the community with regard to quality of education as reflected in their choice of private schools are also based on misplaced notions of quality. Orientation of the parents and community in the developmental significance of play, of balanced nutrition, desirable health and hygiene practices, indicators of quality for preschools and schools are some of the areas which should be included in the package for community orientation to help them make informed choices and regulate the right kind of demand. Mothers & children are focus of the interventions but male members of the family & community need to be involved as well to make any intervention effective. It was noticed during the study that when requested and informed, fathers brought their children to the Polyclinic very enthusiastically for blood test and growth monitoring which clearly illustrates possibility of involving fathers.

In conclusion, while planning interventions to improve the childhood of children in the *Basti*, it would be important to keep the following principles in mind. Firstly, the development and growth of a newborn child occurs within the proximal environment of the immediate and extended family and whatever services are available in the neighborhood, and this in turn is influenced by the more distal variables of institutions, socio cultural and linguistic practices, and
the larger political economy. Any intervention planned for the young child must therefore necessarily be community based and contextualized. Secondly, the holistic development of the child occurs along a life cycle continuum so that for the benefits of any set of interventions to reach the child, these will have to address the continuity and cumulative nature of development across the different sub stages of childhood, while also addressing the interdependence of health, nutritional and education needs.

The earliest years of a child's life are known to last a lifetime and are key to predicting his/her eventual success in life. Given the current situation of children in the Nizamuddin Basti, the urgency of planning for a better childhood for them cannot be over emphasized. We hope the direction provided by this study makes benchmark for future studies, and will help stakeholders plan more meaningfully for their childhood and contribute in a small way to this imperative goal.
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## List of Annexure

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PRE-TESTING REPORT

The pilot testing of the study on the **Situation analysis of Early Childhood Care and Development initiatives in Nizamuddin basti** was carried out on the 15\textsuperscript{th} and 16\textsuperscript{th} of February 2010. Since the conceptualization of the project proposal in November, there were two Research Advisory committee meetings; one was scheduled in end-November and the other in beginning-February. The sample and the tools of the study were discussed in greater detail in subsequent meetings, with inputs and collaboration between the Aga Khan Foundation (AKF) and Centre for Early Childhood Education and Development (CECED), Ambedkar University, Delhi.

It was decided that the pilot testing was to be done on a select number of individuals and families from the *basti* (These will not form the part of the larger study). Hence, Aga Khan Foundation mobilized the team of community volunteers (residents of the same basti) in order to identify the beneficiaries that could be covered during the pilot testing of the study. Meanwhile, the field investigators who had joined on the 1\textsuperscript{st} of February (with one exception) underwent their orientation and training at the CECED Ambedkar University campus.

After revising and editing the tools of the study, seven tools were selected to be conducted by the field investigators who have been specifically appointed for the study. The tools are, viz.:

1. **Household schedule** (a common schedule for all the households that covered basic family information vis-à-vis socio economic status of the family, total number of family members, educational status, and other details. This tool helped in identification of target beneficiaries to be covered in the study.)

2. **Interview schedule for currently pregnant women** (covered assessment of awareness level of the pregnant woman in terms of health, nutrition, immunization, benefits to which they are entitled, and concerns and issues relevant to the phase of pregnancy)

3. **Interview schedule for mothers of children (0-35 months)** The interview aimed at understanding whether the mother was aware of benefits of breast feeding, care of health,
hygiene, immunization, nutritional needs of self and child. The tool also aimed to assess whether the caregiver was aware of the benefits she and the child should get from Anganwadi centre. It also included anthropometric measurement of children.

4. **Interview schedule for caregivers of children (3 years to 5 years 11 months)** The interview aimed at covering the quality of health, nutrition and education services availed by the parents for their child(ren). The tool also assessed the child’s cognitive and language development and health status of the child as perceived by the parents.

5. **Interview schedule for caregivers of children (6-8 years)** This aimed at assessing the quality of educational services available, and perception of parents regarding these. It also helped to assess health status of the child.

6. **School Readiness Tool** Is a standardized tool which was administered on children from 4 year 6 months to 5 year 6 months to assess their preparedness for school.

7. **Achievement Test** was administered on children who were completing their Grade 2 to assess their Math and Hindi achievement level.

The rest of the tools for the study were conducted by the Research Associates and the Research Assistants from CECED. For the pilot testing, it was required that the research tools that were to be handled by the field investigators must be pre-tested. The pilot testing thus involved the following people:

- Mr. Deepak Padhi (Coordinator from AKF)
- Dr. Adarsh Sharma (Co-ordinator from CECED)
- CECED team comprising of Research Associates and Research Assistants (Ms. Mukulika Dadhich, Ms. Palak Gupta, Ms. Sameen Almas and Ms. Shubhi Sachdeva)
- Community volunteers from AKF (Ms. Nazia, Ms. Mussarrat, and Ms. Ghazala)
- Four field investigators (Ms. Archita Jha, Ms. Anita Saroj, Mr. Tejender S. Bisht and Mr. Naveen Parsad)

On 12th February 2010, a meeting of CECED team and AKF representatives was held in order to assess the number of beneficiaries to be covered for trialing of tools. During the course of the
meeting, the field investigators were given inputs on how to conduct themselves in the community. Thereafter, all the questions in each tool were reviewed and discussed in great detail, with the community members giving feedback on how and where to re-frame the questions keeping in mind the situation of the basti and its inhabitants. The suggestions that emerged after that meeting have been mentioned below:

It was decided that the community volunteers after identifying the households for the pilot testing shall introduce the field investigators to each house. Also, each field investigator was to be accompanied with one Research Associate/Assistant for these visits. This step would ensure that the proper methodology of conducting the interview may be followed. The personnel had specified roles and responsibilities, viz.:

- **Role of Mr. Deepak Padhi, AKF**: Coordinator for the study, from AKF. Gave inputs on designing the tools and arranged the sample and the logistics required for the study.

- **Role of Dr. Adarsh Sharma**: Co-ordinator from CECED. Provided intensive training to field investigators and revised research tools.

- **Role of the community volunteers**: Identified the households (other than the main sample of the study) and introduced the household head to the field investigator and assisted in rapport building.

- **Role of CECED R.As**: Worked on designing, re-structuring the research tools of the study. Also, accompanied the field investigators and assisted them in conducting the research tools in the pilot testing.

- **Role of the F.Is**: Data collection for the pilot testing of the research tools after undergoing thorough training.
Hence, groups were formed and beneficiaries were covered. The details of the two days are mentioned below:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Tool used</th>
<th>Total numbers tools planned for piloting</th>
<th>Total Number done</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Household data sheet</td>
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<td>13</td>
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<tr>
<td>2.</td>
<td>IPW (Pregnant women)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>IP*(0-35 months)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>IP(3-6 years)</td>
<td>4</td>
<td>4</td>
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<tr>
<td>5.</td>
<td>IP(6-8 years)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>School Readiness Instrument</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>School Achievement tests (Hindi &amp; Math)</td>
<td>2</td>
<td>2</td>
</tr>
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</table>

*Interview schedule for parents with children

The MCD polyclinic served as an office for us to share the experiences of the research team after field testing. The testing exercise proved fruitful in many ways. Firstly, it gave the investigators an opportunity for hands-on experience of working in the *basti*, along with giving the team an insight to the necessities in terms of preparation of conducting the field study. Secondly, it also made the team aware of the changes that were required in the formulation of questions and options to be added as per responses received for a particular question.

In order to finalize the research tools, each tool was examined question-wise and feedback from each person conducting the interview was noted down before the second review meeting which was scheduled at Ambedkar University campus on 17th February 2010 to make the final edits on the tools. There were changes suggested in the sequencing or additions in a few questions. These changes are as follows:

1. On right hand side top corner, all the schedules except for household schedule code HHS Number line was added so that there was no chance of mixing of data or scope for ambiguity.
2. Since most of the mothers were found to be unaware about Aganwadi services properly, following two questions were added in the interview schedules for currently pregnant women, parents of children (0-35 months) and parents of children (3 years to 5 years 11 months).

<table>
<thead>
<tr>
<th>Are you aware of Anganwadi services?</th>
<th>Yes</th>
<th>No</th>
<th>If no (02), skip to 256</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the services provided by the AWC (multiple responses possible)?</td>
<td>Supplementary nutrition</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td>Non formal education</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td></td>
<td>Immunization</td>
<td>03</td>
<td>04</td>
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<td></td>
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<td></td>
<td>Growth monitoring</td>
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<td>06</td>
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<td></td>
<td>Kishori Shakti Yojna</td>
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<td>07</td>
</tr>
<tr>
<td></td>
<td>All of the above</td>
<td>07</td>
<td></td>
</tr>
</tbody>
</table>

3. In the household schedule (Section 1) changes made were as follows:

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Issue</th>
<th>Changes done</th>
</tr>
</thead>
</table>
| Q7 | Beneficiary Coverage cannot be attained by yes/ no response | *Therefore, actual numbers of beneficiaries are to be taken*
| Q108 | If children were going to more than one type of school, then? | *It was clarified to all FIs that if the child is going to school in the in morning and to madarsa in evening then it has to be coded as going to school*
| Q112 | Type of container – if water is not stored then what? | *In that case an option ‘Water is always available’ was added*

4. In Interview schedule for currently pregnant women (Section 2) changes made were:

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Issue</th>
<th>Changes done</th>
</tr>
</thead>
</table>
| Q258 | Who advised for birth spacing – if the interviewee says that she knows by herself then what? | *In that case an option ‘Self informed was added’*
5. In Interview schedule for mother of child of age 0-35 months (Section 3) changes made were:

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Issue</th>
<th>Changes done</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Apart from the 2 Anganwadi questions given above</td>
<td>Additional 2 questions asked are: Q 368 ‘Are you registered at Aganwadi’? Q 371 ‘Are you satisfied by the quality of food’?</td>
</tr>
<tr>
<td>Q373</td>
<td>The developmental aspects of child were to be covered by Yes/ No option as per the age norms</td>
<td>Q 377 has been made elaborate to cater to the need and made in 3 parts for children less than 6 month, 6 months to 1 year and children above 1 year.</td>
</tr>
<tr>
<td>Q 389</td>
<td>Regarding main sources of information for the parents about child immunization – if the interviewee says that she knows by herself then what?</td>
<td>In that case an option ‘Self informed was added’</td>
</tr>
<tr>
<td>Q 390</td>
<td>Delhi Govt. includes Hepatitis B vaccination as part of their immunization</td>
<td></td>
</tr>
</tbody>
</table>

In Interview schedule for caregivers of 3 years to 5 years 11 months (Section 4) changes made were as follows:

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Issue</th>
<th>Changes done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q401</td>
<td>In case of sickness of your child, where do you take him/her?</td>
<td>In that case an option ‘Govt. Hospital was added.</td>
</tr>
<tr>
<td>Q420</td>
<td>Some children were not going to government run school hence did not receive food in school.</td>
<td>In that case an option ‘Food not given in school’</td>
</tr>
<tr>
<td>Q421</td>
<td>Question reframed to ‘Do you eat food given at AWC’?</td>
<td></td>
</tr>
<tr>
<td>Q 427 &amp; Q 430</td>
<td>During piloting another option of dance emerged</td>
<td>In that case an option ‘dance’ was added</td>
</tr>
<tr>
<td>Q 433</td>
<td>Some were able to perform part of the activity</td>
<td>In that case an option ‘somewhat’ was added Any other specify category was removed</td>
</tr>
</tbody>
</table>
6. The achievement test of Math was simplified and graded from simple to complex problems to ascertain the real achievement status of children. Also, the content of the Hindi test was reduced, as it was considered to be quite lengthy for children.
CASE STUDIES

Growing up in Nizamuddin

Nizamuddin basti, as mentioned earlier, is a socio-religious place with significant history and strong cultural roots. It represents a space with the people following its customs and rituals closely. Some families have been living here for many years, whereas there are some that have recently migrated. The following case studies are a reflection of the lives of children living in the basti, and document varied circumstances of these people living in the same geographical location. Their colors, dreams, festivities and aspirations all find a way of expression through their everyday practices. Right from conception (when life begins) through the young years to middle childhood, these case studies of children illustrate the variance of childhood experiences and expectations.

The selection of the case study-sample was done keeping in mind the circumstances that were unique in terms of their influence these have on the growing child. Variation in family structure and the specific needs of children and families has also found appropriate representation. Studies were developed using mixed techniques of intensive interaction and was done by use of detailed interviews with the mothers, observation and conversations with the family members. Assessment of the children below 6 years of age was done by a standardized tool. In selected cases, Revised Denver's Pre-screening Developmental Questionnaire which is mainly a screening tool to gauge competence of children in various domains proved handy, in ascertaining children’s performance against the developmental age norms of the scale. A projective technique of making drawings on sheet with crayons on themes of “me” and “my family” supplemented the information and acted as a window into the personal spaces of children.
The Expecting months

Traditionally, in most cultures, the expecting mother is indulged and doted after. She is advised a rich nutritious diet, supplements and a lifestyle that takes care of her and the baby’s health. Additionally, the members in the family and well-wishers also recommend and advise her about the cares and precautions to be followed. Social customs and practices followed as a way of life are further impressed during such phases. Sudhir Kakkar, in his book The Inner World, enunciates in the last chapter Child in the Indian tradition, about the emotions of the pregnant mother and how she should be indulged “The critical period for the psychological development is said to commence from the third month of pregnancy... For the future psychic well-being of the individual, it is imperative- the texts are unanimous on this point- that the wishes and cravings of the pregnant woman be fully gratified and the unit of expectant mother and foetus be completely indulged.” Moreover, the childhood samskaras which are the expressive and symbolic performances, including rites and ceremonies...mark his transition from one stage to another. These are thus an attempt at introducing the child to the people and the world around.

With a predominantly Muslim population in the basti, the customs and rituals followed are in line with Islamic traditions. It was a common practice for families to have 3-4 children on an average. Hence, the fear of the mother during pregnancy was reduced considerably for the subsequent childbirths. A ceremony of god-bharai occasionally took place. Also, the dietary prescriptions for the pregnant woman altered keeping her extra needs at that time. She is advised milk, ghee and such rich foods; and also juices and dry-fruits for adequate nourishment.

Birth and rituals

In the recent years, there has been a change in the place of delivery, with most parents taking the mother to a hospital or an institution. However, some of the home deliveries also take place, due to the insistence of the in-laws’ or a resistance to forego old beliefs. As soon as the baby is born,

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most families dress up the child in new clothes. After the birth, the most common formal ceremony is on the 6th day, termed as chhatthi, where gifts and offerings are made to the baby. On the 21st day, the baby’s head is shaven. It also takes place on the 7th day in a number of families. The mother is not allowed to step out of the four walls of the house until 40 days, since it is believed that this way, she will avoid the evil eye. The 40th day marks the occasion of aqiqa which is a ceremony wherein relatives and friends are invited for a meal at home. An animal sacrifice (usually goat) is made, and the meat is distributed among the poor. Those who can not afford such a meal, cooked rice is served to the needy.

A customary practice of letting the newborn taste tea and honey immediately or a few hours after birth was also reported by a few respondents.

**Beliefs and Taboos**

A number of beliefs concerning children’s well-being and security are held by the community members. Since it is believed that the newborn child is a precious gift of God, there is also a parallel underlying fear of negative influence unduly affecting the child. Certain values have become embedded into the system, such as the concept of evil eye. Most parents believe in the same and attempt to ward it off by various means. Some seek the help of religious sages, some by practice of use of materials like chilli powder and salt, and so on. More often than not, a taaveez (a black thread with a tied sacred parchment) can be seen worn by most children around their necks or on the arm. It is for the same reason that it is believed to protect from any possible harm or danger to the child.

**Bringing up children**

It is often said of Indian family structure that bringing up children is not a lonely affair. In joint family setups, it is imperative that the child is not just brought up by the parents alone, but by the entire household, consisting of aunts, uncles and even cousins. He/she is collectively cared for,
nurtured, disciplined and played with. Often, the elder siblings take up the responsibility in the absence of the parents. Spending time playing different games are common among them.

The basti is a densely crowded place, with about 70% of the families residing in nuclear kind of arrangements. With the size of the house not being large, children who go out to play and those living in the neighborhoods find an opportunity of being together. They walk past each other, play in the same lanes and even meddle with each other. This has become a source of concern for most parents. They do not think their children safe in venturing outdoors, for there are a number of street urchins lurking in the lanes and who snatch away the money (five or ten rupees) which their children carry to buy goodies from the nearby shop.

Education and health of children are concerns that most parents resolve by relying on private facilities than the public ones. The preferences of the parents are colored by the faith in private schools and clinics as a solution to most of their problems due to their speedy and seemingly working mechanisms.

An essential component of bringing up children, as propounded by parents, is teaching them good habits and their disciplining. Almost all parents want their children to learn good behavior, be obedient, well-mannered and respectful towards elders. A common method, as admitted by most parents is to smack their child if he /she does not listen to them. With much pride, and as also observed, hitting children is not considered a crime; but is mostly an everyday affair. Fights among children often result in this. And more often than not, it was admitted that it is an effective way of putting things in order.
An active child and a stimulating upbringing

Zainab is a bright 4 year old girl. An active child from the very beginning, her mother recalled her naughty pranks and her being short-tempered and willful. Zainab attends an NGO-run preschool “Mohabbatein” in the basti from ten in the morning to one in the noon. Going to a preschool is well-liked by her, and the best part about the preschool is her teacher; however, she dislikes that she has to study in the school.

The mother is also not happy about the quality of education being imparted there, and that no midday meal is served to her daughter. Despite all this, the mother sends her daughter to the school for lack of better options. In the evenings, Zainab also goes for her Arabic lessons. She is very fond of her younger brother, and she is more than willing to take care of him. Being in a joint family, while we talked to the mother, we noticed that several other cousins in the household interacted with one another. Zainab's younger brother who is not more than a month old was the focus of attention receiving caresses and kisses.

Rukhsana was just 19 years old at the time when Zainab was born. Since it was the first pregnancy, the mother admitted that she was somewhat scared. Her special dietary prescriptions included milk and consumption of (iron) tablets. Describing rituals and ceremonies, it was informed that she was also advised to wear a gantha, made of threads on her arm. The birth took place at Rukhsana’s natal home. She informed that her father-in-law did not allow for a hospital delivery, and hence the decision for a delivery at home. A ceremony of “god-bharai” took place in the seventh month of pregnancy. The mother was served hot milk with butter during that phase. She also consumed almonds and jaggery. After a passage of 6 days after birth of Zainab, a ceremony of chatthi took place. Aqiqah, a ceremony with animal sacrifice was held to rejoice
over the birth of all the children of the household together. This party was thrown after 40 days of Zainab’s birth, when relatives and friends were invited at their residence. The baby’s head was shaved on three occasions: on the 6th, 21st and the 40th day. She was made to wear a taaveez (a sacred parchment generally worn around the neck tied in a thread) to protect from harm. The mother was fed with special diet and food in post-delivery period, and she mentioned having breastfed Zainab until 3 years of age. Regular application of oil on Zainab’s body followed, to ensure that the muscles of the arms and legs became strong and supple.

Zainab has many good friends in the neighborhood, who also happen to be her classmates in the school as well. She counts Ilma as her best friend, and says that she loves playing with her friends. She loves watching cartoons on television, and counted her favourite games as running and catching, “I spy” and play with dolls. On an average, Zainab spends substantial time of her day in play and in studies. While at play, she generally takes up a bossy role of the leader. Zainab has an angry and stubborn predisposition like her grandmother’s, says her mother. The mother admitted hitting Zainab almost once every day, because of her naughty pranks. The father, on the other hand, is more indulgent and gives in to all her demands and wishes. There have been opportunities for Zainab to be out with family away from home on a few occasions and visit places such as the zoo, Appu ghar (amusement park), children’s park (India gate) and the Trade Fair. Her wish to God is to grant her lot of money so that she could buy ‘cheez’ (goodies).

Zainab is an above average child as indicated by her performance on Denver's screening schedule and School readiness instrument. She performed quite well on the activities of the schedule, which include tasks that give an idea about the developmental age in different domains, viz. language, gross motor, fine motor and psycho-social. Her achievement levels in all the domains were found to be high. Also, her age according to the tool has been determined to be at least higher by a year and a half, than her actual age. She also scored well (than most children her age) in the School Readiness Instrument, which assesses the readiness of the child for her entry into school.
Zainab's **drawings** of self and family have detailing to the level of depiction of the separate parts of the body including arms and legs. As a four year old, she has been able to draw figures that look human, and also illustrate the finer things such as hair, eyes and mouth. The family sketch drawn included all members of the joint family standing in two rows, and was filled with colors. They visibly were holding hands depicting a united family.

**Bringing up a child with special needs**

Four year old Sohail is a special child who suffers from frequent convulsions. The family has got medical tests and CT scan done for him, however, the investigators have not been able to trace any specific cause to his condition. The only possible assumption of the parents is that when Sohail was one year old, he suffered a head injury by falling off the bed. Until another 6 months, nothing perceivable happened; however, since then, he has been suffering from convulsions that are not very rare, and occur generally during the night. Each time the child gets such fits, he is taken to a local doctor, who treats him by prescribing medicines. For the same reason, there is someone or the other all the time who has to stay with the child to take care of him, says the mother. Shanno, his mother also bathes, feeds and takes care of other activities of her son. The child has achieved toilet training, and can eat on his own. She says she plans to send her child to the HOPE project NGO working in the **basti**, which offers some services for special children.

Sohail is much attached to his elder brother, and has a friend in the neighborhood. They like playing games together such as hide and seek, running, “catch me if you can” and with toys. His playmates are mostly of the same age as his. The mother says that he does not like sharing his toys, and when he comes to bat, he wants to do nothing but bat all the time. He often goes out to the neighbouring **Chhatri** park in the summer almost every day. She further to say how Sohail is the most loved child in the family, and how all relatives treat him in an indulgent manner, so much so, that he has become
indisciplined in his ways. “No one in the family teaches him how to behave well”. He is only afraid of his father, who is a figure of authority for him. When Sohail is angry or upset, he shouts on people around him, with everyone trying to calm him down. Sohail is rewarded with some tit-bits (snacks) for good behaviour. The mother feels that there is a considerable difference in the way girls and boys should be treated. Girls must be taught household chores, and must follow the cultural restrictions placed on them. However, for boys, there is certainly more freedom that they can access.

For Shanno, (Sohail’s mother) deliveries of her 6 children were normal, however, she experienced water break (rupture of the amniotic sac) before Sohail’s delivery. The condition of the child was known to the parents after an year, and they have taken him each time to a local doctor to manage the convulsions, which had increased in frequency since. The mother admitted that the family had faced/borne certain discriminatory attitude from others around, on account of Sohail’s disability. Sounding almost disappointed, she mentioned that she would rather not take help from anyone who would offer it, for many had come and promised to do something for the betterment of the child, but none had taken any tangible action. There were no ceremonies performed before the birth of the child, and a ceremony of chhathhi was held for the elder brother Ayaan. She received pre-lacteals for a period of 6 months and the child was weaned with bananas. The mother had strong belief in the concept of evil eye and made sure that the child wore a taaveez to protect him from any possible harm.

As far as Sohail’s role models or his aspirations were concerned, the mother felt that there were no definitive ideas. It was up to Sohail whatever he wants to grow up into. Sohail, she said, was a short-tempered and stubborn child. According to her, a “good child” must have education, good behavior, should respect elders and must stay well outside the home. Sohail said he was happy going to the pre-school, and wishes to become a doctor when he grows up.

According to Denver's Pre-screening questionnaire, Sohail's age was found to be less than his actual age by about 8 months. Since he has received no stimulation in a pre-school setting and stays only at home which is not very large, there seems to be some degree of lack in his gross
and fine motor skills. Additionally, the child also did not fare very well in the language component, and did not use a lot of verbal communication to express himself.

Sohail did not draw anything on the paper given to him. After much cajoling, he made a few scribbles, but that too, with a very light hand, and at the edges of the sheet. For a four year old, these scribbles are what should have been achieved earlier age-wise. But owing to the lack of a stimulating environment, the child could not draw anything significant.

The child with a single mother

Ilma is the only daughter of her parents, and lives with her mother at her maternal grandparents’ home. The mother has been living separate from the father for the past 6 years, since Ilma was born. Ilma spends most of her time with her cousin brothers playing and studying. In a joint family, children are likely to spend only sometime with her mother, as was Ilma’s case, said her mother. Although above six years of age, Ilma does not attend any school presently, and her mother claims that she is about to get her enrolled in one. Ilma is passionate about studying, her mother says. Even though she does not go to any formal school, she attends tuition classes offered at a private residence. She is taught Mathematics, English, Hindi and Drawing there. Ilma comes home from tuitions and sits back to study and complete her homework. The mother believes that these classes have been beneficial for her daughter. Ilma is very attached to her mother and grandmother, and each night she only sleeps after she has pressed her granny’s feet and arms. Since she is the eldest among her siblings (cousins), she disciplines and acts as an elder sister, sharing her toys and materials. However, she seems to be clear on one point; when her cousins come over to her room, she makes sure that they listen to her, for she has the upper hand/advantage of possessing the toys as well as the space. The mother’s aspirations for her daughter have been succinctly stated in her words, when she mentions “Jo yeh banna chaahhe” (Whatever she wishes to become).

Ilma is a quiet girl and likes watching cartoons, and loves playing with toys. She does not get many opportunities for outside play. There is not much space to run about in the house, but the mother considers it unsafe for her daughter to venture outdoors. Ilma’s mother had endured a lot
of suffering after her marriage. At the time of her pregnancy, the mother was not cared for by her in-laws. They did not see to her dietary needs nor were any customs and ceremonies held for the expectant mother. Before her delivery was due, she came over to her natal home and stayed for over a month, where her mother took care of her and also prepared clothes for the newborn. She however had returned to her in-laws before the due delivery date, and gave birth to Ilma in the house itself. The mother stated that the in-laws were expecting the birth of a son; and their reaction at the birth of a daughter was that of indifference. Soon after, the mother contracted some respiratory infection, but was not given any medical attention by her in-laws. Hence, after a passage of 24 days after Ilma’s birth, the mother packed up her materials and returned to her natal home for good. Since that day, no one from her father’s family have ever come to seek to meet her or the daughter. Ilma’s mother, Zahira believes that boys and girls should be treated in exactly the same manner. There should be no discrimination on any grounds. Both must have an equal share of food, go to the same school and should have access to similar resources.

There were no formal ceremonies to mark the birth of the child, except a customary aqiqah ceremony (animal sacrifice, with food distributed among the poor) on the 21st day after Ilma’s birth. Zahira says that she often gets angry when Ilma does not listen to her, but she soon gives way to lovingly tell her what to do, and Ilma does understand with the latter. When Ilma gets angry, she contorts her face and doesn’t reveal her concern until much persuasion to her mother. Zahira says she handles disciplining of her child since, being a mother; it’s her duty to teach her right from wrong. In her own words: “If I don’t do it now, there is no point repenting later.” For Ilma’s positive conduct, she rewards her with small gifts that she asks for. She wants Ilma to become like her tuition teacher, as she believes her to be strong and courageous; and adds “Women must be strong”. She wants Ilma to possess qualities that are virtuous, “Khud ko samjhaane waali aur doosron ko samajhne waali” (“One who can reason with herself, and can also understand others”)

Ilma is a support to her mother in simple household chores, and even goes to purchase small items of use from the nearby shop. Zahira considers a “good child” as one who listens to the parents. She said she dislikes those children who are dishonest, impolite with elders and do whatever pleases them. Ilma, in her view, is a shy girl, who doesn’t open up and talk very easily, but at the same time, is a dedicated daughter. She wishes to grow up and become like her
teacher. And finally, Ilma mentioned that she would ask God to give her money so that she could buy lots of “cheez” (goodies).

As a 6 year old, Ilma has drawn pictures that take up most of the space of the graph sheet. For her own portrait, she depicts a girl wearing a colored shirt and a skirt (with wavy lines) which she wanted to depict as a dancing pose. The arms are widespread and seem to illustrate dance. For the portrait of the family, she has drawn a picture of herself and her mother standing next to each other, clearly missing the father. There has been fine detailing in the picture with definite facial features as well as in clothing of the two.

**Being brought up by a determined mother in the midst of challenges**

Born in a nuclear family, with 2 sisters, one on either side, Bushra is the middle daughter of Mohd. Shakir and Shabnam. Her eldest sister, Aaliya is suffering from a medical condition. When Aaliya was 3 months old, she fell very sick. The parents took her to a few local doctors, but her situation did not improve. A senior doctor at a government hospital finally told the parents that Aaliya was mistakenly given medication for an older child, leading to damage to her liver and kidneys. It has been almost 10 years now, and her mother regularly (every 15 days or a month) takes her to the hospital for dialysis and blood transfusion. Aaliya is 10 years old, and has been in Nursery class for the past 5 years, and is sent each day, for she loves going there.

The second daughter, Bushra is a 7 year old girl, and the youngest is Mubashira. Bushra is a highly energetic and bright child. She goes to Navyug school and is very hard-working, says her mother. Her performance on the School Achievement test was also very good. She often tells her mother that when she grows up, she wants to be a doctor, so that she can treat Aaliya and her mother won’t have to take her to the hospital anymore.
Shabnam, their mother, takes Aaliya to Kalavati Saran Hospital alone, by bus. The father, a tailor, meanwhile stays back at home and takes care of the shop and other children. Although Aaliya is supposed to stay in the hospital for 2 full days, Shabnam returns by night along with Aaliya to be back with kids, teach and send Bushra school and cook food; and back to the hospital in the morning before the doctor arrives at the hospital. The mother is very passionate about education. She wants her to do well in whatever she does. A very interesting situation was revealed here concerning Bushra’s education. Shabnam has never gone to school, but had all by herself learnt to read and write in Hindi. Bushra, on the other hand, goes to an English-medium school. In order to assist her in studies, Shabnam gets all of Bushra’s Mathematics and English chapters transliterated into Hindi by requesting her neighbours to do so; and it is a pleasant surprise to see that in fact they also oblige her. So, each and every word is transliterated into Hindi, in a separate copy that the mother maintains for herself, for instance: “I am a good girl” is written in Hindi as “-------------------------”. (Specimen attached)
The most striking thing about the mother is that she is courageous and is uncomplaining about money or other problems/challenges that she faces on account of her circumstances. The injections and other medicines that Aaliya receives are very expensive for the parents to buy. Yet her strength, positive spirit and her energy to go on, despite the struggle, is really touching and incredible.

Shabnam does not discriminate between boys and girls; and never mentioned during the 2-hour conversation wanting to have a son while bringing up three daughters. The mother sends Bushra out sometimes to get some small items, vegetables from the nearby market. She wants her to learn good manners, talk to people politely, respect elders and never lie. The father is the main figure who handles disciplining of the children. He is the figure most feared, for he throws and breaks things, and Bushra generally runs away to the terrace or to the bathroom. For positive behavior, the parents gift chocolates, chips or fruits; on lucky days, a picnic to India Gate or a trip to Children’s Park takes place. The family also visits the grandparents once a fortnight, and the grandfather gets money or chocolates for the children when he comes to pay a visit to their place.

During her pregnancy, Shabnam says that she feared that the second child (Bushra) may also have the same problem as Aaliya. The ceremony of animal sacrifice did not take place before her birth; nor were taboos or instructions imposed on Shabnam before Bushra’s birth. She was advised to take milk regularly with ghee during that phase. After Bushra’s birth, a ceremony
of *aqiqah* (animal sacrifice) took place, and so did another ritual of *lobaan*, which is a practice performed to secure the child from germs/ bad air.

Bushra does not get to spend a lot of time with her mother, owing to her sister’s health condition, but she keeps herself busy at play. She likes watching television and playing games with her friends such as “house-house”, “teacher-student” and so on. Although she takes up a bossy leader role, but also lets others take turn while playing. She is attached to her youngest sister Mubashira, and calls Aaliya as her enemy. Bushra likes going to the school and the teachers there. In the end, she wishes God to grant her with a Big house.

Yet another outstanding artwork was displayed by the drawings of Bushra. The clarity of her figures, the neatness in her work and the detailing is commendable. She has made a neat drawing of herself, with a beautiful dress which has designs and lots of color over it. The hair, and other facial features and fingers of the hands have been well depicted. And she has also shown herself wearing bangles, hair-clips, earrings, necklace and colored footwear.

Similarly, the portrait of the family which includes her father, mother and her two sisters (excluding herself) has been given the same detailing. It is a neat picture with utilization of most of the graph sheet. The father has been dressed in shirt and pants, with collars, pockets and even
cuff links; while the mother has been illustrated with a bun and a sari (with colorful design) and footwear. Likewise, the two sisters have been dressed in skirts and tops with designs over them, and have been shown with loose hair and hair-clips attached. Overall, her attempts at drawings were admirable, in terms of utilization of space, color and illustration.

The bright-eyed boy

Mohd. Kaif is a 4 year old bright boy who lives in a nuclear family with 4 brothers. He is from a poor family, which follows the tenets of religion closely. Everyday, he goes to the mosque early morning for his prayers. He plays with many friends of his: in the neighborhood and with his brothers. He loves playing and shares his toys and materials with his playmates, but finds it difficult to wait for his turn. He takes the role of an active player, and goes out to the park on Sundays with family.

A naughty boy from the very beginning, the mother admitted that it was her responsibility to teach him manners and discipline him. Sometimes, when he does not listen to her, she verbally scolds him and asks him to leave the house at once and hits him too. When Kaif gets angry (if someone teases him or snatches something from him), he gets annoyed and shouts aloud; meanwhile the mother recites certain verses from the Holy Book for a few minutes, so that he may calm down.

Kaif’s delivery took place at a hospital, and the diet of the mother was normal during the pregnancy. There were no formal ceremonies before and after his birth. His hair were however shaven within seven days. A common problem with Kaif and all his siblings is that they suffer from weakness in the legs, and Kaif could be observed to slightly limp while he walked. The parents have tried to get one of the child operated upon to solve this problem. The mother
admits that Kaif still can not eat or bathe on his own. Moreover, she does not think he can help
with any chores to do outside the home, since he is too young to go out.
According to her, a “good child” is one who respects elders and obeys them. Kaif looks up to an
elder cousin brother as an ideal, since he is doing pretty well professionally and is working on a
“good post”. The parents too want him to become a good human being.
Kaif’s developmental age according to Denver exceeds his actual age, which means his
functioning is higher than that of an average four year-old. The child performed pretty well on
the activities involving fine motor skills, and made clear figures wherever asked. He was also
good at linguistic abilities and psycho-social aspects. A lot of stimulation is provided to Kaif
because of his elder brothers' presence. When he sits down for any work, a supportive
environment surrounds him. Kaif is assisted by elder brothers who go to school and help him in
his learning.

Mohd. Kaif's drawings stand out in the regard that they have been done with detailing which is
not developmentally achieved by children of his age. Depicting his own self, he has made a clear
big figure of a male wearing shirt and pants with shoes on. The face has details of side-parted
hair and ears; while the shirt has collar and design over it, and the fingers of the hands find
representation too. The colors have been filled within the boundaries and he has even used a skin
colored crayon for the face and neck. Similarly, the family members who have been drawn for
the theme "my family" have such details, and their designs of the clothes have been kept unique, with separate kinds of neck designs for the suits worn by the women! Here too, he shows them standing close-by and holding each other's hands.

**Fraternal twins and their differences**

Roshni and Mehboob are fraternal twins born to Mohd. Heera and Saajda Khatoon. As 6 year olds, they regularly go to the MCD School in the basti, and spend most of the day in the school or playing with each other. Mehboob was born as a weak child with low birth weight, and was initially given milk by the NGO HOPE. He is underweight even now, and remains inactive. Roshni was born as a healthy child, and is more active than her brother. They have 2 elder sisters; the younger of the two is very fond of her siblings and takes care of them. She washes clothes, takes care and even helps them in their studies. The children are therefore attached to her more than the eldest sister.

Most of the time, the two are busy playing with each other games like “house-house”, “teacher-student” and so on. Shahnaaz does not actively encourage their free play. According to her, boys can be sent outdoors, but girls need to stay indoors. For the same reason, she lets Mehboob out to buy stuff, but does not let Roshni do so. The disciplining of the children is handled by the father, who is feared to a great extent. They generally stand with their heads down, while being scolded. The mother admitted that she beats the children if they annoy her too much. The parents aspire for the daughter to become an engineer and the son to be a doctor. The father indulges the children and gives them money to buy goodies, of which the mother does not approve much.

When Saajda was pregnant with the twins, she admits being scared of dying, as her sister-in-law had passed away while giving birth. She used to feel tired, and could not eat properly. The mother was fed with milk and ghee to ease out the birth process. On the 6th day after birth, the children's heads were shaven and nails were filed. The mother's breast-milk was given for the first week; however normal food was also introduced soon after. She consumed carom seeds (ajwain) until one year for enhanced lactation. The aqiqah ceremony of the children took place,
and the meat was distributed after the animal sacrifice. The mother also believed in religious sages who practice touching/patting a bundle of peacock feathers onto the head, to protect from harm.

The two children share their toys with each other; and without a television in the house, they keep themselves busy with games. They spend time playing "ludo", a board game. The girl, according to the mother, is more submissive and tends to be a follower, whereas the son takes the role of a leader during play. Saajda feels that a "good child" is one who listens to the parents. The children's wishes to God are different too: Mehboob (son) wants money, whereas Roshni (daughter) wants sweets.

As a six year old, Roshni has made little strokes and used only a small part of the graph sheet to draw the picture of self. The child has drawn a figure of a human, with two arms and legs with a head and a stomach. For the depiction of the family, she has drawn four figures (mainly faces) placed next to each other.

In the absence of any preschool experience, Mehboob found it somewhat difficult to draw significant figures resembling human forms. The portrait of his own self and the family consist of circular strokes without any impression of facial or any bodily features. For a six year old, the figures are not properly depicted showing a definite lack in a stimulating environment for the child.

It is worth noticing here that though the brother and sister belong to the same family, yet their varying general physical conditions have led to different results, as is evident in the drawings of the two.

**Twin birth, separate living**

Atif and Yasir are twin brothers, the former being 20 minutes older. They are more than an year old, and their mother Shahnaaz says that their temperaments are extremely different. Atif is a quiet and submissive child; whereas Yasir is the naughty of the two. They live in separate houses; Atif lives with his parents, and Yasir stays at his grandparents’ house. The children do
not share a friendly relationship with the paternal grandparents, and Shahnaaz does mention that she receives no help in rearing of children from her in-laws. The parents wish to have both the children together at their home, once they start school.

The mother found about the twins in her seventh month of pregnancy. There were no ceremonies held prior to the birth of the children. Since she felt very nauseated for the first 6 months, the husband took good care of her and bought her juices. She went to a religious teacher (Maulana) for seeking his blessings and to procure a taaveez for the children’s safety. The delivery took place at the hospital; Shahnaaz was given jaggery to chew on to ease out the birth process, but she could not eat it. After the birth, the mother was fed milk and porridge. Additionally, fennel, almonds and ajwain were given as galactogogues (substances that enhance milk production). She mentioned that Atif consumed more of her breastmilk than Yasir.

Atif, the elder child is attached to the mother, and does not become friendly at once with others. Yasir, on the other hand, is social and fond of his grandparents. Since Yasir stays with his maternal grandmother (nani), he has some confusion regarding who the mother is. He calls his grandmother “maa” + “ammi”, but can’t speak it very clearly. Yasir is fond of his elder brother, but often beats up other boys older than him too. Yasir does not like being fed by anyone, and eats on his own. However, his insistent habit of eating mud has been a cause of concern for the parents, but they have yet not found any solution. He also suffered from severe diarrhea.
once, due to the same reason. Yasir is not scared of his parents, and pretends to cry and shouts back when scolded; Atif, in contrast, gets upset and complaints to the mother.

The children are very young and the mother’s aspirations for them is to get them educated properly and get a better job than that of their father’s who is a driver. She wants them to become good human beings when they grow up.

The Denver’s pre-screening schedule was administered on one of the two twins, Atif, for he was living with the parents at that time. According to the activities in the schedule, he performed well for most domains relative to his age, and could accomplish tasks in fine and gross motor activities well. His developmental age by the tool has been determined to be at least 4 months more than his actual age. It is important to understand, however, that the context of children may be such which does not make a few things part of their everyday reality like the use of objects such as spoon and fork, and hence their inability to use it independently should not be interpreted as a lack or deficiency of any kind, which has been Atif’s case.

A houseful of girls

The sixth daughter of Shakeel and Khushnuma, Ilma is a naughty two-year old girl. She lives in a joint family, with five sisters. For most of the day, Ilma is in the company of her mother, and she enjoys playing with her sisters. They also fight on a few occasions, and pull hair or hit one another, which is when the mother has to intervene. She is called for help and to resolve their fight. The mother generally reprimands the daughters, and hits them too.

The mother admitted that since it was her sixth child, she had not planned for this. She was not very keen for this pregnancy, but bore it with a smile considering it as a gift from God. A number of ceremonies marked the birth of Ilma, viz. recital of the Holy Book, chhatthi (on the 6th day of birth), and on the 40th day, cooked rice was distributed among the poor and needy. During her pregnancy, the mother was prescribed easily digestible foods like khichdi; and other
dry fruits such as coconut, almonds, munnakka and poppy seeds (khus-khus) lightly fried in ghee were served too. As a practice, certain foods and drinks kept aside which have been . She gave birth in a Government hospital, as her blood pressure was high and the movement of the child was not much. In order to ease out the birth process, milk along with butter was given to her. On breastfeeding, she shared that girls can be done for about two and a half years; whereas it is less than 2 years in case of boys.

A good child, according to the mother, is one who respects everybody. She defines her daughter as an aggressive, short-tempered and bright girl. The mother wishes her to get educated, and then pursue what Ilma herself dreams of becoming.

The child's developmental age according to the Denver tool was found to be about 7 months greater than her actual age. Specifically, she showed fairly good performance in the activities concerning the language domain. On account of being a part of a joint family structure, the girl has obvious sources of a rich linguistic environment. This, in turn, has led to the development of clear language skills from an early age.

**Coping with seizures**

Abu Baqr is a one year old young boy, who lives with his parents and sister in a nuclear setup. He does not have a fixed daily schedule, but sleeps usually late at night, after his father comes home and plays with him. The child stays most of the day with the mother. When Abu was about four months old, he suffered from seizures for 2 months, during which the parents took him to a local private doctor. The parents got his CT Scan done, and he was given medicines, multivitamins, calcium tablets and powders for strength. He has an elder sister Aamna with whom he loves playing with cars, dolls and utensils. He does share his toys with others, but often pulls from them too. The mother tries her best to teach her children poems and stories. However, on account of an early marriage, (when she was just in Standard 4), she had to quit schooling. She still feels the loss and her incapacities to teach them worthwhile things like poems and so on. The mother wants Abu to go for higher education and aspires for him to pursue engineering or a computer course. She also wants her children to learn good manners and be polite to all
elders. For her, a "good child" is one who listens to his parents, does not eat anything disagreeable and who behaves well.

The mother has given birth to all children at home. She also managed all the deliveries on her own, and she mentioned that there was no one at home when it happened. She did not experience labour pain, but called her mother to assist in cutting the umbilical cord. The first child (older to Aamna) was a still birth, caused due to strangulation by the umbilical cord, yet the next two deliveries also took place at home. Sharing her emotions during pregnancy, the mother stated that she had no fear of any sorts. She was advised to consume eggs, bread, rice fried in ghee and avoid green leafy vegetables during that period. Practices during delivery were not known to her, yet she had the notion that the delivery on no account should happen in a dargah or a mosque, unless an emergency. Moreover she was aware of the idea that the mother cannot venture out of doors until about 35-40 days after birth, but the newborn can. Mentioning the practices which should be followed while delivering the child, she stressed on the use of a blade that has been sterilized by a candle flame, and then tying the cord of the child with a thread. Also, massage of the arms and legs of the body also needs to be done regularly, she added. The mother began breastfeeding Abu immediately after birth; and stated the practice of breastfeeding is different for boys and girls as quoted in the Holy Book (1.5 years for boys, and 3 for girls). She consumed ground kalaunji with rice or bread for enhanced breast milk production. The child's grandmother did the household chores for the first two months, while the mother rested.

Abu has still not been toilet trained, and is learning to inform the mother. He is able to eat rice and pre-cooked noodles on his own; the mother helps him with the rest. The disciplining of the children is handled by the mother herself. She admitted hitting the daughter more than Abu, when they don't listen to her. She tries to warn them once or twice, but usually, she ends up hitting them twice or thrice a day. The children, according to her, become quiet only for a short while when scolded, but they return to
their pranks once she is done. She describes Abu as a naughty and active child, and wants him to grow up into a well-behaved person.

During the assessment of the child, it was found that he could achieve all tasks according to his age. However, in terms of his gross motor skills (involving larger muscles of the body), there was an evident lack especially even to walk about. This may be attributed to the general weakness in the child because of his physical condition and ill-health.

An year old Aqsa: cynosure of everyone's eyes

Aqsa is the third daughter in the family. Just about an year old, she is a part of a joint family household, and gets attention from all members. Her cousins, mostly of her age, like to come over and play with her. The mother feeds, bathes and takes care of the child and also is able to do the household chores, due to the support she receives from the other people in the house. On the same account, Aqsa is more attached with her grandparents. She greets elders with a salaam. Since she is very young, everybody deals with her lovingly, and even when she commits a wrong, she is lightly reprimanded. Often, her fits of anger burst out with a distortion of the face and loud yells with a tightened fist. While being scolded, however, she gives a disarming smile to please.

The mother admitted her desire to have borne a son after the birth of two daughters, but accepts this one as a will of God. During her pregnancy, she was given fried dry fruits that were grounded and sweetened with sugar; and spicy food was avoided. Before the delivery, she was administered sweet water to drink and jaggery to ease out the birth process.

On the 6th day after birth, Aqsa was given a name and her hair shaven. The typical ceremony of aqiqah was not held for the girl. Arifa, her mother, mentioned about the consumption of gourd, lentils and kheer for promoting
the production of her breast-milk. She mentioned that she had breasted her other children until two years of age, and was doing so for Aqsa as she was just one year old. In order to keep her child safe from harm, she used to recite verses from the Holy Book and blow on her; otherwise she used to get rid of the evil eye by use of red chillies (encircling around the head reciting verses) and later burning them.

A good child, in her opinion, is one who performs well in studies and is well-mannered. She calls her child as an easy child, unless she is refused the thing that she demands. The mother wants her to study in the same school as her sister’s. But she does not want to impose her aspirations on her: “She should perform well in her studies, but Aqsa will decide what she wants to become.”

The girl's actual age is close to one year, and her developmental age, according to the Denver's pre-screening questionnaire has been found to be 19 months, which is about 6 months older than her actual age. She performed the tasks on the schedule well and her active nature along with a joint family upbringing, where she has received ample exposure as well as attention from all members of the household has led to optimal development for the child.
Focus Group Discussion with Adolescent Girls

Date: 30th March 2010
Time: 3:30 PM – 5:30 PM
Venue: Resource Center, MCD School, Basti Nizamuddin
Number of Adolescent Girls = 21

Before starting the Focus Group Discussion with the girls, the AUD team introduced itself and briefed the girls about the basic objectives of discussion. Each girl was asked to prepare a name tag for herself and draw something which she felt depicted her. The AUD team also prepared similar name tags; this exercise helped everyone for easier identification in a fun way. Consent was sought before the discussion and the girls were given the freedom/choice to walk out or not answer, in case they felt uncomfortable or did not wish to divulge information. Initial rapport building was accomplished with the girls with the help of ice breaking games.

During the ice-breaking game: Idli, dosa, samosa

Educational and Vocational training

Out of 21 girls, 14 girls were found to be studying in high school, 5 had dropped out after primary school, and only one was studying in college, but the most discouraging thing was to find that one girl was never enrolled in a school. The reasons given for discontinuation of education were varied, ranging from...
household work, taking care of siblings, financial problems, to fear of failure. Parents did not want them to go out as they were worried about their daughters’ safety.

All the girls did household chores at home daily, and reported that at the end of the day, they felt tired and hardly had any time for themselves. One of the girls mentioned cooking at her sister’s place to earn money after completing all household work at her home. Similarly, six other girls also worked from home to supplement a portion of the family’s income.

Each girl was of the view that education was very important to be able to tide over emergencies; and, if required they were ready to go out and work to support their family. Education was also deemed as important as it built self-confidence and brought about awareness of the things happening around them. The girls’ aspirations were high, and they shared that they wanted to be doctors, police inspectors, air hostesses, fashion designers, teachers, vocational teachers and even scientists!!!

They wanted to avail vocational training in areas such as advanced English speaking course, bharatnatyam dance, computer course, mehendi (henna) design, dress designing, interior decoration and beautician course. With an exception of two girls, all wanted to be self-employed.

**Entertainment:**

During leisure time, most of the girls watched television, visited relatives or went to the nearby park. They re-iterated the lack of safety in the basti for girls to go out alone, due to which they preferred going out in groups. Most of the girls had never been out of Delhi, and their visits out of basti were mainly for attending religious or wedding occasions at relatives’. 
Health and Nutrition:

Health problems seemed rampant, with all girls (except two) reporting problems such as weight loss, joint pains, and as many as half of them mentioned loss of appetite. Financial constraints of the family led to loss of appetite among them, as reported. Most of the girls were well-aware of the importance of nutritious food to stay healthy; yet, nearly half of the girls did not have proper breakfast. It was interesting to note that some of the girls watched their “diet” to stay fit, and avoided milk, banana, ghee, oily foods and sweets.

None of the girls had gone for a routine health check-up in the last two-three years. On enquiring about the role of the Anganwadi worker in dispensing healthcare, none of the girls reported guidance received by AWW regarding information about calcium, iron and prophylaxis.

Gender discrimination:

All the girls mentioned that they completed household chores as well as kept aside time for studying; on the other hand, their brothers neither worked at home nor devoted time to study. They confided that their brothers got preference over them for food and type of schooling they received. Yet they believed that their parents loved them equally or more than their brothers. Some girls eagerly pointed out that their fathers loved them more while mothers loved brothers more.

Marriage:

All girls felt that women should be married only after 18 years of age, somewhere between 20-25 years. They were quite aware about the health problems associated with early marriage and strongly felt that the first child should be at least after two years of marriage. They also had vague ideas about family planning.
Menstrual cycle and Hygiene:

All girls with an exception of one had begun their menstruation and all reported using sanitary napkins. On initiation of periods the girls reported receiving new dress (es), money and dry fruits to prevent weakness. However, it was dismaying to know that they were not allowed to take regular bath during their periods. The reason for such a practice was given (by the girls’ mothers) as a factor leading to reduction in their fertility. All the girls admitted that they felt extremely dirty, due to avoidance of bath; and had at some or the other time, confronted their mothers but had found it very difficult to convince them. Foods avoided by them during this period were eggs, tea, coffee, fish, mutton, chicken, rice, sour food items and even cold water. A very few girls were aware about HIV/AIDS through advertisements on television, posters or by teachers. An enthusiastic girl gave a very accurate and detailed description of all the modes of contracting the disease. She was encouraged and appreciated for the same.

Other issues:

A few girls expressed that although public toilets were built in the area, they were apprehensive of using the same. They expressed their concern about the fact that boys in the basti teased them and they found it difficult to report such misdemeanour to their parents, for in that case they would have to face the wrath of being barred from going out anymore. At this, one of the girls excitedly illustrated a case when a group of girls had collectively thrashed a boy who used to tease one of them.

At a happy note, the FGD concluded, but not before sharing the key issues about health and nutrition. The girls were asked to share the information they had gained that day with their friends and other girls in the basti. Their last comment before departure was “For the first time, we have felt so important - as nobody had ever heard our views with so much interest!!”
Focus Group Discussions with Community Leaders

Date: 6th April, 2010
Venue: Resource Center, MCD School
Time: 4:00pm-5:30pm
Number of participants (excluding the team): 9

It was a felt need to know the opinion of the representatives of the community: the community leaders. Their influential role had to be gathered, and their views sought on the issues they considered which promote as well as thwart the development of the community. A majority of them who were present for the FGD had been living in the basti since birth. Their views were solicited on the following areas:

Changes that have taken place in the Basti:

- They mentioned that the most significant visible change through the years has been the steady rise in the population of the basti which has increased manifold. People from cities and towns around have migrated there and settled.
- Moreover, due to increased constraint on resources, the rate of house rent had increased considerably.
- The number of visitors (foreigners and tourists) to the area had also become higher.
- Sadly, unsocial activities such as smoking, drinking and drug abuse had become much more open and common. To quote, “There is no shame anymore.”
- Harassment of girls and women had risen.
- The overall environment of the basti had become filthy and unclean.
Disappointment could be sensed amongst the community members regarding the negative changes that had taken place. They, who had lived in the basti their entire lives and had it as their home, had to stay quiet now. They mentioned that residents of the basti felt ashamed to tell others where they lived, and simply listed their address as in Nizamuddin West.

**Education:**

All the community members were very passionate about the issue of education and its importance, and wanted the situation to improve at all levels. They highlighted a positive trend as that of more girls receiving education than boys. Some of their **suggestions** concerning the improvement of this aspect were as follows:

- **Syllabus:** They said that they would have liked to see a universal syllabus for 3 to 6 year olds, such that when children became ready for school they all were equally prepared or had at least similar preparation for education, which may be likened to the Kendra Vidyalaya system.

- Most children studied only till about class 10th or 12th. Since parents lacked knowledge about education and opportunities after school, they said a counseling center for children in 11th and 12th class could be pretty valuable, as it would help them receive guidance for college and other educational/vocational opportunities after school.

- **Environment for Children:**
  The schools have a mix of students, and the community leaders pointed to the fact that most children were scared of rowdy kids who pulled and shoved them. A large number of drug users and other neighborhood kids harassed the children going to school, which was a source of concern for many parents. Some corrective action with the aid of police was immediately needed.

**Water Supply:**

The water supply received by the basti residents was mentioned as being dirty. Sometimes it also appeared like sewer water which could be possibly due to the fact that the main water line was laid next to the sewer line, complained the community members. An evident lack of awareness among the residents about dirty water and its consequences had led to a large number of people getting sick. Stagnation of water during the rainy season, especially around the MCD School, was a major problem and health hazard for children too. The lanes and by-lanes within the basti were also small and narrow.
Sanitation and Cleanliness:
Availability of quality washrooms and toilets for tourists was negligible, and was a serious concern for women. Some of them also mentioned that foreigners came to the basti with an open mind, to pray and worship, but the basti’s dirt and filth was not easy to ignore once they arrived. The garbage was regularly collected by the local sweeper who was paid a sum of money, but they were unaware where the garbage was finally disposed. But accepting their own faults and shortcomings, a community member said that this was the result of their own negligent attitude. No one cared anymore. Everyone was too busy with their own lives and paid little attention to the larger basti, the condition of which was deteriorating at a fast pace.

Health:
Most community leaders present mentioned an immediate need for an X-Ray facility in the basti. They also wanted a place people could access in case of an emergency (offering services 24X7). Moreover, access of existing services was strained due to the presence of drug peddlers and other people around the health centres.

Issues related to AKF presence:
Many community members mentioned the undesirable apprehension among the residents about AKF and its role in the basti. They mentioned that there were numerous rumors regarding the organization’s position and function. They suggested that AKF must take steps in the direction and hold a meeting involving all members of the community, and clarify their role and purpose in the basti. Moreover, it was a general feeling among basti residents that each household should be covered during surveys. People were not happy with the fact that the surveys were conducted only in select households. The community members also recommended that AKF should look forward to inspire the younger generation, take them into confidence, so that they may receive positive support and co-operation from them, who shall take the basti’s development forward.
Focus Group Discussions with Parents (Mothers)

Date: March 31st, 2010  
Time: 3:30 pm to 5:30pm  
Venue: Resource Center, MCD School  
Number of Mothers present: 12

Parents’ views and concerns regarding what they find as the lacunae and the gaps which need to be immediately filled, concerning their children’s overall healthy development was a must. Moreover, it was essential to spread some awareness about “good practices” for children. About half of the mothers who were present had lived in the basti for more than 10 years; while the other half had been living there for around 5 years.

On being asked why they liked the basti, the mothers’ responses varied from the presence of the dargah and the markaz (centers and headquarters for one of the religious movement’s activities) to the feeling of brotherhood and unity that existed within the community. They also pointed out the benefits of available health facilities along with regular supply of water and electricity.

However, their suggestions on the areas requiring immediate attention were:

- Improving the level of cleanliness and hygiene within the basti.
- Quality of drinking water was poor, and hence needed corrective measures.
- Lack of park or playground and safe play spaces for children around homes.
- A need of a good English medium school in the vicinity

The most recent changes that they had experienced while living in the Basti were:

- Initiation of an English speaking course
- A flood/ Launch of Computer courses
• Entry and opening of various social work organizations, such as Sufi Inayat, HOPE project, AKF

On the other hand, some negative changes were also noticeable:
• The basti had become filthier and dirtier; especially areas such as Nizam Nagar, Alvi Chowk and Newar Babu Hotel were the worst cases.
• Population of the basti was increasing at a high rate. With a larger influx of people from villages, living spaces were becoming smaller, with very little room to live comfortably.
• There were no safety arrangements for children. Rowdy children and drug peddlers could be seen roaming around often, who harassed their children, they said. For the same reason, the parents had to drop and pick up their children from the school.
• They also worried lack of proper sunlight could lead to bones-related problems.

Health Concerns:
The mothers were aware of the following facilities as being available in the basti:
• HOPE Project health facility
• Polyclinic
• Local private doctors

However, the shortcomings associated with these available health facilities in the basti were also shared by the mothers. Although the Polyclinic was easily accessible, mothers complained that patients were mostly provided with medicines which were ineffective. Additionally, they were not happy with the way doctors dealt with them, especially the lady doctor at the Polyclinic. With local doctors, the services were good, but were known to be expensive.

In terms of suggestions for improvement of the health facility, they put forth following points:
• Polyclinic should have an X-Ray facility and provision of beds as well.
• There should be some place in the basti for times of emergency, especially at nights.
• Presence of a homeopathic doctor.
• Moreover, a skin specialist must be there too, since a lot of people complained of skin problems.

*Health facilities for pregnant women:*

The mothers mentioned that in HOPE’s health facility, the doctor visited twice a day and quality of services was fairly good. The women were also handed cards and various tests were conducted. Checkups were done every month, and they were given calcium and iron tablets, at a little charge. For delivery, there was no facility yet available; hence women went to Bhogal MCWC or Safdarjung hospital. At Bhogal’s MCWC, parents were satisfied with the fact that the medicines were free of cost; but due to its location outside the *basti*, they complained of having to spend money in transportation. Surprisingly, a substantial number of women had given births at home. The enumerated reasons for such a practice, as stated by mothers were feeling of shame going to the hospital, carelessness and maltreatment by hospital staff (nurses hitting patients), and lack of cleanliness and hygiene. However, these women were well-aware about the care to be taken during delivery at home and mentioned cleanliness (clean bed, room, clothes, hands and nails and fresh blade and thread) as the foremost points to be kept in mind. Some people also called doctors at home.

*Health facilities for children:*

Regarding *infant care*, mothers knew about the importance of breast milk and mentioned that it should be given until the child is 1.5 to 2 years old. Weaning food commonly used by most mothers was *Cerelac* (brand name). They also gave egg yolk in milk with sugar for treating cough and cold. The doctor advised most of them on dietary practices to be followed. Citrus fruits were important for healthy growth, they added.

For their *pre-school* going children, the mothers had the following opinions to share:

• Earlier, the AWs used to be of good quality, but the condition had significantly deteriorated in the present times. The only function that they performed was distribution of food. The only time any health worker visited them was to administer Polio drops to their children. Other than that, no one ever
came to their house, and nor were they called anywhere regarding any sort of information, they said. They however, felt the need of the AWW to inform the community about immunization and other relevant issues.

- **Immunization:** There were no problems with immunization facilities, but the mothers mentioned that Vitamin A drops were not administered to their children. It was heartening to hear that the mothers were aware of the fact that Vitamin A was good for the eyes.

**Expectations from AKF:**
The mothers said that they expected AKF to work positively in the development of the following key areas.

- **Education of women:** Majority of the mothers never went to school, but they would like to have a facility where they can study now.
- **Quality engagement of housewives:** The women said that they wanted to do something significant to contribute to the household income. They cited some examples of the work they would like to do: sewing, stitching and making sandals for children, for which they required training. AKF could address this concern and provide the required skill training to these women.
- **Creation of a quality playschool for young children.** They also stated that the duration of time spent in preschool should be increased.
- **Coaching classes/ Tuitions for school-going children**
- **Building a play area/park which serves as a safe play space for children**
- **Regular growth monitoring of their children**
- **English classes for community members**
Focus Group Discussion with AWWs (Anganwadi workers)

Date: 31st March 2010  
Time: 1:00 PM – 2:30 PM  
Venue: Resource Center, MCD School, Basti Nizamuddin  
Number of AWWs – 7

**Basic information:** Majority of the AWWs lived outside the basti, with an exception of one. They came from areas as far as Seva Nagar, Maharani Bagh, Okhla, and so on. Each day, before they arrive at the AWC they finish their house work, send their children to school and then start for the AWC.

**Daily Schedule:**

The AWWs stated that they reached the AWC by 9:30 a.m. During pulse polio program, they had to reach earlier (8:00 a.m.), especially while working on some project or if visitors were to come. The helpers (all of them lived in the basti) assisted them and cleaned the AWC. They said that between 9.30 a.m. to 12.30 p.m. activities were conducted for children, and between 12:30 p.m. to 1:00 p.m. they conducted home visits for immunization and pregnant women, and visited one or two homes each day.

A common schedule existed for all the AWCs, but the actual activities that the AWWs did were not fixed and varied largely. The supervisor visited the AWC once a week, observed preschool activities and checked attendance of children and the activities of the AWWs. If she (supervisor) came before 11:30 a.m., then she told the AWWs how to go about improving activities for children.

**Trainings:**

The ICDS had not conducted any training in the last year, they said. The training for new AWWs was reduced from three months to only one month now. Moreover, initial trainings were being conducted very late; for instance, two new AWWs in the basti had received their training after almost two years from joining, which was imparted after they had become permanent. The quality of the training too was
not very useful. The AWWs said that they already knew the activities that were taught during these training. The only new thing they learnt was to prepare resources using waste material.

The refresher course was also reduced from 15 days to one week now, and took place only once every two to three years. The refresher course was only for 3 to 5 days and was not very helpful; AWWs called it “a waste of time.”

The overall level of training had dropped considerably and was not of much help, they said. The AWWs held that they had to get their own materials and make things. They were graded and given positions/ranks on the areas where they showed maximum improvement. On the other hand, the AWWs said they liked the AKF training far better. Even though they knew most of the material, they still found it good.

Monitoring:
The CDPO (Child Development Project Officer) did not visit often, but the Supervisor came once every week. She checked the registers, attendance of children and checked on child immunization. She was considered mainly as a figure of authority. The AWWs did not seem to like the supervisor’s visit and said that what the supervisor did was enough and did not want her to do anything more. What emerged of these supervisor visits was that the AWWs were more alert and arrived on time.

What children gained?
The AWWs stated that only the extremely deprived children/women came to the AWC. Through this, the children learnt to stay away from parents for certain periods of time. They also learnt how to say their name, parents’ name, hold pen and pencil, identify colors and shapes, and became ready for “school admission interview”.

Community interaction:
The AWWs mentioned the beneficiaries from the community which availed their AW’s services comprising of pregnant women, nursing mothers, and children between 1 to 3 years.
They admitted doing negligible interaction with adolescent girls. There were only 2 girls who did not go to any school and thus their names were entered in the AW register. The AWWs did not teach them anything except giving them food. However, they said nursing mothers were provided with diet and given information about immunization, feeding practices and health related issues, by them.

According to the AWWs, only a handful of parents were happy with the services offered at the AWC. Most community members used the AW as an information center, and came to know about the ‘laadli’ scheme and school admissions procedure through the centre, they said. A sizeable number of parents wanted the AWW to teach (3 R’s) to their children. People also wanted the quality of the food to improve.

**Problems faced:**
Many problems bothered the AWWs which they faced while working with the community, some of which were:

- They complained that the community members did not always follow what they told them.
- Another issue that troubled them was the difficulty they faced while advising on birth control, since a majority of them belonged to another religious faith. Sometimes, at the time of administration of polio drops, religious issues cropped up with a few ignorant people preventing them from giving drops to their children.
- Their salary was both low and handed over late. The monthly income of the AWW was Rs. 2,500, and to make things worse, their salaries were delayed by months. Due to such delays, the AWWs were not motivated to work hard and they said that they would rather focus on their families than on a job that does not even pay for months.
- Travelling long distances within the basti as well as while reaching it.
- Their own family members were unhappy with the little time that they spent on them.
- Lack of enough space to sit or store anything in the AWCs.
However, the discussion ended at a positive note, when they were asked to rate themselves on their work performance, all the AWWs replied in the affirmative, stating themselves as being happy with their work!
To understand whether the developmental needs of children living in the basti were attended to, it was essential to thoroughly examine the educational facilities available within the basti. Technically, educational facility available for children between the ages of 3 to 6 years is called as Early Childhood Education (ECE). Pre-school activities in ECE centres strengthen the child’s capabilities and help him/her to get ready for primary school education, develop required skills to perform better for school entry and lead to regular attendance in school. It aims at improving school enrollment and school retention in rural areas, relieve the older sibling mostly girls from the burden of child care and enable her to attend school and to prepare the children to adjust to formal school going.

The Integrated Child Development Scheme (ICDS), has one of its main objective to cater to the needs of the development of children in the age group of 3-6 years. Pre-school education is one of the components of ICDS, which aims at ensuring holistic development of the children and to provide learning environment to children, which is conducive for promotion of social, emotional, cognitive and aesthetic development of the child. The services are delivered by local community volunteer at a centre called Anganwadi Centre (AWC). In the basti there are seven AWCs, two private nursery schools, and one nursery class in MCD School. To assess the quality of PSE services a modified and adapted version of well known tool- Early Childhood Environment Rating Scale (ECERS) was used. It was an observation guide and consisted of three parts:

**Part 1** was an observation recording sheet in which the actual activities that were conducted in the classroom were described at a 15 minute interval.

**Part 2** focused on the physical conditions in and around the Centre.

**Part 3** focused more on the quality of teacher child interaction, with specific reference to developmental priorities.

The information sought in this tool was gathered mainly by observation and not by asking questions, unless very necessary. Scoring was based on actual observation of the centre. Score used in the rating scale was 0, 1, and 2 – in all cases scored as:

- **0** indicated that there was nothing available for the criterion,
• 1 indicated that there was something available for the criterion but not up to mark and
• 2 indicated that good facility was available for the criterion.

An in-house orientation and training was arranged for the research team to administer ECERS in a standard manner. Thereafter, ECERS was administered in all AWCs (7 in number) and a nursery school located in Nizamuddin basti area. The basti also had two more private preschools, which were approached by the research team to seek permission for observation, but access was denied in both places.

The highlights of the findings that emerged through the observation of 7 AWCs and the Nursery class of MCD school through ECERS has been summarized below:
Part 1: ACTIVITY OBSERVATION

Observations of the AWCs revealed a surprisingly similar and common pattern as far as the conduct of activities was concerned. Most AWCs did not begin functioning before 10 a.m., although the designated time is from 9:00 a.m. to 12:00 noon. The AWWs trickled in by 11 a.m., until then the helper ran the show. The usual routine comprised of making children sit in rows or line and distribution of food. Activities to develop cognitive skills, creative skills, social development and gross and fine motor development were missing. Authoritarian control was exercised to keep the children quiet. Sometimes, the practice of singing a few rhymes again and again was observed in most AWCs. It was only at one anganwadi centre that children were absorbed in drawing activity with much excitement.

At the MCD school in the basti, new session had commenced at the Nursery class barely a fortnight before the observation. Though proper activities had not begun there, yet children were found to be sitting in small groups engaged in various activities. The nursery teacher had provided age appropriate activities to the children. A few children below 4 years who were not formally admitted in the Nursery section were also allowed by the teacher to sit in the class. On the other hand, some children who already knew how to read and write were given work by the teacher according to their level of understanding. She also appreciated and encouraged the children while they did their work.

Part 2 – INFRASTRUCTURE

2.1 Physical Setting: The key conditions that were observed were availability of drinking water, classroom space, sitting space for children, storage space for teachers’ material, toilets, and water in toilets. Along with this, observations were also made to ascertain hazards around the centre/preschool, clean/unclean surroundings, and safety of the building and level of noise pollution.

Table 1 clearly indicates the dismal state of physical infrastructure in the AWC as compared to the MCD School. Physical infrastructure facility in the AWCs was dismal, as it had shortage of space for children to sit properly, leave aside the availability of a toilet. Sitting mats for children were torn and in most cases unclean; and, in one case was full of bugs. Hazardous surroundings could be observed around such as electric heaters (with cooking going on inside the room itself) which were hardly 4-5 feet away from the seated children. Safety of the building too was questionable, with houses perched one on another, and noticeable dilapidated walls and ceilings. In almost all AWs, the AWW had limited or no storage spaces, to store registers, toys and play materials.
Table 1: Physical Infrastructure

<table>
<thead>
<tr>
<th></th>
<th>Average Rating of 7 AWCs</th>
<th>Nursery, MCD school</th>
<th>In case rating is less than 0.5</th>
<th>In case rating is between 0.6 to 1.5</th>
<th>In case rating is above 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilet Availability and Use</td>
<td>0.0</td>
<td>2</td>
<td>Toilet not available</td>
<td>Available but not used by more than half</td>
<td>Available and used by more than half</td>
</tr>
<tr>
<td>Availability of Water in Toilet</td>
<td>NA</td>
<td>2</td>
<td>Not available</td>
<td>Only for washing but not for flushing</td>
<td>Available for washing as well as flushing</td>
</tr>
<tr>
<td>Availability of Water for Drinking</td>
<td>0.3</td>
<td>2</td>
<td>Drinking water not available</td>
<td>Drinking water available but not covered or clean</td>
<td>Drinking water available and is covered and clean</td>
</tr>
<tr>
<td>Hazards around the centre or preschool</td>
<td>0.3</td>
<td>2</td>
<td>More than 1 hazardous condition within 10 m. of AW</td>
<td>1 or more hazardous condition beyond 10 m. of AW</td>
<td>No hazardous condition &amp; centre has protective barrier</td>
</tr>
<tr>
<td>Clean/ Unclean surroundings</td>
<td>0.0</td>
<td>2</td>
<td>More than 1 unclean condition within 10 m. of ECE centre</td>
<td>More than 1 unclean condition beyond 10 m. of ECE centre</td>
<td>No unclean condition and has protective barrier</td>
</tr>
<tr>
<td>Safety level of Building</td>
<td>1.0</td>
<td>2</td>
<td>3 or more unsafe condition in ECE centre</td>
<td>2 unsafe condition in ECE centre</td>
<td>1 or none unsafe condition in ECE centre</td>
</tr>
<tr>
<td>Noise Pollution</td>
<td>1.0</td>
<td>2</td>
<td>2/3rd time outside noise prevent hearing of conversation</td>
<td>1/3rd time outside noise prevent hearing of conversation</td>
<td>No disturbance</td>
</tr>
<tr>
<td>Classroom Space</td>
<td>0.3</td>
<td>2</td>
<td>No space to sit comfortably</td>
<td>Can sit comfortably but or do activities cannot move</td>
<td>Can sit comfortably - can move &amp; do activities</td>
</tr>
<tr>
<td>Storage for Teacher</td>
<td>0.9</td>
<td>1</td>
<td>No storage space for teacher</td>
<td>Inadequate storage space</td>
<td>Adequate storage space</td>
</tr>
<tr>
<td>Sitting facility for children</td>
<td>1.1</td>
<td>2</td>
<td>Children sitting on bare floor</td>
<td>Children sitting on unclean/torn mats</td>
<td>Children sitting on clean mats or chairs</td>
</tr>
</tbody>
</table>

2.2 Learning/Play Aids, Programme Schedule, and Class Arrangement: Observation was made to assess space and equipment for outdoor play/activities, varieties of equipment/materials for indoor learning/play activities and its use, along with class arrangement, weekly/daily schedule, class display, and children’s produced display.

The sub-categories for this part of the observation again showed that none of the above were available in the AWCs, as indicated in Table 2. Now the question that arises, is it justified to rate them for the above sub-categories when space was a major constraint, and to add to it AWW were not found to be particularly dedicated in imparting pre-school education which is their primary responsibility. Whatever little pre-school education was imparted was done by the helper, who herself was not adequately trained to do it. The nursery class in MCD School, on the contrary, had learning aids and other resource material. However, since the session had just begun there, the observations based on the current situation might have improved later and given a different picture altogether if it would have been observed later.
Table 2: Learning/Play aids, Programme Schedule and Classroom arrangement

<table>
<thead>
<tr>
<th>Space and Equipment for Outdoor Play/Activities</th>
<th>Average Rating of 7 AWCs</th>
<th>Nursery, MCD school</th>
<th>In case rating is less than 0.5</th>
<th>In case rating is between 0.6 to 1.5</th>
<th>In case rating is above 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space available</td>
<td>0</td>
<td>2</td>
<td>No space or equipment available</td>
<td>Space available but limited or no equipments</td>
<td>Space available with equipments</td>
</tr>
<tr>
<td>Varieties of equipment/materials for Indoor Learning/Play Activities</td>
<td>0.14</td>
<td>1</td>
<td>No indoor play material available</td>
<td>Some indoor play material available</td>
<td>Manipulative &amp; Audio visual play material available</td>
</tr>
<tr>
<td>Use of Indoor Learning materials in the class</td>
<td>0.29</td>
<td>1</td>
<td>No indoor play material available</td>
<td>Indoor play material available but less than 1/2 children use it</td>
<td>Indoor play material available &amp; more than 1/2 children use it</td>
</tr>
<tr>
<td>Class Arrangement</td>
<td>0.14</td>
<td>1</td>
<td>No arrangement</td>
<td>Material arranged but no facilitation of activities</td>
<td>Material arranged with specific activity corners</td>
</tr>
<tr>
<td>Weekly/Daily Schedule</td>
<td>0.14</td>
<td>1</td>
<td>No pre-planned schedule displayed or followed</td>
<td>Pre-planned schedule displayed but not followed</td>
<td>Pre-planned schedule displayed and followed</td>
</tr>
<tr>
<td>Class display</td>
<td>0.29</td>
<td>1</td>
<td>No display or displayed material not familiar to children</td>
<td>Displayed material is familiar but out of reach of children</td>
<td>Displayed material is interesting and within reach of children</td>
</tr>
<tr>
<td>Child produced display</td>
<td>0.14</td>
<td>0</td>
<td>No display of children's work</td>
<td>Displayed children's work is more than a month old</td>
<td>Displayed children's work is changed monthly</td>
</tr>
</tbody>
</table>

Part 3  QUALITY OF TEACHER CHILD INTERACTION

3.1 Personal Care, Hygiene and habit formation: Observation was made to assess whether children were aware and followed good hygiene practices by examining personal grooming, and associated details. Children were observed during meal time to see whether they could eat independently.

3.2 Language and Reasoning Experiences: Assessment was made to understand whether children were provided listening and speaking opportunities, if children could understand and express in language used by the teacher, and whether language, cognitive and other developmental activities were performed.

3.3 Fine and Gross Motor Activities: Observation of activities performed by children for gross and fine motor development and ascertaining teachers’ supervision and interaction during activities.

3.4 Creative Activities: Observation of children’s participation and teacher’s guidance for activities to music/songs, individual and group recitation along with the activities of music and movement
3.5 Social Development: Assessment was made to observe whether teacher and children greeted each other on arrival and departure, if children cooperated and shared with each other, and positive social interaction between children and with teacher.

The above mentioned aspect of quality of teacher-child interaction is crucial in determining the success of any preschool program. Tables 3, 4, 5, 6 and 7 provide a detailed picture of the performance of the ECE centres. The rating on each of the subscales was disappointingly found to be very poor in the AWCs as compared to the MCD nursery class. There was a significant constraint of indoor space, and out-of-doors activities were worse off with no outdoor space available. That also explains negligible active promotion of gross motor activities and creative activities. However, a complete lack of fine motor and social development activities is unjustifiable. The AWWs receive regular trainings to conduct cognitive, language development and reasoning activities with children, but this was pushed to the margins in their daily schedule as the most important job according to them was filling the numerous registers they had!

The helpers who were inadequately trained carried out ‘some’ activities in ways they deemed as appropriate. Therefore, ‘pre-school education’ in AW began sluggishly around 10 a.m. By the time the clock struck 11:00, the bored children, AWW as well as the helper eagerly waited for the clock to show 11.30, so that food could be distributed to the children- the only duty that was effectively completed. About 25 percent of the children (more than the class strength an hour earlier) appeared directly to the AWC at the assigned time with their bowls or plastic bags to collect the meal that was distributed. Children carried the food home to eat, and no one consumed it there.

The observation of AWCs clearly showed that it functioned primarily as a food dispersal centre where children, AWW and helper just whiled away time doing ‘some’ thing, till the canister of food arrived and the clock struck 11.30.

<table>
<thead>
<tr>
<th>Table 3: Personal Care, Hygiene &amp; Habit formation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Rating of 7 AWCs</strong></td>
</tr>
<tr>
<td>Hand washing</td>
</tr>
<tr>
<td>Personal Grooming</td>
</tr>
<tr>
<td>Independent toileting</td>
</tr>
<tr>
<td>Meal/ Snack Time</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Meal time children are not allowed to talk</td>
</tr>
<tr>
<td>Eating independently</td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>*</td>
</tr>
<tr>
<td>*</td>
</tr>
<tr>
<td>*</td>
</tr>
</tbody>
</table>

* Meals were collected and taken home at 11.30 a.m. by children, so there was no opportunity for observation.

### Table 4: Language and Reasoning Experience

<table>
<thead>
<tr>
<th></th>
<th>Average Rating of 7 AWCs</th>
<th>Nursery, MCD school</th>
<th>In case rating is less than 0.5</th>
<th>In case rating is between 0.6 to 1.5</th>
<th>In case rating is above 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Language– Children Understanding language</td>
<td>1.3</td>
<td>2</td>
<td>&lt; 1/3rd children understand the language of the caregiver</td>
<td>About 1/2 of children understand the language of the caregiver</td>
<td>&gt; 1/2 of children understand the language of the caregiver</td>
</tr>
<tr>
<td>Listening opportunities</td>
<td>0.1</td>
<td>2</td>
<td>No opportunity to listen to language through planned activity</td>
<td>Have opportunity to listen to language through at least 1 planned activity</td>
<td>Have opportunity to listen to language through &gt; 1 planned activity</td>
</tr>
<tr>
<td>Expressive Language – Speaking opportunities</td>
<td></td>
<td></td>
<td>Few or no opportunity to speak in ECE centre</td>
<td>Has opportunity to speak in ECE centre but through single word or short sentence</td>
<td>Encouraged to speak in ECE centre on their own &amp; share queries, ideas etc.</td>
</tr>
<tr>
<td>Teacher’s use of Language</td>
<td>0.3</td>
<td>2</td>
<td>Uses language to only control, discipline or instruct</td>
<td>Caregiver sometimes talks to children</td>
<td>Caregiver uses language to help extend children’s thinking - children ask more of why, how &amp; what if</td>
</tr>
<tr>
<td>Activities for language development</td>
<td>0.4</td>
<td>1</td>
<td>No specific activities for listening and speaking</td>
<td>Language activities are conducted but less than 1/2 of children are involved</td>
<td>Language activities are conducted with material involving all children</td>
</tr>
<tr>
<td>Classroom environment</td>
<td>1.14</td>
<td>2</td>
<td>Children not allowed to talk with peers</td>
<td>Children are allowed to talk with peers but not encouraged</td>
<td>Children are allowed and encouraged to talk with peers</td>
</tr>
<tr>
<td>Activities materials for concept formation</td>
<td>0.0</td>
<td>1</td>
<td>No activities or material available</td>
<td>Activities and material used but by few children</td>
<td>Activities and material used but by all children</td>
</tr>
<tr>
<td>Activities, materials for developing cognitive skills</td>
<td>0.0</td>
<td>1</td>
<td>No activities &amp; material for seriation, classification, reasoning, pattern making, sequencing etc.</td>
<td>Activities and material used only to demonstrate or used by few children</td>
<td>Activities and material used to demonstrate and used by all children</td>
</tr>
<tr>
<td>Activities for reading, writing and number</td>
<td>0.0</td>
<td>0</td>
<td>No readiness activities such as phonetics, sound visual</td>
<td>Few 4+ yrs. children involved in readiness activities</td>
<td>All 4+ yrs. children involved in readiness activities</td>
</tr>
</tbody>
</table>
readiness

| Activities for Reading, Writing and Number | NA | 2 | Teaching of formal reading, writing and number work | Teaching of formal reading, writing and number work with help of activities | No formal reading, writing and number work, only activities conducted |

# Children mostly talk amongst themselves - no guided conversation

Table 5: Fine and Gross Motor Activities

<table>
<thead>
<tr>
<th>Children’s participation in Outdoor Activities for Gross Motor Development</th>
<th>Average Rating of 7 AWCs</th>
<th>Nursery, MCD school</th>
<th>In case rating is less than 0.5</th>
<th>In case rating is between 0.6 to 1.5</th>
<th>In case rating is above 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No outdoor play</td>
<td>0</td>
<td>1</td>
<td>Conducts outdoor play but less than 1/2 of the children participate</td>
<td>Conducts outdoor play most/all of the children participate</td>
<td></td>
</tr>
<tr>
<td>No activities of gross motor development like jumping, running, hopping etc. done</td>
<td>0</td>
<td>0</td>
<td>Conducts activities but less than 1/2 of the children participate</td>
<td>Conducts activities with most/all of the children participate</td>
<td></td>
</tr>
<tr>
<td>No free outdoor play</td>
<td>NA</td>
<td>0</td>
<td>Free &amp; guided outdoor play</td>
<td>Conducts at least 2 activities involving most/all children</td>
<td></td>
</tr>
<tr>
<td>No activities like threading, tracing, cutting, drawing etc. done</td>
<td>0</td>
<td>2</td>
<td>&lt;1/2 of the children are involved in 1 or 2 activities</td>
<td>Conducts activities with most or all children</td>
<td></td>
</tr>
<tr>
<td>Does not provide activities with material like beads, straw, pebbles, dolls, crayons etc</td>
<td>0.71</td>
<td>1</td>
<td>Provides opportunity of free play without supervision</td>
<td>Supervises and interacts in doing activities with material</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Creative Activities

<table>
<thead>
<tr>
<th>Children’s Participation</th>
<th>Average Rating of 7 AWCs</th>
<th>Nursery, MCD school</th>
<th>In case rating is below 1</th>
<th>In case rating is between 1- 2</th>
<th>In case rating is between 2- 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No art and craft activity</td>
<td>0</td>
<td>2</td>
<td>Conducts activities but less than 1/2 of the children participate</td>
<td>Conducts activities with most/all of the children participate</td>
<td></td>
</tr>
<tr>
<td>Directs children to draw exactly</td>
<td>0.14</td>
<td>2</td>
<td>Allows to draw without interaction or guidance</td>
<td>Encourages to draw and appreciates their efforts</td>
<td></td>
</tr>
<tr>
<td>No opportunity to sing songs or rhymes</td>
<td>0.86</td>
<td>2</td>
<td>Recite rhymes/songs without expressions</td>
<td>Recite rhymes/songs with expressions</td>
<td></td>
</tr>
<tr>
<td>No opportunity to sing songs or rhymes</td>
<td>0.86</td>
<td>2</td>
<td>Provides opportunity but less than 1/2 of the children participate</td>
<td>Provides opportunity and most/all children participate</td>
<td></td>
</tr>
</tbody>
</table>
The situation in MCD School’s nursery section was contrastingly remarkable in comparison to the AWCs, on all counts—be it the infrastructure or the activities or the mid day meal which was served to and eaten by the children in a clean manner! The teacher herself had clear concepts, and had prepared materials on her own, which she stated were to be used later. Small group activities were given to children according to their developmental level. The children too seemed to be enjoying themselves thoroughly during the classes. While reciting poems with the teacher, they did so with expression and good voice modulation. However, the teacher was disappointed due to the fact that a furniture-filled classroom made
it difficult or her to conduct gross motor activities with the children. The teacher showed previous year’s artwork by children as part of fine motor activity, and added that she had plans to begin fine motor activities at a later stage (of the new session). There was no music and movement material available with the teacher then. Since the batch of children who had joined the nursery class was fresh, social skills were yet to form and develop.
Interviews were conducted with the school teachers teaching Grade 1 and 2 in the MCD school, to solicit their views on how they viewed their capacities and are their broad areas of concern. The findings of the interview have been mentioned under the following themes:

1. **Qualification, teaching experience and pre-service training:**

   The MCD School in the **basti** that we visited had four teachers who teach Grade 1 & 2; out of these the vice-principal had more than 20 years of experience (with a B.A. and B.Ed.), and the other skilled teacher had experience of more than 10 years while the remaining two had joined the school just six months ago (with two years’ diploma course from DIET after completing Senior Secondary). It was heartening to observe that one of the teachers had completed her M. Phil. in Urdu and had done JBT to teach primary school children.

2. **In-service training**

   2.1 *Ideal situation:* Refresher training should be conducted for duration of 20 days per year as per SSA guidelines.

   2.2 *Facts:* MCD school teachers were regularly trained by a consultant (head of Shri Ram Foundation), who conducted half day workshops every week for the teachers and guided them to develop teaching-learning material, oriented them about activity based teaching and strengthened their teaching skills to help children who could not easily cope with studies. The teachers also prepared their weekly lesson plan under the guidance of the consultant.

   2.3 *Issue/s:* It seemed that though in-service training via workshops had helped the teachers to draw theme based weekly plan, but they felt that this effort was only ‘somewhat useful’. Another issue that emerged plainly was that one of the teachers was unclear whether it was a workshop or training that was being imparted to them, so had not reported these workshops as any training. Two of the teachers reported training for activity-based teaching while the other two said that they were not trained – what was the reason for this discrepancy?

   2.4 *Intervention:* Observation of classroom transaction and pedagogical practices should be done on a regular basis so that flaws can be corrected immediately. There is a need to understand why
all the teachers felt that the training imparted to them had been just somewhat useful. Teachers need to be trained to teach special children and make the classroom as an inclusive setup.

3. Classroom Transaction:

3.1 Ideal situation: Teacher should:
- be able to give equal attention to all students most of the time
- teach students using activity-based approach
- be able to address and teach special children in the class along with other children

3.2 Facts: The vice principal reported that she always gave full attention to all students, but also added ‘I give equal attention but whether kids take it or not is up to them’. The relatively new teachers reported that most of the time they were able to give attention to all, but only with lot of efforts. Activity-based teaching had been only somewhat useful for the teachers. It was disheartening to know that there was no special child enrolled in Grades 1 & 2, although the household survey showed the presence of special children in the basti.

3.3 Issue/s: The School Achievement test conducted on MCD school children showed through children’s performance that there was a need to improve classroom transaction considerably. It was a known fact that teachers’ indifferent approach hampered teaching-learning in the class. There was no training given to these teachers to include special children. In fact, even the complete makeover of the school building had not built ramps or taken needs of special children into consideration.

3.4 Intervention: There was a need to improve classroom transaction by including innovative teaching practices. Also, efforts should be made to admit special children in school and the teachers should be sensitized and trained to teach them along with other students.

4. Student Absenteeism

3.1 Ideal situation: Students should have regular attendance.

3.2 Facts: Teachers reported 50 per cent attendance during regular school days, however all students turned up for exams. One of the teachers described in detail the measures taken to regulate absenteeism was to make an ayah visit child’s home if the child is absent even after prior notice being sent at home; followed by a teacher visit after 21 days to know the reasons of
absenteeism. After that if the child did not attend school for 45 days then his/her name was struck off from the school records. Strangely, the other teachers were perhaps unaware of this measure and reported no action was taken in case of long absenteeism till the academic year ends, after which the child was not listed in new academic year’s school records.

3.3 Issue/s: The issue of student absenteeism was not taken seriously in practice.

3.4 Intervention: There is a need to analyze the reasons of student absenteeism, and some workable plan should be drawn in consultation with teachers and parents to tackle the issue.

5. Mid Day Meal and Health Checkup facility for students

5.1 Ideal situation: Nutritious and delicious meal for the children and regular health checkups.

5.2 Facts: All teachers appreciated the Mid Day Meal provided to the children as being of very good quality. The vice principal reported monthly health checkups, whereas other teachers mentioned observation health checkup was done once in 2-3 months.

5.3 Issue/s: There is a need to improve health checkup facilities.

5.4 Intervention: Health cards facility should be issued to all children.

6. School supervision vis-à-vis teachers’ perception

6.1 Ideal situation: There should be regular school supervision, which should not impede classroom transactions and the input of these visits should help teacher to further improve her skills.

6.2 Facts: The Vice Principal claimed regular check up by the supervisor had resulted in good outcomes and were done without disturbance to any school activity. However, other teachers had a different story to tell. They reported erratic visits (at times one visit in 2-3 months or otherwise twice in a month), which were ‘somewhat’ beneficial but caused some disturbance and inconvenience in ongoing teaching process.

6.3 Issue/s: The perceptions of school administrator and teachers differ in case of school supervision.

6.4 Intervention: There is a need to understand the main aim of the visit and how it can be done without affecting the school activity.
7. School and Community/parent interactions

7.1 Ideal situation: There should be close interaction between school and parents/community for betterment of the students and school activities.

7.2 Facts: There was no regular interaction forum or system for parents/community to be in touch with school. Lack of knowledge among parents about their wards may be a possible explanation to the non-committal attitude of the teachers. On a positive note, the vice principal mentioned about the satisfaction among parents due to improved infrastructure and new building, the same was also backed by parents during the FGD.

7.3 Issue/s: Two-way interaction was found to be missing.

7.4 Intervention: Meetings may be planned with parents/community on regular basis. These meetings could have some agenda, and issues related to any of the children’s problems could be taken up, with an approach to reach a solution.
The Maternal and Child Welfare Center was located in Bhogal. The centre was run by the Municipal Corporation of Delhi (MCD), and catered to the primary health care needs of the population in the Nizamuddin area including the basti. The objective of reviewing the center was to assess the available services at the MCD Maternal and Child Welfare Centre (MCWC), Bhogal. An observation checklist for review of the center was used; interviews were administered for health staff, along with general observations of the investigator.

The information gained through the above-mentioned tools has been discussed further in greater detail:

**a) Functioning:**

The health center was found to be operational for six days in a week. The timings of the center varied from 8:00 a.m. to 2:00 p.m. in summers to 9:00 a.m. to 3:00 p.m. during winters.

**b) Staff:**

The status of the posts sanctioned by MCD and the current status of available staff was observed. The state in the centre, as on 8th April was as follows:

<table>
<thead>
<tr>
<th>Staff</th>
<th>Post Sanctioned by MCD</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Posts in Position</td>
<td>Post Vacant</td>
</tr>
<tr>
<td>Medical Officer (Female)</td>
<td>3</td>
<td>Nil</td>
</tr>
<tr>
<td>Lady Health Visitor (LHV)</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Auxiliary Nurse Midwife (ANM)</td>
<td>9</td>
<td>Nil</td>
</tr>
<tr>
<td>Lab technician</td>
<td>1</td>
<td>Nil</td>
</tr>
</tbody>
</table>

One Medical Officer was available full time, i.e. six days a week; whereas, the other two medical officers were accessible for only 3 days in a week. She also expressed the immediate need of having a guard at the center. It was relevant to ensure the security of the center and the equipments placed within.
c) **Infrastructure:**

The building of the center was provided by the Government. It was situated on the ground floor, and was spacious and clean. Presently, it has a room for consultation, testing lab, labour room with delivery table, pharmacy, waiting room and six toilets. Drinking water was stored in an earthen pot.

d) **Services**

The services provided by the health center were aimed at improving the mother’s and child’s health status. The services offered were as follows:

- Immunization of under-five children
- Antenatal care
- Delivery services
- Postnatal care
- Family planning services
- Outreach activities
- Laboratory

For efficient utilization and accessibility by the people, these services were organized as follows:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach activities (Field visit)</td>
<td>Monday and Thursday</td>
</tr>
<tr>
<td>Antenatal clinic</td>
<td>Tuesday and Thursday</td>
</tr>
<tr>
<td>Immunization</td>
<td>Wednesday and Friday</td>
</tr>
<tr>
<td>Family Planning services</td>
<td>Daily (Monday to Saturday)</td>
</tr>
</tbody>
</table>

i) **Immunization Services:**

Routine immunization services were provided to under-five children living in and around Bhogal, including Nizamuddin basti. Immunization sessions were conducted twice a week, on Wednesdays and Fridays. The influx of children was around 560-720 children per month (60-90 per session). Vaccines provided include BCG, DPT, OPV, Measles, Hepatitis B, MMR and against Typhoid.

**Schedule of Immunization:**

**BCG & OPV:** It was given twice a month, usually on the first and third Wednesday. Three doses each of DPT and OPV was given as per the usual schedule at the age of 6, 10 and 14 weeks. The first dose was given at the sixth week. However, in case of babies delivered in the MCWC, both BCG and OPV 0 doses were given at birth, before discharging the mother and newborn from the centre. Any child who missed a vaccine dose was contacted during home visits.
**Hepatitis B:** Three doses of Hepatitis B were given. This vaccine was either given at birth, or along with three doses of DPT which was given at an interval of 6 to 8 weeks beginning from 2 months of age.

**Measles vaccine:** It was administered at nine months, and MMR was given six months after the measles vaccine.

**Typhoid vaccine:** It was given to children above two years of age.

Records of all immunizations were maintained on the immunization cards provided to the mothers. Auto-disabled syringes were used for vaccination. A regular supply of vaccines was ensured from the stores at *Gulabi Bagh*. One Ice-Lined Refrigerator (ILR) and one deep freezer were made available for maintenance of cold chain for vaccines. However, supply of oral vitamin A solution was one concern expressed by the health staff as it was not supplied regularly, and therefore could not be distributed further.

ii) **Ante Natal Care (ANC) Services:**

The antenatal clinic functioned twice a week, on Tuesdays and Thursdays. About 50-60 patients attended each clinic (1200 per month) which included first-time visitors and re-visitors. A high influx from the *basti* was reported for ANC.

**Procedure:**

**Pregnancy test:** Urine pregnancy test was available at the center and women could confirm their pregnancy by this test.

**Registration for ANC:** Pregnant mothers were usually registered during their third-fourth month of gestation. Thereafter, they were advised for regular checkups at the MCWC. Antenatal cards are made, and given to the mothers which have to be maintained until delivery.

**Antenatal Checkups:** They were conducted by the Medical Officer. During ANC, weight and blood pressure were recorded routinely for all pregnant women. Injections of tetanus toxoid were administered as per recommended schedule, i.e., during second and third trimester.

Ultrasound was usually advised during the third trimester, especially for those women who were likely to come to the MCWC for delivery, in order to detect any high risk factor. Ultrasound facility was not available at the MCWC and had to be done from outside. High risk pregnancies were not tackled in the center and they were referred to Safdarjang Hospital/ AIIMS / IPP-VIII Centre at Lajpat Nagar. Three to four high risk pregnancies were identified every month.

**Supplements:** Iron and folic acid tablets were given to all pregnant women (100 tablets to each woman). Calcium tablets, if available, were also given.
Lab Test for Pregnant Women: Investigations included urine pregnancy test, urine examination for albumin and sugar, and blood hemoglobin.

The health staff informed that there was no transport facility available for patients. However, there was a possibility of provision of an ambulance soon.

iii) Delivery Services:
An average of 15-20 deliveries were handled each month at the MCWC by the medical officers/doctors, trained ANMs and LHV's. The ANMs worked on shift duties and resided on-campus, hence were available round the clock. On the other hand, LHV's were available on call. Hence, deliveries could be handled during night-time too.

Who can avail? Women who had previously delivered at least one child, and who did not have any complication in the current antenatal period, were suitable for delivery at the MCWC. It was clear that primary deliveries were not handled at the center, since the probability of risks/caesarean deliveries were higher. All high-risk pregnancies and those delivering for the first time were referred to Safdarjung Hospital / AIIMS / IPP-VIII Centre at Lajpat Nagar.

Services Available: At the MCWC, 12-bedded ward was accessible for the mothers. The facility of incubator was also made available to keep the newborns warm. Mothers pregnant with their second child were provided remuneration of Rs. 600/- in order to encourage institutional deliveries. After delivery, the women were kept for three days in the MCWC under observation, and then discharged.

Problems Faced: Despite high influx of mothers during days when antenatal clinics were held (1200 per month), only 15-20 deliveries took place in a month. The health staff blamed the dais and parents/in-laws of pregnant women for allowing home deliveries which not only were unhealthy but also extremely risky for the health of mother as well as newborn. They expressed a dire need of strengthening the outreach activities to motivate mothers to favor institutional deliveries.

iv) Post Natal Care:
The ANMs visited the women residing in the catchment area at least once during the post-partum period. During this visit, they checked for any post-partum complications and advised on breastfeeding and family planning.
v) Family Planning:
Family planning services were available at the MCWC throughout the week. Oral contraceptive pills and condoms were dispensed at the centre, but women were known to barely consume them. A general trend was for women to come for family planning after 3-4 deliveries. Copper-T was the most preferred method among the predominant Muslim population residing in the basti. About 15-20 women visited per month and the device was inserted by the LHV / ANM. Outreach activities were effective for family planning, the health staff mentioned. The family planning worker went everyday to motivate and mobilize people to opt for family planning. Tubectomy was not available at the center. Thus, women who opted for tubal ligation were escorted with the ANMs to Safdarjung Hospital or Kasturba Hospital. Women desirous of medical termination of pregnancy (MTP) were also referred to the same hospitals. Marital counselling was also offered at the center.

vi) Outreach Activities:
The outreach activities of the MCWC included the following:

*Home Visits by ANMs:* The MCWC served a population of 60,000-70,000, including residents of the basti. The ANMs had a fixed schedule of home visits on Mondays and Thursdays. During these visits, special emphasis was laid on pregnant women and children under five. However, effective results were still a distant vision as there was no collaboration between the ANMs and the anganwadi workers in the basti.

*Mobile Van Services:* For the past one year, outreach services were being provided to the people in Nizamuddin Basti through a mobile van, which visited every Wednesday. Immunization services were provided every week to an average of 20-30 eligible children and pregnant women. Iron-Folate tablets and medicines for common ailments were also distributed.

*Visits to the Sufi Centre:* The ANMs were available at the Sufi centre in Nizamuddin Basti once a month for care of under-five children and pregnant women, with special focus on immunization. The day of this monthly visit was not fixed. However, less number of people accessed the services offered here, ever since the commencement of the weekly visit of the mobile van to the area.

vii) Laboratory
A laboratory technician visited the MCWC twice a week, on Fridays and Saturdays. Another laboratory technician was also present at the center, under the scheme of NRHM.
Investigations/ Tests available: Hemoglobin test, blood sugar, blood group test, test for thalassemia, HIV, urine test for measuring protein, sugar and pregnancy. The lab staff expressed the need of VDRL (Venereal Disease Research Laboratory) kits to test for infections.

viii) Other Services: ICTC (Integrated Counseling and Testing Center)
ICTC had been since two years. The facilities provided under ICTC were conducting HIV diagnostic tests, counseling people and linking them with other HIV prevention, care and treatment services. As informed by the counselor, HIV testing was voluntary and could not be made mandatory. Three patients had been detected positive in the past two years, one of them being from the basti.
During counselling, parents were informed about issues such as HIV and reproductive health. The people who came for ICTC were mostly ANC mothers, husbands of ANC mothers, cases from DOTS center and voluntary patients. The positive cases came for regular counseling and were advised for institutional deliveries.

Way forward:
1. The laboratory staff of MCWC mentioned about unavailability of VDRL kit which delayed patients’ tests against various infections.
2. There was an urgent of specialists at the centre, especially a pediatrician.
3. The center could only provide for the basic care of newborns. However, there was a lack in specialized neonatal care, which should be immediately addressed.
4. Another issue was the space constraint. The ICTC and testing laboratory were housed within the same room. There was hence, a need to expand the center.

The services provided at the MCWC, Bhogal need to be optimally utilized by the residents of the basti. Strong linkages need to be established between the ANMs of the MCWC and AWWs and AKF outreach staff of the basti. This networking is likely to result in improved immunization and coverage of under-five children, care of the antenatal women and promotion of institutional deliveries in the Nizamuddin basti area.
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A report by

Centre for Early Childhood Education and Development (CECED)
Ambedkar University, Delhi

314, Integrated Institute of Technology Campus, Sector 9, Dwarka, New Delhi.
Tel.: 011-25074878, Email: ceced.aud@gmail.com