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<b>Name of document</b>	<b>BASELINE STUDY OF EARLY CHILDHOOD CARE AND DEVELOPMENT PROJECT IN CHATTISGARH</b>
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<b>Brief abstract (description of project)</b>	<p>The ECDE project implemented in Chattisgarh focuses towards strengthening five domains – Health, Nutrition, Care &amp; Development, Rights &amp; Protection and Economic strengthening and works with 5 levels – Child, Anganwadi Centre, Caregiver, Community and National. The main objective of the project are:</p> <p>To strengthen status of ECCD component of ICDS with a view to ensure health and psycho – social well-being of children less than 6 years of age.</p>
<b>Comment</b>	

**BASELINE STUDY OF EARLY CHILDHOOD CARE AND  
DEVELOPMENT PROJECT IN CHATTISGARH**

**Draft Report**

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**April, 2012**

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**3 CHAPTER – I**  
**4 INTRODUCTION**

This chapter gives the background of the “Early Childhood Care and Development Project” (ECCD), implemented by CARE in Chattisgarh. It covers objectives of the Project and this baseline survey.

**5 1.1 Background of “Early Childhood Care and Development Project”**

CARE has mainly been involved in initiating interventions in the field of health, education and livelihood to improve life opportunities for women and children. Their past interventions have focused on maternal health and strengthening preschool education to improve children’s school readiness. Integrated Child Development Scheme (ICDS) is the oldest and largest programme of the Government of India which aims to build holistic development of children ages below six years of age. It mainly focuses on health and nutrition needs and has a component of pre-school education for children aged 3-6 years.

CARE-India fulfilled this need of the ICDS programme in their project “Early Childhood Care and Development Project’ (ECCD). This project implemented in Chattisgarh focuses towards strengthening five domains – Health, Nutrition, Care & Development, Rights & Protection and Economic strengthening and works with 5 levels – Child, Anganwadi Centre, Caregiver, Community and National. The main objectives of the project are:

1. To strengthen status of ECCD component of ICDS with a view to ensure health and psycho – social well-being of children less than 6 years of age.
2. To promote understanding, skills and capabilities of workers / stakeholders, family and community members to meet the psychological , physical & social development needs of the children below the age of six years during each sub – stage of early childhood years (prenatal , birth to 3 years , 3-6 years), and
3. To enhance the skills and competencies of functionaries in effective implementation of ECD component of ICDS.

Thus, the intervention, in this project, will address the holistic needs of the child and primary caregivers and also will work towards ensuring key rights of child. **These interventions will be made at ICDS centre and home level to reach out to different sets of children and their caregivers.**

**6 1.2 Objectives of the baseline survey**

The objectives of the baseline study are:

1. To estimate the current levels of age-related health, nutrition and cognitive development indicators of children aged 3-3.5 years and 5-5.5 years. For children in the ages of 5- 5.5 years, it will also estimate the indicators related to school readiness.

2. To assess the current levels of KAP and understanding of the primary caregivers (mothers) on the holistic needs of the children in both these age groups
3. To assess the current levels of KAP and understanding of AWWs on age-related needs for holistic development of children in both the age groups
4. To determine systemic functioning of the AWCs , and
5. To assess levels of understanding of the programme managers of ICDS programme at sector and block levels.

7

### 8 1.3 Scope of the study

The information collected in the baseline survey will further help in assessing the impact in the end -line survey. This information will also be used to plan and design the interventions of the ECCD project by CARE-India.

Being a baseline, its scope included the following five key information areas:

- Nutritional Status with respect to nutrition and child care and development practices.
- Knowledge and understanding levels on child development & practices among mothers/ caregivers.
- Kind of preschool education provided in ICDS centres.
- Understanding and capacity of AWWs in transacting preschool education.
- Level of understanding and involvement of sector and block level leadership of ICDS and factors that impede or facilitate their involvement.

### 9 1.4 The study area

The intervention districts where the project is being implemented are Janjgir and Korba while Raigarh is taken as a control district. Further in intervention districts, the Project will be implemented in 200 AWCs (100 AWCs in each district and these AWCs are termed as fully intervention ones. In these AWCs, all AWWs and sector supervisors under ICDS will be provided training in the Project. The remaining AWCs in the intervention districts will be termed as intermediate intervention AWCs where only sector supervisors will be provided training under the Project. In control district of Raigarh, only the blocks of Kharsia and Sarangarh are taken under the study. Lists of fully intervention AWCs in the intervention districts and in the selected blocks of Kharsia and Sarangarh in the control district have been provided by the client. These lists were used as sampling frames to draw a required sample of AWCs under each of these groups.

### 10 1.5 Chapterization of the report

11

12 The report has the following ten chapters:

1. Introduction
2. Methodology and data collection
3. Profile of the surveyed population
4. Knowledge and practices of mothers related to maternal & child health and hygiene

5. Caregivers Understanding and practice of child development.
6. Knowledge about government schemes.
7. Development test of children aged 3-3.5 years and school readiness of children aged and 5-5.5 years.
8. Anganwadi workers and functioning of anganwadi center.
9. Observations on the pre-school education programme at the services of anganwadi centres.
10. Awareness and involvement of supervisory cadre (of ICDS) on activities of growth and development of children.

## **13 CHAPTER -II**

### **14 METHODOLOGY AND DATA COLLECTION**

This chapter discusses all aspects of the planning of the study. It includes sampling design, training of the field teams, data collection and quality assurance, data analysis and report writing.

#### **15 2.1 Study design**

The client has suggested a quasi - experimental design wherein a control district (Raigarh) was selected in addition to Project Area. The Project areas are Janjgir and Korba districts termed as intervention districts. In each of the districts, 100 AWCs are full intervention AWCs. The client has also suggested "intermediate intervention" area from the intervention districts where intervention will have indirect impact of the interventions. These will be the AWCs neighbouring to the fully intervention ones. Thus, impact of the Project would be measured on three point scale – control, intermediate intervention and full intervention. They formed three strata for the study.

In consonance with the study design envisaged, a stratified two stage sampling procedure was employed to select AWCs in each stratum of the study at the first stage. The eligible children and their caregivers were selected at the second stage in all the strata for the study.

#### **16 2.2 Sample size**

Based on certain degree of changes in the indicator values during the Project period, the client has estimated a sample size of 465 children and their principal caregivers in each group of children (3-3.5 years and 5-5.5 years). Based on the information on the birth rate in Chattisgarh, the client has estimated the required sample size of 62 AWCs from each of the strata of blocks – control, intermediate intervention and full intervention to get the desired sample size of children in each age group of 3-3.5 years and 5-5.5 years.

#### **17 2.3 Selection of the target population**

##### **2.3.1 Selection of AWCs at the first stage (for each stratum of AWCs)**

A list of full intervention AWCs in both the intervention districts (100 in each district) was provided by the client. This list of AWCs was used as the sampling frame to select 62 AWCs (31 in each district). A systematic random sampling technique was adopted to select 31 full intervention AWCs in each district, making a total of 62 AWCs in both the intervention districts. For the selection of 62 intermediate intervention AWCs, an AWC neighbouring to the selected intervention one in the same block was selected. For the sample of AWCs from the third stratum, control district of Raigarh, the list of AWCs in the two selected blocks of the district was provided by the client. From this list, 36 AWCs were selected in each block by adopting a systematic random sampling procedure (five more than the required number of AWCs in each block). Out of them, 62 AWCs (31 in each block) were finally to be covered under the study.

All the anganwadi workers posted at the selected AWCs were interviewed through a structured interview schedule to understand their knowledge, practice followed and ability to provide services to pregnant lactating mothers and stimulating environment to the child including pre – school education.

The sampled AWCs were also observed using a specific observation tool (ECCFR). The aim was to understand functioning of AWC and quality of pre school education provided at the centre.

### 2.3.2 Selection of children aged 3-3.5 years and 5-5.5 years

It was decided to cover all the eligible children aged 3-3.5 years and 5-5.5 years in the catchment area of an AWC to achieve the required sample of eligible children after assessing the situation in few AWCs covered in first 2-3 days of the field work. Thus, all eligible children aged 3-3.5 years and 5-5.5 years enrolled in an AWC and found otherwise (information provided by AWW, ASHA and any other informant in the catchment area of the AWC) were covered under the study. If a woman had children aged 3-.3.5 years and 5-5.5 years. Both of her children were covered under the study. If a woman had twin of the same age, both children were covered under the study.

The children aged 3-3.5 years were administered a screening development and anthropometry test (their weight and height were taken under anthropometry test to assess their nutritional status) while the children aged 5-5.5 years were administered a school readiness test and anthropometry test (under it, their weight and height were taken to assess their nutritional status). Alongwith the target children, their primary caregiver was also selected for interview through a structured interview schedule. This exercise aimed to understand their knowledge, practice followed and ability to provide stimulating environment to the child.

### 2.3.3 Child development programme officers and supervisors

Besides the target group of mothers/ caregivers & children and AWWs, Child Development Officers and Supervisors at block and sector level respectively from implementation and control district were interviewed to assess their competency and ability to provide supportive supervision. In all, 17 CDPOs and 13 supervisors were interviewed in intervention and control district.

### 2.3.4 Sample coverage

#### The sample was to be covered and actually covered

Target population	Total intervention districts				Control district	
	Full inter. AWCs		Intermediate Inter. AWCs		Raigarh	
	To be covered	Actually covered	To be covered	Actually covered	To be covered	Actually covered
Anganwadi centres (AWCs)- <b>observations</b>	62	62	62	60	62	62
Anganwadi workers (AWWs)	62	61	62	59	62	61
Children aged 3-3.5 years	465	442	465	440	465	466
Children aged 5-5.5 years	465	386	465	404	465	458
Mothers / care givers	930	828	930	844	930	924
CDPOs/ supervisors	16	15	16	14	4	1

## 18 2.4 Study tools

The following study tools were used in the baseline survey

1. Questionnaire for mother / care giver
2. Questionnaire for anganwadi worker and observation schedule for AWC
3. School readiness instrument for children aged 5-5.5 years
4. ICMR developmental screening test instrument for children aged 3 – 3.5 years
5. Questionnaire for child development programme officer (CDPO) at block level
6. Questionnaire for mukhya sevika (supervisor)

The following study instruments were developed by GfK MODE keeping in view the objectives of the study in mind.

- i. Questionnaire for mother/ care giver
- ii. Questionnaire for anganwadi worker
- iii. Questionnaire for mukhya savika (supervisor)
- iv. Questionnaire for child development programme officer (CDPO) at block level

All these study instruments were first prepared in English and shared with the client for their approval. After incorporating all the inputs provided by the client, they were finalized in consultation with the client in English first. After finalization, they all were translated in Hindi. Hindi versions of all these study instruments were shared with the client and pretested before their finalization.

The following study instruments were provided by the client.

- i. ICMR developmental screening test for children aged 3-3.5 years
- ii. School readiness test for children aged 5-5.5 years
- iii. Observation schedule for AWC

Hindi versions of instruments listed at sr. number (i) and (ii) were also provided by the client. The observation schedule for AWC was translated in Hindi by GfK MODE and shared with the client.

They were all formatted. After that all these instruments were shared and finalized after incorporating all the suggestions/ comments provided by the client. The final Hindi versions of all the study instruments were administered to the target population and they have been given in Annexure -1.

## 19 2.5 Recruitment and training of the field teams and their development

### 2.5.1 Recruitment of the field teams

In all, 72 persons (57 investigators and 15 supervisors / editors) were recruited. In addition, there was a field executive and a deputy manager (operations). The field executive and deputy manager (operations) are the regular employees of GfK MODE , while other field staff were taken from a large panel of qualified interviewers which GfK MODE maintains. They all have rich experience in collecting data and have worked with GfK MODDE the company in one or the other similar project earlier.

## 2.5.2 Training of the field teams

The training was conducted in three phases. Phase wise details regarding venue &, dates of the training and number of trainees and other participants who attended the training are given below:

Phase No.	Venue of training	Date of training	No. of trainees	Particulars
1.	C.G Chamber of Commerce Hall, Raipur	16 <sup>th</sup> to 21 <sup>st</sup> Jan,2012	35	<b>GfK MODE</b> 1. O.P.Goel , Researcher 2.Arun Rai, Deputy Manager (Operations) 3.Ms. Manisha, Field Executive 4.Vipul Chandekar, Field Executive <b>CARE India</b> 1.Ms. Geeta verma 2.Mr. Delip Sarwate , Project Manager , 3.Mr Balaji B.Ubarhande, M&E Officer
2.	Lion's club hall , Bilaspur	7 <sup>th</sup> to 9 <sup>th</sup> Feb,2012	15	<b>GfK MODE</b> 1.Arun Rai, Deputy Manager (Operations) 2.Vipul Chandekar, Field Executive <b>CARE India</b> Mr Balaji B.Ubarhande, M&E Officer
3.	Gfk MODE office, Nagpur	24 <sup>th</sup> to 27 <sup>th</sup> Feb, 2012	22	<b>GfK MODE</b> 1.Arun Rai, Deputy Manager (Operations) 2.Vipul Chandekar, Field Executive

In all, 35 trainees attended the training in Phase 1 from 16<sup>th</sup> to 21<sup>st</sup> Jan, 2012 at Raipur. The trainees in the training in Phase 1 at Raipur were divided in two groups. The group 1 of the trainees comprised of those who would be deployed to interview eligible mothers / care givers, angawandi workers, child development programme officers and supervisors. The second group of trainees was those who would have an interaction with the eligible children.

The training to the group 1 trainees was imparted by O.P.Goel, Researcher associated with the study and was actively involved in preparation of the study tools. The training to the second group was imparted by officials of CARE.

In the second phase, 15 trainees participated in the training. This training was imparted for three days from 7<sup>th</sup> to 9<sup>th</sup> February, 2012 by officials of GfK MODE (Mr. Arun Rai & Mr. Vipul Chandekar) and Mr. Balaji B. Ubarhande, M&E Officer, CARE India. This training was imparted at Bilaspur.

The training in the 3<sup>rd</sup> phase was conducted at Nagpur for 4 days from 24<sup>th</sup> to 27<sup>th</sup> February, 2012 in GfK office. It was imparted by officials of GfK MODE (Mr. Arun Rai & Mr. Vipul Chandekar). In all, 22 trainees attended this training. Thus, 72 trainees attended the training in all the three Phases.

Training consisted of classroom training, general lectures, and demonstration and practice interviews as well as field practice and supplementary training for field editors and supervisors. The classroom training included instructions in interviewing techniques and survey field procedures, a detailed review of each item in the questionnaires, mock interviews between participants. Investigators responsible for interaction with children aged 3-3.5 years and 5-5.5 years were given additional specialized training on measuring height and weight of children. This specialized training included classroom training and extensive field practice in anganwadis for 2 days.

On the last day of the training in each phase of the training, the trainees were sent to the field practice to complete one or two interviews. During this field practice, trainers went with them and observed how the trainees were putting and asking the questions. They were guided in the field itself by the trainers on the gaps they observed while interviewing the respondents. Their filled –in questionnaires were thoroughly scrutinized by trainers. They were de – briefed on the gaps which the trainers found in their filled –in questionnaires on the last day of the training in the afternoon in each phase of the training.

### **2.5.3 Deployment of the field teams**

Out of the 72 field investigators and editors/ supervisors, 4 were dropped due to their poor performance during training and field practice assessed by trainers. So, finally 68 field investigators and editors / supervisors were deployed for data collection. In all, 8 teams were formed. Each team consisted of one editor, one supervisor and 6 investigators. Out of 6 investigators in each team, 3 were for interviewing the eligible mothers / care givers and three for interaction with the eligible children. Editors / supervisors conducted interviews with AWWs, supervisors and CDPOs in addition to their normal duties. In addition, a ninth team consisting of 4 investigators was formed to revisit the eligible respondents who could not be interviewed due to any reason during the visit of the field team.

## **20 2.6 Field work**

The field work was done simultaneously in all the districts of the study. The field work was completed in all the selected AWCs under the study in a period of about 6 weeks starting from 9<sup>th</sup> February to 20<sup>th</sup> March, 2012.

## **21 2.7 Monitoring and quality assurance of data**

Special efforts were made to continuously monitor field work to assure quality of data. GfK MODE deployed a field coordinator who was in continuous touch with field team members including field supervisors and field executive through phone calls and personal visits to field. The researcher associated with the study was also continuously monitoring the quality of field work. CARE staff from Chhattisgarh and New Delhi provided all support in monitoring field work by making several visits to the field during data collection period and gave many suggestions for improving the quality of data from time to time. The client was periodically provided reports about movement of field teams and the progress of the field survey.

Besides continuous monitoring through phone calls and field visits, the following steps were taken to assure quality of data:

- Training, including mock interviews and field practice, was given great attention. The field teams were not sent for field work unless the trainers were sure of their full understanding and competence in collection of data independently.
- Field movement plan was worked out before the teams were sent for data collection. This movement plan was prepared by the field coordinator, GfK MODE and shared with researcher and representatives of CARE, so that they could make field visits unannounced. Such unannounced visits kept the field teams on their toes.
- Our teams went to the field along with the field executive of GfK MODE and CARE team. They helped the field teams during the initial teething problems; they were made fully functional in terms of data collection, scrutiny of questionnaires, consistency checks and the process of back checking.
- We had built a supervisor for every team of three interviewers to make sure that he/she was with the team and was able to scrutinize and edit questionnaires on a daily basis. We ensured that supervisors back-checked 15 to 20 per cent of the filled-in questionnaires of each investigator on a daily basis.
- Supervisors edited all the questionnaires on a daily basis for completeness and consistency.
- Information related to some important indicators was manually tabulated to make sure that they followed the expected pattern.
- Filled – in questionnaires were received at the data processing unit, New Delhi periodically, where they were again scrutinized (usual practice with GfK MODE) and coded (for open-ended questions) before passing on to the data processing unit , New Delhi.
- Data was properly validated by range checks, skip patterns and consistency before tables were generated.
- Once tables, as per the tabulation plan were received, they were checked for consistency and proper denominators before indicators were computed. Checking tables very carefully before their interpretation was one major task we undertook for the study since the quantity of data was very large.

## **22 2.8 Data processing**

GfK MODE prepared the tabulation plans for all the study instruments in the form of dummy tables and shared with the client to get their inputs. It was finalized after having incorporating all the inputs/ suggestions received from the client. This finalized tabulation plan was sent to our Data Processing Unit to develop their data entry and tables generation programmes. Data processing consisted of office editing coding, data entry and machine editing, using the integrated system of survey analysis software.

Tables generated by Data Processing Unit were sent to our Research Division for scrutiny. These tables were examined based on their strength in addressing the objectives of the study and on the parameters mentioned below:

- Reasonability of the indicator
- Logical denominator for calculation of ratio and percentages
- Consistency in the levels of various indicators. Classification of the study area as under the broad objective of the study.

All the unexpected levels were looked at in the original questionnaires to correct the information in the tables. After examining all the tables on the above points, modifications/ changes were made in the tabulation plan and sent to Data Processing Unit again for generating tables.

## **23 2.9 Reporting writing**

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A detailed chapterization plan, with sections & sub – sections was sent to the client. By using this chapterization plan and our own experience, the report was prepared. It had all the relevant chapters including chapters on background of the study and data & methodology. It may be noted that the report gives only a part of the important data; more detailed tables have been given in the Annexure -2 of the report. These detailed tables provide district-differentials and AWC – differentials by their category across the study.

## 24 CHAPTER -III

### 25 PROFILE OF THE SURVEYED POPULATION

This chapter presents a profile of the demographic and socio economic characteristics of individual respondents (mothers / caregivers) in terms of their age, education, caste & religion, education of their spouse and age of the youngest child. It also highlights the characteristics of the households of the mothers / caregivers to which they belonged in terms of type of family , house type , main source of drinking water and whether the household have a toilet facility in their house or not and if not , where the household members go for defecation. It also provides information on household members, average household size, migration status of any member in the household for livelihood, number of earning adult members, sources of livelihood and household income.

#### 26 3.1 Profile of the mothers /caregivers

##### 27 3.1.1 Age distribution

Almost three – fifths of the mothers/ caregivers were in the age group of 20-29 years in both the intervention and control districts. About 36 percent in intervention districts (35% in intervention AWCs and 37% in intermediate AWCs) and 29 percent in control district were in the next age bracket of 30-39 years. Their mean age was around 29 years in all the three categories of AWC (Table 3.1).

**Table 3.1: Age distribution of respondents**

Age in years	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
<20 years	0.5	0.5	1.9
20-29 years	61.8	59.5	60.8
30-39 years	35	36.6	29.4
40-49 years	2.7	3.4	7.8
Mean age	28.51	28.82	28.9
Standard Deviation	5.46	5.64	6.47

##### 28 3.1.2 Educational attainment

The educational level of the mothers/ caregivers is an important characteristic because educational attainment often affects reproductive behaviour, the health of children and proper hygienic practices. Table 3.2 shows the extent of literacy and level of education they attained. About 34 percent of the mothers / caregivers in intervention districts (with no difference in Janigir and korba) and 30 percent in Raigarh were illiterate. With respect to educational attainment, almost one – fourth of them in both the intervention and control districts had completed primary level of schooling and about one – fifth (19% in intervention and 22% in control district) had passed middle standard. The median number of years of schooling was around 4 in intervention districts and 5 in control district.

**Table 3.2: Distribution of respondents by their highest grade of education completed****(Percentage)**

Highest grade of education completed	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Illiterate	33.3	34.5	29.9
Below primary (Class 1-4)	13.9	14	11.8
Primary completed (Class 5-7)	25.1	25.2	25.5
Middle completed (Class 8-9)	19	18.4	21.6
Matric or High School (10-11)	4.7	3.7	6.6
Higher Secondary/Sr. Secondary (12-13)	3.3	3.4	3.5
Graduate and above	0.7	0.8	1.1
Median years of schooling	4.47	4.36	4.94

**293.1.3 Caste and religion**

Almost all of them (99% in both control and intervention districts) were Hindu. About one – fifth of them in intervention districts and 32 percent in control district belonged to scheduled caste communities, while 29 percent in intervention districts and 17 percent in control district were from scheduled tribe communities. About one – half of them (48% in intervention districts and 51% in control district) belonged to other backward classes (Table 3.3).

**Table 3.3: Distribution of respondents by their caste and religion****(Percentage)**

Caste and religion	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Caste (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
SC	21.6	18.8	31.7
ST	27.7	29.7	16.6
OBC	48.1	47.7	50.5
Others / higher caste	2.7	3.7	1.2
<b>Religion (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Hindu	99	98.3	99
Muslim	0.8	1.2	0.5
Sikh	0	0.2	0.2
No religion	0.1	0.2	0.2

**303.1.4 Educational attainment by their spouse**

Less than one – fifth of their spouses (16% in intervention AWCs, 13% in intervention and 13% in control AWCs) were illiterate. About one – fourth (26% in intervention and control districts) had completed middle standard of education and 29 percent in intervention & 35 percent in control district had at least completed high school examination. The median number of years of schooling was about 7 in all the categories of AWCs (Table 3.4).

**Table 3.4: Distribution of respondents by Highest grade completed by their spouse (Percentage)**

Highest grade completed	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Illiterate	16.2	13.4	12.8
Below primary (Class 1-4)	8.7	11.1	9.6
Primary completed (Class 5-7)	17.5	21.9	16.9
Middle completed (Class 8-9)	26.7	25.9	25.5
Matric or High School (Class 10-11)	16.9	13.7	17.4
Higher Secondary/Sr. Secondary (12-13)	9.9	9.4	9.8
Graduate and above	3.6	4	5.2
Don't know	0.5	0.5	2.7
Median years of schooling	7.09	7.01	7.41

### 313.1.5 Age of youngest child

Less than two – fifths of them (35% in intervention and 37% in control district) had their youngest child ages 36-42 months, followed by those who had their youngest child in ages of 60-66 months (19% in intervention and 23% in control districts). The mean age of their youngest child was around 32 months in intervention & intermediate AWCs and 35 months in control district (Table 3.5).

**Table 3.5: Distribution of respondents by age of youngest child (Percentage)**

Age of youngest child	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
< 6	10.3	9	5.1
6-11	10	10.3	8.3
12-23	13.8	14	13
24-35	10.6	10	11.1
36-42	32.9	36.1	36.8
43-59	1.4	1.5	1.8
60-66	19.7	17.5	23.1
Average age	32.32	32.14	35.42

For more district- wise details, Tables 3.1A in Annexure -2 may please be seen.

## 3.2 Profile of households

### 323.2.1 Age – sex distribution of household members

Around one – fifth of households had 3-4 members , while about two – fifths each had 5-6 and more than 6 members. The average household size was 6.5 in intervention , 6.7 in intermediate and 6.3 in control AWCs (Table 3.6).

**Table 3.6: Distribution of households by no. of family members** (Percentage)

No. of family members	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
3-4	19.9	21.3	21.9
5-6	44	38.3	40.7
Above 6	36.1	40.4	37.4
Total number of members	5387	5652	5841
Average household size (total no. of members/total no. of households)	6.51	6.7	6.32

### 333.2.2 Household composition

More than three – fifths of households (64% in intervention and 63% in intermediate AWCs) and 57% in control AWCs belonged to nuclear family and the remaining ones had a joint family system (Table 3.7).

**Table 3.7: Distribution of households by type of family** (Percentage)

Type of family	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Nuclear	63.9	63.2	57
Joint	36.1	36.8	43

### 343.2.3 Housing characteristics

Most of the households (63% in intervention, 71 in intermediate AWCs and 67% in control AWCs) had a kaccha house to live in, while about one – fifth (26% in intervention 19% in intermediate and 20% in control AWCs) had a semi – pucca house and about one – tenth (10% in intervention and 13% in control district) were living in a pucca house (Table 3.8).

**Table 3.8: Distribution of households by type of house** (Percentage)

Type of house	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Kaccha	63.5	71.4	67.4
Semi pucca	25.6	18.6	19.6
Pucca	10.9	10	13

The types of water and sanitary facilities are important determinants of the health status of household members, particularly of children. The seriousness of major childhood diseases such as diarrhoea can be reduced by proper hygienic practices. Therefore, the survey questionnaire of the mother / caregiver contained questions on sanitary facilities and sources of drinking water. Regarding the source of drinking water, 19 percent of households in intervention districts and 50 percent in control district had piped water, 67 percent in intervention and 42 percent in control district had drinking water from a handpump and one – tenth of the households in intervention districts got water from wells (Tables 3.9).

**Table 3.9: Distribution of households by main source of drinking water** (Percentage)

Main source of drinking water	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Tap / piped water	19.8	17.5	49.6
Hand pump	66.8	66.9	41.8
Tube well	4.8	3.9	7.8
Rivulet	0.6	0	0.3
Well	8	11.6	0.5

Regarding sanitation facilities, only around one -fifth of households in intervention districts and 23 percent in control district had a toilet in their house. Those who did not have any toilet facility, were further asked where their household members go for defecation. Almost all of them reported "open defecation" (Table 3.10).

**Table 3.10: Distribution of households by toilet facility** (Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Toilet facilities in the house (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	20.2	17.5	22.7
No	79.8	82.5	77.3
<b>Place where family members go for defecation (n=)</b>	<b>661</b>	<b>696</b>	<b>714</b>
Open space	99.1	99.9	99.7
Shared toilets	0.9	0.1	0.3

### 353.2.4 Migration status for livelihood

All the surveyed mothers / caregivers were asked whether any member of their household was residing at some other place for livelihood & if yes "number of years since when residing there was gathered. Table 3.11 provides such information.

**Table 3.11: Distribution of households by migration details of household members for livelihood** (Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Any family member residing in other state/town for livelihood (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	4	2.8	6.8
No	96	97.2	93.2
<b>No. of years since residing in other state / town (n=)</b>	<b>33</b>	<b>24</b>	<b>63</b>
1	21.2	25	20.6
2	12.1	16.7	9.5
3	12.1	4.2	11.1
4	9.1	16.7	6.3
5	9.1	4.2	12.7
6	6.1	4.2	9.5
7 or more	30.3	29.0	30.3
Average	6.7	6.21	6.11

Only 3 percent of the mothers / caregivers (4% in intervention 3% in intermediate AWCs) and 7 percent in control AWCs reported migration of any member of their household for livelihood. On an average, the migrated person had been living there for the last 6 years.

### 36 3.2.5 Means of livelihood

Slightly over 60 percent of households in intervention districts (62% in intervention and 65% in intermediate AWCs) and 53 percent in control AWCs, there was an adult member who was engaged in one or the other job for livelihood, while one – fourth of families in intervention districts and 32 percent in control district had two such members. The mean number of adult members engaged in some profession for livelihood was 1.55 intervention districts and 1.72 in control district (Table 3.12).

**Table 3.12: Distribution of households by number of earning adult members and occupation**

**(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Number of adult family members engaged in a job (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
1	62	64.9	52.9
2	26.7	23.5	31.8
3 or more	11.3	11.6	15.3
Average	1.55	1.55	1.72
<b>Sources of livelihood (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
<b>Primary/main source</b>			
Cultivation on own land	56	55.1	65.5
Cultivation on leased land	6.2	4.3	3
Casual agricultural wage labor(paid on a daily basis in cash or kind)	18.4	17.9	23.4
Regular agricultural wage labor(paid on a weekly/bi-weekly basis in cash or kind)	5.4	4.4	4.1
Husbandry of own animals	4.1	5.3	1.7
Husbandry of leased animals	0.5	0.5	0.3
Animal husbandry wage labor	1.3	0.2	0.5
Casual non-agricultural wage labor(paid on a daily basis in cash or kind)	10.9	11.5	16.5
Regular non-agricultural wage labor(paid on a weekly/bi-weekly basis in cash or kind)	9.9	10	23.9
Salaried work (paid on monthly basis, only in cash)	12.1	11.3	13.1
Non-agricultural business	6.5	7.8	10
Labour in repayment of loan	0.4	0.2	0.2
Kapde banane ka kaam	0	0.1	0
Self Employed	0.5	0.6	1.1
<b>Secondary source</b>			
Cultivation on own land	16.5	19.4	24
Cultivation on leased land	8.1	7.8	12.9
Casual agricultural wage labor(paid on a daily basis in cash or kind)	11.6	9.4	22

**Table 3.12: Distribution of households by number of earning adult members and occupation (Contd..)**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
Regular agricultural wage labor(paid on a weekly/bi-weekly basis in cash or kind)	3.3	2.7	1.8
Husbandry of own animals	4	3.8	1.2
Husbandry of leased animals	0.5	0.8	0.4
Animal husbandry wage labor	1.6	1.5	0.3
Casual non-agricultural wage labor(paid on a daily basis in cash or kind)	16.1	16.6	16.9
Regular non-agricultural wage labor(paid on a weekly/bi-weekly basis in cash or kind)	4.3	4.6	22.7
Salaried work(paid on monthly basis, only in cash)	3.3	2.7	7.1
Non-agricultural business	3	5	8.2
Labour in repayment of loan	0	0	0.2

Regarding main source of livelihood, about 56 percent in intervention districts and 65 percent in control district were engaged in farming on their own land. The other professions cited by mothers / care givers were casual non – agricultural wage labour , causal agricultural wage labour, regular non – agricultural wage labour , service (salaried work) and non – agricultural business. Regarding secondary source of livelihood, they reported “cultivation on own land”, “cultivation on leased land”, “causal agriculture wage labour”, “casual non – agricultural wage labour and “regular non agricultural wage labour” (Table 3.12).

### 373.2.6 Monthly household income

The larger number of households (two –fifths of households in intervention districts and one – third in control district) had income of Rs 2001-3000 per month. The average income per household per month was about Rs. 3000 /- in intervention & intermediate AWCs and Rs. 3168 - in control AWCs (Table 3.13).

**Table 3.13: Distribution of households by occupation and monthly income**

(Percentage)

Total monthly income of family from all sources	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Upto Rs 500	1	2.1	2.5
Rs 500-2000	19.4	17.2	22
Rs 2001-3000	39.3	39.9	33.3
Rs 3001-4000	23.2	27.5	14.8
Rs 4001-6000	9.4	5.2	9.8
Rs 6000-9000	1.9	1.3	4.8
Rs 9001+	2.8	3.6	4.3
Don't know / can't say	3	3.2	8.4
Average	3011.52	2977.05	3167.55

For more district - wise details , Tables 3.2A to 3.7 A in Annexure – 2 may be referred.

**38**  
**39 CHAPTER -IV**  
**40 KNOWLEDGE AND PRACTICES OF MOTHERS RELATED TO MATERNAL & CHILD HEALTH AND HYGIENE**

This chapter discusses about knowledge and practices of mothers / caregivers related to maternal & child health and hygiene practices they follow during preparation and keeping food after cooking.

**41 4.1 Antenatal care**

**424.1.1 Working status during the last pregnancy**

All the surveyed mothers / care givers were asked how many hours they worked in a day at home and outside during the pregnancy of the last youngest child, what kind of work they did and who helped in their household chores. Table 4.1 provides such information.

**Table 4.1: Working status during the last pregnancy**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Number of hours worked in a day at home and outside (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
<= 3	22.3	23.8	49.6
4-6	42.1	44.9	42.2
7-8	20.5	15.9	4.1
Above 8	14.6	14.9	4
Average	5.77	5.67	3.86
<b>Kind of work done at home and outside (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Cooking	99.4	99.4	99.9
Washing	97.3	95.1	93.6
Taking care of animals	18.6	19.7	9.5
Milking of animals	2.9	3.7	2.2
Taking care of children	62.4	66.5	66.3
Working for livelihood	16.2	16.5	2.8
Agriculture	24	22.4	12
Labour	26.4	22.2	10.4
<b>Person who helped in household chores (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
None	49	50.1	43.6
Mother-in-law	28.9	29	34
Sister-in-law	9.3	10.1	10.8
Husband	21.5	20.4	20.6

Slightly less than one – fourth of them in intervention districts and 50 percent in control district reported to have worked for 3 or less hours in a day, while two - fifths in intervention and 42 percent in control district worked for 4-6 hours per day. Mean number of hours they worked per day during the reference pregnancy was 5.72 in intervention and 3.86 in control district. Regarding kind of work, they mostly reported cooking and washing, while about two – thirds were busy in taking care of their children. The other works cited by them were “taking care of animals”, “agriculture related activities”, and “labour”.

About one – half of the mothers / caregivers in intervention and 44 percent in control district reported that nobody helped them in their household chores. About 29 percent in intervention and 34 percent in control district stated that their mother- in- law helped them, while about

one – fifth were helped by their husband. For more details, Table 4.1A in Annexure -2 may be referred.

#### 4.1.2 Registration of the pregnancy

All the surveyed mothers/ caregivers were asked whether the reference pregnancy was registered or not and if yes, information on the month of the pregnancy when it was registered and the perceived benefits of early registration was gathered from the respondents. Table 4.2 provides such data.

**Table 4.2: Registration of the last pregnancy**

**(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Registered pregnancy (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	86.5	88.5	88.9
<b>Month in which registered (n=)</b>	<b>716</b>	<b>747</b>	<b>821</b>
Within 3 months	60.9	65.6	70.6
4th month	32.3	27.7	21.2
5th month	4.6	4.6	5.6
6th month or later	1.3	1.5	1.6
<b>Perceived benefits of early registration of pregnancy (n=)</b>	<b>716</b>	<b>747</b>	<b>821</b>
Get TT and IFA tablets	97.6	98.5	97.9
Get Supplementary meals	74.6	73.2	73.9
ANC checkups identify if there are any danger signs and need referral	5	5.4	8.5

- About 87 percent of the mothers in intervention districts and 89 percent in control district got the reference pregnancy registered. Out of them, 63 percent in intervention and 71 percent in control district got it registered in the first trimester, while only about 2 percent reported registration of the reference pregnancy in 6<sup>th</sup> month or later.
- Regarding perceived benefits of early registration, they mainly reported getting of TT injection, IFA tablets and supplementary nutrition food from AWC. But less than 10 percent of them reported to have antenatal checkup for identification of any danger signs that needed referral for immediate medical care.

#### 4.1.3 Receipt of antenatal checkups

All the respondents were asked whether they received any antenatal checkup during the reference pregnancy & if yes, information on month of pregnancy when received antenatal checkup, person who advised for getting antenatal checkup and type of checkups done were collected from them. Table 4.3 provides such information.

Table 4.3: Receipt of antenatal checkups

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Received any antenatal check up (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	72.9	72.9	75
<b>Months of pregnancy in which received (n=)</b>	<b>604</b>	<b>615</b>	<b>693</b>
With in 3 months	49.5	47	47.6
Between 4-6 months	36.6	41.6	42.3
Between 7-9 months	13.6	11.4	10.1
<b>Who advised for getting ANC (n=)</b>	<b>604</b>	<b>615</b>	<b>693</b>
AWW/Sahayika	70.2	72.5	62.9
ANM	24.5	22.6	46.6
ASHA	20.9	28	19.9
Medical Officer	13.9	9.6	2.5
Others (relative/family members/neighbor, Self , Private/Govt hospital)	5.4	5.4	12.2
Not specified	0.7	0.5	0.9
<b>Type of checkups (n=)</b>	<b>604</b>	<b>615</b>	<b>693</b>
Weight measurement	80.6	81.3	54.4
BP measurement	67.7	65.2	65.1
Abdomen examination	63.4	66.7	61.2
All checkups received	36.4	39.2	18.8
<b>Whether BP and weight recorded in the antenatal card (n=)</b>	<b>604</b>	<b>615</b>	<b>693</b>
Yes,BP only	7.1	2.6	10
Yes,weight only	15.2	14.5	8.7
Yes,both	55.8	57.9	44.6
None	21.9	25	36.8

- About 73 percent of the respondents in intervention districts and 75 percent in control district reported to have any antenatal checkup during the reference pregnancy. Out of them, 48 percent in both intervention and control district received antenatal checkup during 1st trimester, while 39 percent in intervention and 42 percent in control district received it during the second trimester. Only about one - tenth reported to have received in third trimester.
- Anganwadi worker in intervention districts (71%) and control district (63%) was reported as the main person who advised them to receive antenatal checkups. The other workers who advised them for receiving antenatal checkups were ANM and ASHA.
- Regarding quality of antenatal care, 38 percent in intervention districts and 19 percent in control district reported to have their weight & blood pressure measured and abdomen examined. Weight measurement was reported by 81 percent and 54 percent of them in intervention and control district respectively, while between 61 and 66 percent reported to have their blood pressure measured and abdomen examined.
- Regarding recording of measurement of weight and blood pressure in the antenatal card, 57 percent in intervention districts and 45 percent in control district replied in affirmative for both.

#### 4.1.4 Receipt of TT injections

All the surveyed respondents were asked whether the mothers received any TT injection during their reference pregnancy and if yes, they were further enquired about the month of pregnancy when received and who advised for it. Table 4.4 provides such information.

**Table 4.4: Receipt of TT injections**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Received any TT vaccination (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	96.7	96.4	97.2
No	3.3	3.6	2.8
<b>Months of pregnancy in which received TT (n=)</b>	<b>801</b>	<b>814</b>	<b>898</b>
Within 3 months	55.8	57.1	52.8
Between 4-6 months	39.8	39.9	43.2
Between 7-9 months	2.4	1.1	3.5
Not specified	2	1.8	0.6
<b>Who advised to take TT injection(n=)</b>	<b>801</b>	<b>814</b>	<b>898</b>
AWW/Sahayika	79	82.1	68.8
ANM	22.5	20.4	41.5
ASHA	21.1	23.8	19
Others (Private/Govt hospital , relative/family members/neighbour)	6.9	7.6	6.9
Not specified	1.9	1.2	1.4

- About 97 percent of the respondents in both intervention and control districts reported to have received a TT injection during reference pregnancy. Out of them 56 percent in intervention and 53 percent in control district reported that they received T.T injection in 1st trimester of their pregnancy, while about 40 percent in intervention and 43 percent in control district received it in the 2nd trimester.
- About 81 percent of them in intervention and 69 percent in control district were advised by AWW to have TT injection. ANM and ASHA were the other workers who advised them for TT injection.

#### 4.1.5 Receipt and consumption of IFA tablets and vitamin A

Table 4.5 provides data on receipt and consumption of IFA tablets and vitamin A.

**Table 4.5: Receipt and consumption of IFA tablets**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Number of IFA tablets received / bought (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Did not receive / buy	12.9	8.6	11.4
<90	34.1	31.3	56.7
90+	50.8	59.2	28
DK/don't remember	2.2	0.8	3.9

**Table 4.5: Receipt and consumption of IFA tablets****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>No. of IFA tablets consumed (n=)</b>	<b>721</b>	<b>771</b>	<b>819</b>
Did not consume	7.6	6	3.2
<90	53.7	51.5	68
90+	36.3	40.5	24.4
DK/don't remember	2.4	2.1	4.4
<b>Who advised for taking IFA tablets (n=)</b>	<b>721</b>	<b>771</b>	<b>819</b>
AWW/Sahayika	75.7	78	68.7
ANM	28	24	43.6
ASHA	23.3	25.8	20.8
MO	8.7	5.4	2.9
Others (relative/family members/neighbour , self)	1.1	0.6	3.6
Not specified	0.3	0.8	2
<b>Receipt of Vit A (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	68.5	73.1	62.7
No	31.5	26.9	37.3

The following findings have emerged.

- Almost 55 percent of the mothers in intervention districts (51% in intervention and 59% in intermediate AWCs) received 90 or more IFA tablets. The proportion of such mothers was only 28 percent in control AWCs.
- Regarding consumption of IFA tablets, 38 percent in intervention districts (36% in intervention and 40% in intermediate AWCs) consumed 90 or more tablets, while the proportion of such mothers was 24 percent in control AWCs.
- Disliking of the taste and stool became black were cited as the main reasons for consuming lesser tablets than the received ones.
- AWW was reported as the main source for advising to take IFA tablets, followed by ANM and ASHA.
- About 71 percent of the mothers in intervention districts, (68% in intervention and 73% in intermediate AWCs) received vitamin A dose. The proportion of such mothers was relatively lesser in control AWCs (63%).

#### **4.1.6 Rest and intake of extra meal per day**

From Table 4.6, the following findings have emerged

- Majority of the mothers (69%) in intervention districts (78% in Janjgir and 60% in Korba) took rest once in a day during the reference pregnancy against a corresponding figure of 47 percent in control district. In control district, 49 percent of the mothers reported to have rest twice in a day.
- Mean hours of rest taken in a day was around 2 in intervention districts against a corresponding figure of 2.63 in control district.
- Only 23 percent of the mothers in intervention (18% in Janjgir and 29% in korba district; with no difference in intervention and intermediate intervention AWCs) and 17 percent in control district reported to have an extra meal per day during the reference pregnancy **always**.

**Table 4.6: Rest and extra meal taken per day during the last pregnancy**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Number of times took rest during the day (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Once	68.4	69.5	46.5
Twice	26.3	23.2	48.5
Thrice or more times	5.1	6.5	4.9
Not specified	0.2	0.7	0.1
<b>No. of hours rest taken (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
1	31	27.1	13.1
2	44.1	48.3	44.7
3	12.4	13.2	18.3
4 or more	12.4	10.9	23.8
Not specified	0	0.5	0.1
Average hours	2.07	2.09	2.63
<b>Taken an extra meal per day (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes, always	22.8	23.7	17
Yes, most of the time	16.1	13	2.5
Yes, some time	33.3	34.7	24.1
Yes, rarely	6.6	7.8	26.2
Never	20.9	19.9	29.9
Not specified	0.2	0.8	0.3

#### 43 4.2 Natal care

Information on place of delivery of the reference child and whether benefits of Janani suraksha yojana availed or not was collected. Table 4.7 provides such information.

##### 4.2.1 Place of delivery

Only 27 percent of the mothers in intervention districts (25% in intervention AWCs and 29% in intermediate AWCs) and 30 percent in control district delivered the reference child in some health facility. The proportion of such mothers was 18 percent in Janjgir and 37 percent in korba district.

##### 4.2.2 Receipt of benefit of JSY

About 31 percent of the mothers in intervention districts (28% in intervention and 33% in intermediate AWCs) and 38 percent in control AWCs reported to have received the benefits of JSY. The proportion of mothers who received benefits of JSY was more than those who delivered the reference child in some health facility. It appeared that some of them might have received benefits of JSY during the antenatal period and did not deliver the baby in some health facility.

**Table 4.7: Place of delivery and receipt of benefits of JSY****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Place of delivery (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Home	74.6	70.7	69.8
Institution (PHC / CHC / Hospital)	25.4	29.3	30.2
<b>Whether availed benefits of Janani Suraksha Yojana (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	28.5	32.7	37.7
No	71.5	67.3	62.3

#### 44 4.3 Awareness and utilization of services of AWCs during the last pregnancy

A set of questions was asked from each respondent to assess their knowledge on functioning of AWC. In addition, information on receipt of supplementary nutrition by respondents and their reference child from AWC, visit & purpose of visit of AWW/ AW helper to the household, organization of NHDs at AWC, participation in NHDs and knowledge on home visit of AWW or ANM. This section discusses on all these aspects.

##### 4.3.1 Awareness about functioning of AWCs

###### 4.3.1.1 Knowledge about services being provided at AWC

All the surveyed mothers/ caregivers were asked what services are provided at AWC. Their spontaneous responses were recorded without prompting. Table 4.8 provides their responses.

**Table 4.8: Knowledge about type of services being provided at AWC****(Percentage)**

Type of services being provided at AWC	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Supplementary nutrition to women and children	86.8	88.4	90.6
Immunization to children	77.7	76.1	86.6
Pre-school education to children (3-6 years)	23.4	30.3	13.6
Health check-ups	10.9	10	7.3
Referral services	3.3	2.3	3
Weighing of children	41.4	40.3	39.6
Nutrition and health education	12.9	9.5	6.7
Weighing of pregnant women	21.7	21	11
Supply of vit A and IFA tablets	19.9	21.7	17.4
Nothing	2.7	1.8	3.8

- More than three – fourths of the respondents in both intervention and control districts reported “supplementary nutrition to women and children” and “immunization of children” as the services which are provided at AWC. About two - fifths of them pointed out that the children are weighed at AWC.

- “Pre – school education to children aged 3-6 years” and “nutrition & health education” were reported by 27 percent and 11 percent of the respondents in intervention districts respectively. The corresponding figures in control district were 14 percent and 7 percent respectively. The other services were reported by 20 percent or less respondents in both intervention and control districts, showing thereby that the respondents had poor knowledge of the services being provided at AWC.

#### 4.3.1.2 Visit by AWW/ AW helper for collecting children

All the surveyed respondents were asked whether AWW/ AW helper come to their household to collect children and if yes, what was the purpose of their visit. Table 4.9 in provides such information.

**Table 4.9: Awareness of visit of AWW/ AW helper for collecting children**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether AWW/AW helper come for collecting children (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	70.9	75.6	77.5
No	29.1	24.4	22.5
<b>Purpose(s) of AWW/AW helper visit to house (n=)</b>	<b>587</b>	<b>638</b>	<b>716</b>
For providing supplementary nutrition	77.9	77	80.3
For pre-school education	61.3	56	84.1
For growth monitoring of child	24.2	24.9	22.3
For immunization	40.4	45.9	43.3
Nothing	0.2	0.2	0.7

The following findings have emerged from the table.

- Almost 73 percent of the respondents in intervention districts (66% in Janjgir and 81% in korba) and 77 percent in control district had reported the visit of AWW/AW helper for collecting children to their house.
- Providing supplementary nutrition, pre-school education and immunization were reported as the main purpose for visiting their household to collect children. Here the pre- school education was reported by more number of respondents than under the services being provided at AWC. The reason for it might be that here the respondents were specifically asked about the purpose of collecting children. Under services at AWC, their spontaneous responses were recorded without prompting.

#### 4.3.1.3 Home visits by AWW/ ANM

All the surveyed respondents were asked whether AWW or ANM make home visit and if yes, they were further enquired whose houses she visits. Table 4.10 provides such information.

**Table 4.10: Knowledge of home visit of ANM/AWW****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether AWW or ANM does home visit (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes, AWW only	70.7	74.2	43.9
Yes, ANM only	4	1.2	3.6
Yes, both	6.6	7.2	28.5
None	18.7	17.4	24
<b>Whose houses she usually visits (n=)</b>	<b>673</b>	<b>697</b>	<b>702</b>
All houses	71.8	72	93
BPL families	1	2	15.1
Pregnant and lactating mothers	30.8	28.8	36.9
Houses with young children	39.8	40.3	41
Houses with children 3-6 years	14.1	16.8	4.4

The following findings have emerged from the table.

- Almost 72 percent of the respondents (63% in Janjgir and 82% in Korba district) reported that only AWW made home visits against a corresponding figure of 44 percent in control district. Less than 5 percent of the respondents in both intervention districts (3%) and control district (4%) reported home visits by ANM, while 7 percent in intervention and 28 percent in control district stated home visits by both. About one – fifth of the respondents in intervention districts and 24 percent in control district mentioned that they do not make home visits.
- Majority of them (72% in intervention districts and 93% in control district) were of this view that they visit all houses.
- About two – fifths of them reported that they visit to houses with young children. Next to it are the houses with pregnant and lactating mothers (30% in intervention and 37% in control district).

#### 4.3.1.4 Knowledge of organization of NHDs at AWC

**Table 4.11: Distribution of mothers/caregivers by knowledge of nutrition and health days organized at AWC****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether nutrition and health day organized at AWC (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	83.9	87.4	44.2
No	16.1	12.6	55.8
<b>Whether participated regularly (n=)</b>	<b>695</b>	<b>738</b>	<b>408</b>
Yes	63.7	61.1	52.5
No	36.3	38.9	47.5
<b>Type of activities undertaken (n=)</b>	<b>443</b>	<b>451</b>	<b>214</b>
Immunization of children	96.8	96.9	96.3
Growth monitoring of children	22.6	23.7	59.8
ANC to pregnant mothers	17.4	18.4	23.8
TT to pregnant mothers	59.8	51.9	68.7
Distribution of take home ration for children	30.2	28.8	26.2
Nutrition and health education to mothers	22.1	23.3	12.6

From Table 4.11, the following findings have emerged.

- More than four-fifths of the respondents (84% in intervention and 87% in intermediate AWCs) and 44 percent in control district had expressed their knowledge of holding NHDs at AWC
- Regarding their participation in NHDs, 62 percent in intervention districts (55% in Janjgir and 69% in Korba district) replied in affirmative. The corresponding figure in control district was 52 percent.
- Regarding type of activities undertaking on NHDs, almost all of them reported "immunization of children (96-97%)."

### 4.3.2 Utilization of services at AWCs

#### 4.3.2.1 Receipt of supplementary nutrition food

All the surveyed respondents were asked whether the mothers received supplementary nutrition from AWC during their pregnancy. Those who received supplementary nutrition from AWC were further asked about nature of nutrition received and its consumption pattern. Table 4.12 provides such information.

**Table 4.12: Receipt of supplementary nutrition from AWCs during the last pregnancy (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether received supplementary nutrition (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	83.8	85.3	87.8
No	16.2	14.7	12.2
<b>Nature of nutrition received (n=)</b>	<b>694</b>	<b>720</b>	<b>811</b>
Cooked meal	22.9	27.2	4.3
Take home ration	76.5	72.5	94.9
Not specified	0.6	0.3	0.7
<b>Usually eaten all the given food (n=)</b>	<b>694</b>	<b>720</b>	<b>811</b>
Yes	29.8	29.4	28.1
No	70.2	70.6	71.3
Not specified	0	0	0.6

The following main findings have emerged.

- As high as 85 percent of the mothers in intervention districts [higher in korba (91%) than Janjgir (79%)] and 88 percent in control district reported to have received supplementary nutrition from AWC.
- About three – fourths of the mothers in intervention districts received "take home ration". The proportion of such mothers was higher in Janjgir (92%) than in korba (58%), whereas in control district, 95 percent reported to have received such a ration.
- Slightly less than 30 percent of the mothers in both intervention districts (29.6%) and control district (28%) of those who received supplementary nutrition ate all the food received by them. The proportion of such mothers was higher in korba (49%) than in Janjgir (8%). About two - fifths of the mothers in korba district received "cooked food" and that is why the consumption of food was higher in this district.

### 4.3.2.2 Receipt of supplementary nutrition by the reference child

- Around four – fifths of the respondents reported that their reference child was getting supplementary nutrition from AWC in both intervention and control districts. The proportion of such mothers was higher in korba (92%) than in Janjgir (68%) (Table 4.13).
- Average number of days in a month their reference child receive supplementary nutrition from AWC comes out to be 16 in intervention districts (11 in Janjgir and 20 in korba) and 13 in control district. It means that children are getting food on alternative days from AWC.

**Table 4.13: Receipt of supplementary nutrition by the reference child**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether child taking supplementary nutrition from AWC (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	77.9	80.9	81.7
No	22.1	19.1	18.3
<b>Number of days in a month supplementary nutrition/meal are given (n=)</b>	<b>645</b>	<b>683</b>	<b>755</b>
< 7 days	40.2	31	53.4
7-14 days	2.2	2.2	1.3
15-21 days	16.6	15.8	6.4
More than 21 days	41.1	51	38.9
Average	15.33	17.19	13.22

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### 46 4.3.2.3 Visit by any grass root level worker

All the surveyed respondents were asked whether any grass root level worker such as AWW, ANM and ASHA visited the mother during the reference pregnancy and if yes, they were further enquired who visited and what was their frequency of visits. Table 4.14 provides such data.

**Table 4.14: Visit of ICDS worker at home during the last pregnancy**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether any health or ICDS worker visited (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	63.5	61.7	66.9
<b>Who visited (n=)</b>	<b>526</b>	<b>521</b>	<b>618</b>
AWW	79.5	79.3	95.3
ANM	12.7	12.1	23.1
ASHA	29.1	37	29.6
<b>Frequency of visit (n=)</b>	<b>526</b>	<b>521</b>	<b>618</b>
Once in a fortnight	41.8	42.8	48.5
Once in month	42.8	43.8	49.7
Once in a quarter	3.4	2.3	1
Sometimes	12	11.1	0.8
<b>Time spent during last visit (n=)</b>	<b>526</b>	<b>521</b>	<b>618</b>
Less than 10 minutes	58.4	47.8	69.4
11-20 minutes	23.6	32.8	24.6
More than 20 minutes	18.1	19.4	6
Average	14.15	15.08	11.13

- About 63 percent of the respondents in intervention districts (with no difference in Janjgir and korba) and 67 percent in control district reported to have visited by any ICDS worker.

- Almost 79 percent of them in intervention districts and 95 percent in control district were visited by AWW. Next to it was ASHA who visited the mothers during the reference pregnancy (33% in intervention and 30% in control district), while relatively a smaller proportion of mothers (12% in intervention districts and 23% in control district) were visited by ANM. Their visit was either fortnightly or monthly.
- Mainly the workers discussed on early newborn care, immunization of children, complementary feeding to children, feeding to child and cleanliness.
- On an average, a worker spent 15 minutes per household during their last visit in intervention districts and slightly less in control district (11 minutes).

#### 47 4.4 Child health and nutrition

##### 4.4.1 Knowledge of preventable diseases among children through vaccination

48

49 All the surveyed mothers / caregivers were asked whether they were aware of diseases among children which could be prevented by vaccination and if yes, which diseases could be prevented. Table 4.15 provides such information.

**Table 4.15: knowledge of preventable diseases among children by vaccination (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether aware of disease which can be prevented by vaccination (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	65.8	64.7	53.7
<b>Diseases which can be prevented by vaccinations (n=)</b>	<b>545</b>	<b>546</b>	<b>496</b>
TB	36.5	41.2	41.7
Diphtheria	4.4	3.5	3.6
Pertussis	12.8	12.1	4.2
Tetanus	31.7	37.4	45.2
Polio	86.4	87.2	93.3
Measles	52.3	54.4	75.4
Hepatitis	0.2	0.4	0.2
Typhoid	14.3	14.3	13.9
Pneumonia	0	0	0.6
Jaundice	0.4	0	0.2
Don't know	1.7	2	0.2

The following findings have emerged from the table.

- Nearly two – thirds of the respondents in intervention districts (62% in Janjgir and 69% in Korba) and 54 percent in control district had expressed their awareness of the diseases that could be prevented by vaccination.

- A vast majority of them named polio (87% in intervention districts, with vast variation between study intervention districts and 93% in control district), followed by those who mentioned measles (53% in intervention districts and 75% in control district). T.B. was reported by 39 percent and 42 percent of the respondents in intervention and control district respectively, while tetanus was cited by 35 percent and 45 percent of the respondents in intervention and control district respectively. Very few respondents reported diphtheria and pertusis which could be prevented by vaccination.

#### 4.4.2 Immunization status of children aged 12-23 months

The vaccination of children against six serious but preventable diseases (tuberculosis, diphtheria, pertusis, tetanus, poliomyelitis and measles) has been a cornerstone of the child care system in India. The mother/ caregiver was asked whether the child had received a vaccination against tuberculosis (BCG); diphtheria, whooping cough (pertusis) and tetanus (DPT); poliomyelitis (polio) and measles. Further, information on the number of doses of the vaccine given to the child was collected. The 12-23 months age group of children were chosen for analysis because both international and Government of India guidelines specify that children should be fully immunized by the time they complete their first year of life. Children who have received BCG, measles and three doses each of DPT and polio (excluding polio at birth) are considered to be fully vaccinated / immunized.

**Table 4.16: Immunization status of children aged 12-23 months** (Percentage)

Type of vaccination received / no. of doses	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>114</b>	<b>118</b>	<b>120</b>
<b>BCG (1)</b>	78.1	73.7	99.2
<b>DPT (3+)</b>	51.8	46.6	40
<b>Polio (3+)</b>	54.4	52.5	47.5
<b>Measles (1+)</b>	65.8	61.8	82.5
Received full immunization (1BCG+3DPTs+3Polio doses+1Measles)	44.7	42.4	25

- Forty three percent of the children aged 12-23 months were fully vaccinated in intervention districts (41% in Janjgir and 46% in korba). The corresponding figure of fully vaccinated children aged 12-23 months was 25 percent in control district (Table 4.16).
- Coverage of each vaccination was much higher than the percentage fully vaccinated. BCG and Measles vaccine had been received by 76 percent and 64 percent of children age 12-23 months respectively in intervention districts against the corresponding figures of 99 percent and 82 percent respectively in control district. The proportion of such children was higher in Janjgir than korba. Three doses each of DPT and polio were received by 49 percent and 53 percent of the children in intervention districts. The corresponding figures in control district were 40 percent and 47 percent respectively.

#### 4.4.3 Receipt of vitamin A dose by children aged 9 months and above

First dose of vitamin A is given to a child at the age of 9 months and then it is given at an interval of 6 months till a child get 6 doses of it. So , the children who had completed 9 months of their age at the time of survey were chosen for analysis regarding the receipt of vitamin A doses. Table 4.17 provides such data.

**Table 4.17: Receipt of vitamin A dose by children aged 9 months and above (Percentage)**

Vitamin A drops	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>680</b>	<b>708</b>	<b>818</b>
0	10	7.9	5.6
1	38.5	41.5	26.4
2	9.6	7.1	22.9
3	7.1	5.5	11.4
4	1.5	1.7	5.5
5	1.5	1.1	0.4
6+	1.8	2.3	12.1
Not specified	30.1	32.9	15.8

The main findings are as follows:

- About 9 percent of the children aged 9-66 months in intervention districts (15% in Janjgir and 3% in korba) and 6 percent in control district did not receive any dose of vitamin A.
- About two – fifths of children in intervention districts (32% in Janjgir and 49% in korba) and 26 percent in control district received only one dose of vitamin
- The receipt of vitamin A dose was better in control district than intervention districts

#### 4.4.4 Place of vaccination

Those mothers/ caregivers who reported that their child had received any vaccination (including vitamin A dose) were further asked about the place where their child received vaccination . Table 4.18 provides such information.

**Table 4.18 : Place of vaccination of the child (Percentage)**

Place of vaccination*	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>818</b>	<b>834</b>	<b>918</b>
Sub-centre	8.6	4	19.2
AWW centre	85.6	87.4	84.2
Home	5.1	5.8	1.5
Hospital	12.2	13.3	14.1
Others (school , Common place in the village )	0.5	0.9	1.3
Not specified	0.1	0.1	0.2

\*Multiple response

- More than 85 percent of the respondents in intervention districts, (with no difference between study intervention districts and intervention & intermediate AWCs) reported

that their child was vaccinated at AWC. The corresponding figure in control district was 84 percent. The next place of receiving vaccination was hospital in intervention districts (13%) and subcenter in control district (19%) , followed by hospital (14%).

#### 4.4.5 Sources of information for vaccination

All the mothers / caregivers who reported that their child had received any vaccination (including vitamin A dose), were further asked what was their sources to know about vaccination. Table 4.19 provides such data.

**Table 4.19 : Sources of information for vaccination**

Sources of information for vaccination*	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>818</b>	<b>834</b>	<b>918</b>
Private/Govt. doctor	7.3	6.1	8.2
ANM	30.8	31.2	48.6
AWW/Sahayika	72.6	69.1	61.2
ASHA (Mitani)	23.6	25.9	20.7
Others (relative/family members/neighbour , Self, Private hospital)	2.6	5.4	2.7
Not specified	0.7	0.1	0.4

\*Multiple response

- AWW/sahayika was reported as the main source of learning about vaccination of children , followed by those who came to know from ANM and ASHA in both intervention and control district.

#### 4.4.6 Availability of child vaccination card

All the surveyed mothers / caregivers were asked whether the child vaccination card was available and if yes, it was verified from the card whether it was updated regularly or not. Table 4.20 provides such information.

**Table 4.20 : Availability of the vaccination card of the child**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether child vaccination card available (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	65	66.7	53.6
No	35	33.3	46.4
<b>Whether it was updated regularly(n=)</b>	<b>538</b>	<b>563</b>	<b>495</b>
Yes	81	79	73.1
No	18.2	18.8	23.8

- In about two – thirds of the cases in intervention districts (59% in Janjgir and 73% in korba) and 54 percent in control district, the card was available with the respondent. In most the cases (80% in intervention districts and 73% in control district, it was updated regularly. There was no difference between the intervention

districts of Janjgir & Korba and between intervention & intermediate intervention AWCs.

#### 4.4.7 Morbidity among children and treatment pattern

As the major causes of death among infants and children in India are active respiratory infection, diarrhoea and fever, the survey collected information on whether the index child suffered frequently from these diseases and if yes, whom they consulted for treatment of the child and what type of food was given to the child during illness. Table 4.21 provides such data.

**Table 4.21 : Suffering of children from fever, cough and diarrhea, their treatment seeking behavior and type of food given during illness**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether child suffers frequently from fever, cough and diarrhea (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes, fever only	13	9.1	20.6
Yes, cough only	9.5	7.2	6.7
Yes, diarrhea only	2.9	3.9	2.8
Yes, any two	20.5	24.2	36.9
Yes, all three	5.7	4.6	16.9
None	48.3	50.9	16.1
<b>Whom consulted for treatment* (n=)</b>	<b>428</b>	<b>414</b>	<b>775</b>
None	3.5	1.9	2.7
Govt. doctor	36.7	38.2	66.5
Pvt. Doctor	67.8	71.5	58.1
Health worker	13.6	7	20.5
Home treatment	15.9	15.5	11
Others	1.6	0.7	0.3
<b>Type of food given during illnesses* (n=)</b>	<b>428</b>	<b>414</b>	<b>775</b>
Nothing	7.9	8.5	2.1
Semi-solid food	55.1	51.4	37.3
Solid food	38.3	46.1	45.3
Liquid	35.5	30.7	46.3
Same what was given when not sick	11.7	8.5	21.7
Fruit	0.5	0.7	0.8
Not specified	0.2	0.5	1

\*Multiple response

The following findings have emerged from the table.

- About half of mothers / caregivers in intervention districts (71% in Janjgir and 29% in korba) and 84 percent in control district reported that their index child had these problems frequently
- They mainly consulted the private doctor for treatment of their child , followed by those who approached Govt. doctor. The proportion of the respondents who consulted Govt. doctor was higher in control district (66%) than intervention districts (37%). About 16 percent in intervention districts and 11 percent in control district) gave home treatment.
- Semi – solid food (53%), solid food (42%) and liquid (33%) were given to the child during illness in intervention districts whereas liquid (46%) , solid food (45%) and semi – food (37%) were the preferred types of food that were provided to the child during illness in control district.

#### 4.4.8 Breastfeeding and supplementation

**Exclusively breastfeeding among children aged 6+ months:** Slightly less than half of the children aged 6+ months in intervention and intermediate AWCs and one –fifth in control districts were exclusively breastfed for at least six months; with vast difference between Janjgir (57%) and korba (39%) (Table 4.22).

**Table 4.22 : Children aged 6+ months exclusively breastfed for at least 6 months (Percentage)**

Exclusively breastfed for at least six months	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>732</b>	<b>755</b>	<b>870</b>
Children aged 6+ months exclusively breastfed for at least six months	47.5	49.1	20.1

**Age of the child when stopped breastfeeding :** More than two – fifths of the respondents reported to have stopped breastfeeding after 1 year (47% in intervention , 41% in intermediate and 46% in control AWCs) , while less than 40 percent are still breastfeeding (35% in intervention, 38% in intermediate and 32%in control AWC)- Table 4.23.

**Age of starting complementary feeding :** Only less than 5 percent of the respondents in both intervention and control district started complementary feeding before 6 months of age of the child. About 47 percent of the respondents in intervention districts and 25 percent in control district started complementary feeding when the child was 7 months old. About 29 percent in control district started at the age of 6 months of child (Table 4.23). Regarding type of complementary to the child by age when started and type of food taken by the child in the last 24 hours, Tables 4.25 A & 4.26A in Annexure – 2 may please be referred.

**Table 4.23: Distribution of children ages 6+ months by age when stopped breastfeeding and age when started complementary feeding****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Age of the child in months when stopped breastfeeding (n=)</b>	<b>682</b>	<b>696</b>	<b>812</b>
Less than 3 months	0.1	0.1	0
3-5 months	0.6	0.3	0.4
6-9 months	5.6	2.6	4.6
10-12 months	10.4	16.5	14.8
More than 12 months	46.8	41.2	45.8
DK/CS	1.5	1	2.1
Still breastfeeding	35	38.2	32.4
<b>Age of the child, when started complementary feeding in addition to breastfeeding (n=)</b>	<b>682</b>	<b>696</b>	<b>812</b>
Not yet started	0.3	1	0.9
Less than 6 months	3.8	2.2	4.4
6 months	21.6	23.3	28.8
7 months	46.6	46.6	24.9
8 months	13.3	11.9	17.7
9 months or more	13.2	13.1	22.4
Not specified	1.2	2	0.9

**Ways to give complementary feeding:** Majority of the children (60% in intervention & 70% in intermediate and 57% in control AWCs) eat in – separate bowl with spoon (Table 4.24).

**Table 4.24: Distribution of children aged 6+ months by ways how the complementary feeding was given****(Percentage)**

Way how the complementary feeding was given (other than breast milk)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>732</b>	<b>755</b>	<b>870</b>
In a separate bowl with spoon	60.4	70.3	57
Ate in family members plate	25.4	28.7	32.1
Ate with mother	41	37	22.5
With hand	8.1	7.4	6.6

#### 4.4.9 Frequency of bathing the child

Frequency of bathing the child daily was almost universal in both intervention and control districts (Table 4.25).

**Table 4.25: Frequency for giving bath to the child**

Frequency of giving bath to child (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
Daily	97.5	98.2	97
On alternate days	2.2	1.5	2.8
Once in a week	0.1	0	0.2
Occasionally	0.1	0.2	0

### 50 4.5 Growth monitoring of the child

#### 4.5.1 Awareness

##### 4.5.1.1 Ways to know how the child is growing well

All the surveyed respondents were asked how they come to know that their child is growing well. Table 4.26 provides their responses.

**Table 4.26: Knowledge of mothers / caregivers on how they come to know that their child is growing well**

Way to know that the child is growing well (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
By weight of child	68.2	69.4	69.8
By height of child	75.8	75.6	73.5
Appetite of child/child eats well	32.2	32.8	24.3
Child is not weak	21.6	18.8	47.3
Child is playful	30.1	32.8	65.5
Doesn't cry all the time	9.3	10.3	13.9
Other	5.5	8.5	2

The main findings are as follows:

- Nearly three – fourths of the respondents in both intervention districts (with no difference between Janjgir and korba) and control district reported height of the child as an indicator to know growth.
- About 70 percent in both intervention districts (62% in Janjgir and 86% in korba) and control district reported weight as the measured for growth.
- Other indicators cited by respondents were "appetite of child / child eats well" (33%), "child is playful" (32%) and "child is not weak" (20%) in intervention districts; with vast variation between Janjgir and korba. In control district, 66 percent reported "Child is playful", while "child is not weak" and "appetite of child / child eats well" were cited by 47 percent and 24 percent respectively.

#### 4.5.1.2 Knowledge of frequency of taking weight

- Two – thirds of them in intervention districts (51% in Janjgir and 79% in korba) and 77 percent in control district reported measurement of weight of the child aged 0-3 years monthly. About one – fifth in intervention districts and 14 percent in control district had expressed their inability on this issue (Table 4.27).
- Regarding frequency of measurement of weight of the child ages 3.1-6.0 years, 48 percent in intervention districts (26% in Janjgir and 66% in korba) and 75 percent in control district said monthly. About one – third of them were not aware of it (Table 4.27).

**Table 4.27: Knowledge of mothers/caregivers by frequency of measurement of weight of the child**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Frequency of taking weight for children 0-3 years of age (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
Monthly	67.3	65.9	77.4
Quarterly	7.8	8.3	6.4
Half yearly	5.1	3.6	1.1
Others	1.4	1.8	0.7
DK	18.4	20.6	14.4
<b>Frequency of taking weight for children 3.1-6 years of age (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
Monthly	45.7	50.4	74.8
Quarterly	11.3	6.5	6.4
Half yearly	7.1	6.6	1.6
Others	2.2	1.6	1.8
DK	33.7	35	15.3

#### 4.5.1.3 Knowledge of maintenance of age – growth card of the child at AWC

- Nearly 47 percent of them in both intervention and control district reported maintenance of age – growth card of their child at AWC
- Out of them, about one – fifth in both intervention and control districts were informed about status of growth / nutrition status of their child by AWW.
- Regarding the purpose of weight – for – age growth card, 82 percent in intervention districts and 65 percent in control district knew that “it helps to know about the growth of the child”, “while 51 percent in intervention districts and 61 percent in control district expressed that” they come to know whether their child is malnourished or not” (Table 4.28).

**Table 4.28: Knowledge of mothers / caregivers about weight for age growth card (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether weight for age growth card maintained at AWC (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
Yes	49.5	44.1	47.3
<b>Whether the health/ICDS worker informed about status of growth/nutritional status of the child (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	23.8	20.6	18.5
<b>Purposes of weight-for-age growth card (n=)</b>	<b>197</b>	<b>174</b>	<b>171</b>
Helps to know the growth of children	78.7	86.8	65.5
Come to know if the child is Malnourished	44.7	58.6	60.8

## 4.5.2 Practice

### 4.5.2.1 Measurement of weight and height of the child

All the surveyed respondents were asked whether they ever got weight and height of their child measured and if yes, they were further enquired where it was measured and who measured it. Table 4.29 provides such details.

**Table 4.29: Distribution of mothers/caregivers by measurement particulars of height and weight of their child (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether ever got measured the weight and height (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes, measured weight only	57.9	57.1	53.8
Yes, measured height only	1.6	1.8	2.2
Yes, measured both	19.3	19.9	23.2
No, not measured any	21.3	21.2	20.9
<b>Place of measurement (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
AWC	92.9	93.4	93
PHC/CHC	2	2	13.1
District hospital	1.7	1.1	10
Govt. hospital	6	5.9	16.8
Pvt. Hospital	10.1	13.7	11.5
Not specified	0.2	0.3	0.8
<b>Worker who measured (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
AWW	91	90.8	80.2
ANM	16.7	16.1	48.4
Others (brother, ASHA, Doctor)	2.7	4.2	3.1
Not specified	0.8	0.5	0.7

**Table 4.29: Distribution of mothers/caregivers by measurement particulars of height and weight of their child (Contd..)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Time when the child was weighed last time (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
1 week back	10.1	8.4	6.7
2 week back	14.1	11.9	33.1
1 month back	39	44.1	36.9
2 or more months back	33.9	32.2	16.9
Not Specified	2.9	3.5	6.3
<b>Whether Verified from the card (n=)</b>	<b>652</b>	<b>665</b>	<b>731</b>
Verified	11.3	11.3	10.1
Not verified	19.9	25.6	8.3
Card was not available	68.7	63.2	81.5

- Nearly four – fifths of them reported that weight or height or both were ever taken in both intervention and control district.
- A vast majority of them (93% in both intervention and control districts) reported AWC as the place where the measurement was taken.
- AWW was reported as the main worker who took measurement (91% in intervention and 80% in control district). About half of the respondents in control district also reported that ANM had taken the measurement.
- When the respondents were asked about time of weighing their reference child last, 64 percent in intervention districts (58% in Janjgir and 68% in Korba) and 77 percent in control district reported that their child was weighed during the last month. In majority of the cases (66% in intervention districts and 81% in control district), the card was not available (Table 4.29).

## 51 4.6 Cleanliness and hygienic practices

Information on hand washing practices of the respondents before cooking food, serving food to children and eating food was ascertained. Further, they were asked what material they used during hand washing and what safe practices following while cooking and keeping the food after preparation. They were also asked how often they gave bath to their child. This chapter discusses on all these aspects.

### 4.6.1 Hand washing practices during handling food

All the surveyed respondents were asked whether they washed their hands before cooking food, serving food to children and eating food. Table 4.30 provides their responses. The following findings have emerged from this table.

**Table 4.30: Hand washing practices during handling food****(Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
<b>Washing hands before cooking food</b>			
Always	92.8	96	95.1
Sometimes	6.3	3.4	3.4
Occasionally	0.7	0.6	1.2
Rarely	0.2	0	0.1
Never	0	0	0.2
<b>Washing hands before giving food to children</b>			
Always	86.2	90.3	76.5
Sometimes	12.8	8.8	8.9
Occasionally	1	0.9	14.4
Rarely	0	0	0.2
<b>Washing hands by children before taking food</b>			
Always	74	76.3	81.6
Sometimes	24.4	22.6	10.7
Occasionally	1.1	0.7	3.9
Rarely	0.4	0.4	3.6
Never	0.1	0	0.2
<b>Item used in washing hands</b>			
Soap	49.6	48.3	79.3
Ash	5.9	7.1	1
Mud/ soil	0.8	1.3	0.4
Water only	59.1	61.8	23.6

- Almost 94 percent of the respondents in intervention districts (92% in Janjgir and 97% in korba) and 95 percent in control district of Raigarh reported washing hands **always** before cooking food.
- Regarding washing hands always before serving food to children, 88 percent in intervention districts (79% in Janjgir and 97% in korba; with no difference between intervention and intermediate AWCs) reported in affirmative. The proportion of such respondents was lower in control district (76%).
- Almost three – fourths of the respondents in intervention districts (56% in Janjgir and 96% in korba) and 82 percent in control district reported washing hands **always** before taking food.
- Practice of washing hands before cooking was better in Janjgir and Raigarh than that of washing hands before serving food and taking food. On the other hand , there was no difference in korba regarding washing hands on these occasions.
- About 60 percent of the respondents in intervention districts (67% in Janjgir and 53% in Korba) and 24 percent in control district reported of washing hands with water only. About one – half in intervention district (with no difference between Janjgir and korba use soap to wash their hands. The proportion of such respondents was 79 percent in control district. The use of ash was reported by 6 percent in intervention districts and 1 percent in control district.

#### 4.6.2 Practices in handling food before and after preparation

All the surveyed respondents were asked whether they wash pulses and vegetables thoroughly in clean water before cooking, cover the pot with a lid while cooking and how they keep the food after cooking. Table 4.31 provides such information. The main findings emerged out from the table are as follow:

**Table 4.31: Hygienic practices of mothers / caregivers in preparation and keeping food (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Washing pulses and vegetables thoroughly in clean water before cooking (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Always	95.2	97.5	99.2
Sometimes	3.7	1.8	0.4
Occasionally	1.1	0.6	0.2
Rarely	0	0.1	0
Never	0	0	0.1
<b>Covering the pot with a lid while cooking</b>			
Always	94.7	94.3	93
Sometimes	4.1	4.3	1.5
Occasionally	1.2	1.4	5.4
Never	0	0	0.1
<b>Way of keeping food after cooking</b>			
Covered with lid	98.9	98.8	89.6
Keep open till it is served	1.1	1.2	10.4

- Washing pulses and vegetable thoroughly in clean water before cooking was almost universal in both intervention and control districts.
- A vast majority of the respondents (93-94%) in both the intervention districts (90% in Janjgir and 99% in korba) and control district reported covering the pot **always** with a lid while cooking food.
- Almost all the respondents in intervention districts (99%) and 90 percent in control district **always** cover the food with lid after cooking.

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## 60 CHAPTER –V

### 61 CAREGIVER'S UNDERSTANDING AND PRACTICE OF CHILD DEVELOPMENT

This chapter discusses about the understanding and practices of development of children aged 3-3.5 years and 5-5.5 years. The broad areas covered in this chapter are: "simulation environment of children 3-3.5 years for doing activities out side and inside home, care taken by father and activities undertaken to develop different senses in children aged 3-3.5 years for sight, smell, sense , taste and touch; development status of children aged 3-3.5 years with regard to their behavior and development aspects as perceived by caregivers and school going practices of children aged 5-5.5 years. In addition, this chapter discusses about development status of children aged 5-5.5 years with respect to gross motors, vision & fine motors , cognitive , language and social emotional through asking a number of questions under each and awareness of caregivers on age specific needs and rights of children.

#### 62 5.1 Stimulation environment for children aged 3 – 3.5 years

##### 5.1.1 Activities outside home

A series of questions were asked on what practices caregivers follow for development of their child aged 3-3.5 years whether they allow their child to play outside home and if yes , how much time they give to their child to play, with whom & where the child plays . They were further questioned whether they take their child outdoor to show things & if yes, what is the frequency of taking the child outdoor. Table 5.1 provides such data.

**Table 5.1: Playing activities of their child aged 3 - 3.5 years outside home**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether allow child to play outside the house (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	97.7	97.5	95.1
<b>Time given to play outside the house (n=)</b>	<b>432</b>	<b>429</b>	<b>443</b>
< 15 minutes	6	3	5
16-20 minutes	19	13.8	5.6
21-30 minutes	20.8	26.3	22.1
More than 30 minutes	54.2	56.9	67.3
<b>With whom child plays most (n=)</b>	<b>432</b>	<b>429</b>	<b>443</b>
Neighbor's children	92.6	94.2	88.9
Siblings	67.8	71.6	63.7
<b>Whether the child plays at a specific place (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	33	33.4	69.5
<b>Specific place where the child plays most (n=)</b>	<b>146</b>	<b>147</b>	<b>324</b>
Ghar ka angan	72.6	81.6	89.8
<b>Whether child is taken outdoor to show things (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	81.4	79.8	80
<b>Frequency of taking the child outdoor to show things (n=)</b>	<b>360</b>	<b>351</b>	<b>373</b>
Once a month	35.6	38.2	76.7
Twice a month	36.4	31.9	15
Occasionally	20.3	21.1	6.7
Others (weekly)	6.1	8.0	1.4
Not specified	1.7	0.9	0.3

The findings emerged out from the table are as follows:

- More than 95 percent of the respondents allow their child to play outside their house.

- Majority of them (56% in intervention districts and 67% in control district) gave more than 30 minutes to their child to play outside their house. The proportion of such respondents are 68 percent and 43 percent in Janjgir and korba district respectively.
- Children mostly play with neighbour's children and siblings
- Regarding specific place for playing of children , one – third in intervention and 69 percent in control district replied in affirmative. Majority of them (77% in intervention and 90% in control district) reported that the children play in ghar ka angan
- About four – fifths of the respondents take their child out door to show things
- More than 70 percent of them in intervention districts and 92 percent in control district take their child outdoor to show things either fortnightly or monthly.

### 5.1.2 Activities inside home

All the surveyed respondents were asked whether their child has toys at home and if yes, they were further enquired which types of toys their child has, who cleans the toys , whether the toys were bought or made at home and where the material of the child including toys are kept. Table 5.2 provides such information. They were also asked whether they tell a story to their child & if yes, what is the frequency of telling a story.

**Table 5.2: Playing activities of children aged 3-3.5 years inside home (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether the child has toys at home (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	80.1	80	85.6
<b>Types of toys the child has (n=)</b>	<b>354</b>	<b>352</b>	<b>399</b>
Doll	75.4	79.3	65.2
Car/bus/other motor vehicle	67.5	59.9	67.4
Bat-ball	44.6	40.9	30.6
Ball	38.4	34.9	56.1
Others	1.4	1.1	3.3
<b>Whether bought the toys or developed at home (n=)</b>	<b>354</b>	<b>352</b>	<b>399</b>
Bought	98	98.3	93
Developed at home	5.4	6.5	17.8
<b>Whether a story told to the child (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	54.1	49.1	57.5
<b>Frequency of telling a story (n=)</b>	<b>239</b>	<b>216</b>	<b>268</b>
Every day	17.2	13.4	31.3
Once a week	25.1	31	41.8
Few times in a month	55.7	52.8	26.1
DK/CS	2.1	2.8	0.7

Form the table, the following findings have emerged.

- Four – fifths of the respondents in intervention districts (88% in Janjgir and 73% in korba) and 86 percent in control district reported that their child has toys to play with inside home.

- Around two – thirds of children each have doll and car / bus/ other motor vehicle in both intervention and control district. Other toys reported by the respondents were ball and bat – ball.
- Regarding cleaning of the toys, majority of the respondents (80% in intervention districts and 87% in control district) reported that the mother of the child is responsible for it.
- A vast majority of them (98% in intervention districts and 93% in control district) reported that the toys possessed by their child were bought.
- The larger number of the respondents (44% in intervention districts and 58% in control districts ) reported to keep the material in a corner of the room , followed by those who keep them in almirah and on a table in the room.
- Around one – half of the respondents (54% in intervention AWCs & 49% in intermediate AWCs) and 57 percent in control AWCs reported that they tell a story to their child – mostly few times in a month in intervention districts and weekly or daily in control district.

### 5.1.3 Interaction with father

All the surveyed respondents were asked whether father of the child takes care of the child and if yes, what kind of help he provides and how much time he spends with the child. Table 5.3 provides such data.

**Table 5.3: Interaction of the child with father**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether husband takes care of the child (n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
Yes	92.3	91.1	85.8
Not applicable (if father is a care giver).	1.6	1.1	0.2
<b>Kind of help provided by husband (n=)</b>	<b>408</b>	<b>401</b>	<b>400</b>
Giving bath	85.8	83	85.5
Helps in eating	64	60.3	74.8
Takes the child to AWC	11.3	10.7	13.5
Helps in learning	24.8	22.9	34.8
Helps in dressing	47.1	45.6	50.3
Plays with child	29.7	35.2	21.5
Not Specified	0	0	0.5
<b>Time spent by the husband with child in a day (n=)</b>	<b>408</b>	<b>401</b>	<b>400</b>
< 15 minutes	7.4	5	3
16-30 minutes	18.1	16	9.8
31-60 minutes	25.7	23.2	22.3
61-120 minutes	10.3	16	30.3
More than 2 hours	38.2	39.7	33.8
Not specified	0.2	0.2	1
Average	72.74	77.59	81.85

Main findings are as follows.

- About 92 percent of the respondents in intervention districts and 86 percent in control district reported that the father takes care of the child.

- Mostly father provides help in giving bath to the child and in eating the child. The other kind of helps provided by father are: dressing the child, making the child learn and playing with the child.
- On an average , they spend more than 1½ hours in a day to take care of the child

#### 5.1.4 Activities undertaken to develop different senses

All the surveyed mothers / caregivers of children aged 3-3.5 years were asked what kind of activities they do to develop child's ability with regard to sight, smell, sense, taste and touch.. The following findings have emerged from Table 5.4A in Annexure -2.

- Mostly they show different birds , animals , fruits , vegetables and various other things to develop their child's ability for sight
- For smell, they mostly ask the child to see various things such as flowers, agarbeti , mud, garlic , medicine etc. and ask how the child feels after smelling.
- For sense , they mostly ask the child how he/she feels about "Marne se ehसाas hota hai" , "ant/ mosquito katne ka ehसाas hota hai", "Uchaiya se girne se ehसाas hota hai" , "Chune ka ehसाas hota hai etc.
- The respondents reported to provide different things and ask the child to eat to develop his / her taste. For this they give food, fruit , sweet , gur , salt , tea medicine , kheer etc. and ask the child how he/she feels after eating.
- For touch they mostly stated "subhe chune se uth jaata hai" , "sone ka bad chune se uth jata hai", "chune se apni aur dekhta hai" , "Ek dusare ko hath laga kar" , "chune ka ehसाas" etc.

### 63 5.2 Status of development of children aged 3-3.5 years

All the surveyed mothers/ caregivers of children aged 3-3.5 years were asked a series of questions related behavioral and development aspects whether their child had achieved or not.

#### 5.2.1 Behavioral aspects

Under behavioral aspects , five questions were asked from mothers / caregivers whether their child (i) asks to many questions, (ii) is curious to know about body parts, (iii) likes to do things himself / herself , (iv) feels jealous, if a younger baby comes in the family, being afraid of reduction in love and affection he /she was getting and (v) starts recognizing gender differences and correctly says "I am a boy or girl". Table 5.4 provides their responses.

- More than four – fifths of the respondents replied in affirmative for questions (i), (ii) and (v). About 68 percent of the respondents in intervention districts and 84 percent in control district reported that their child liked to do things himself / herself , while about two – fifths in intervention districts and 47 percent in control district expressed that their child "feels jealous if a younger baby comes in the family , being afraid of reduction in love and affection he/she was getting"

**Table 5.4: Development status of the child aged 3-3.5 years on behavioral aspects (Percentage)**

Behavioral	Intervention districts		Control district
	Intervention	Intermediate	Control

aspects	AWCs	AWCs	AWCs
<b>(n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
i.Asks too many questions	86	83	87.8
ii.Curious to know about body parts	88.5	91.8	93.1
iii.Like to do things for themselves	69.5	66.1	83.7
iv. Feels jealous if a younger baby comes in the family, being afraid of reduction in love and affection he/she was getting	40.3	41.1	47.4
v. Start recognizing gender differences and will correctly say "I am a boy or girl"	81.7	85.7	89.5

### 5.2.2 Development aspects

Under development aspects eleven questions were asked from the respondents whether their child aged 3-3.5 years has achieved a particular aspect or not. Table 5.5 provides their responses.

**Table 5.5: Developmental status of the child aged 3-3.5 years on development aspects (Percentage)**

Development aspects	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>442</b>	<b>440</b>	<b>466</b>
i.Can name a picture	42.8	38.6	76
ii.Name at least one colour	30.3	31.8	32.8
iii. Knows his/her name, age and sex	64.3	56.8	68.9
iv.Able to put on his or her own shirt but will need help with shoes and buttons	35.3	35.2	45.5
v.Can jump in place and stand briefly on one foot	67.6	67.7	57.9
vi.Can speak three- four words sentences	77.4	74.8	91
vii.Comprehends the meaning of "smaller or bigger" and "on or under"	85.1	83	77.7
viii,Can open doors	75.1	77.3	93.1
ix.Can brushing teeth	81.2	77.5	90.8
x.Try to eat without support	89.1	83.9	96.6
xi.Tells about going to toilet	91.9	90	91.4

The main findings are as follows:

- More than two – thirds of the respondents have stated that their child "Can jump in place and stand briefly on one foot" , " Can speak three- four words sentences", "Comprehends the meaning of "smaller or bigger" and "on or under", "Can brushing teeth" , "Try to eat without support" and "Tells about going to toilet".
- Between 55 & 70 percent have expressed their child "knows his/her name , age & sex" ; while less than 50 percent have stated that their child "Can name a picture", "Name at least one colour" and "Able to put on his or her own shirt but will need help with shoes and buttons"

## 64 5.3 School going practices of children aged 5-5.5 years

### 5.3.1 Perception about sending the child to AWC for pre –school education

All the surveyed mothers / caregivers of children aged 5-5.5 years were asked a set of questions to assess their perception regarding sending the child for preschool education. Table 5.6 provides their responses.

**Table 5.6: Perception of mothers/caregivers for sending the child ages 5-5.5 years to AWC for pre school education**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>386</b>	<b>404</b>	<b>458</b>
<b>Whether feel importance for a child of 5+ years to go to AWC for preschool (n=)</b>			
Yes	97.2	98	95.9
No	2.8	2	4.1
<b>Whether child going to AWC</b>			
Yes	74.1	82.2	68.6
No	25.9	17.8	31.4
<b>No of days in a month the child goes to AWC (n=)</b>	<b>286</b>	<b>332</b>	<b>314</b>
< 7 days	3.5	1.8	2.9
7-14 days	4.5	3	3.5
15-21 days	43.4	45.2	20.7
> 21 days	48.6	50	72.9
Average no. of days	21.13	21.66	22.72
<b>Reasons for not going to centre (n=)</b>	<b>100</b>	<b>72</b>	<b>144</b>
Food is not available regularly	24	37.5	16
Anganwadi doesn't open regularly	28	23.6	18.1
Angawadi helper doesn't come to take him	41	34.7	20.1
There is no one at home to take him/her to Anganwadi	21	22.2	13.9
He/she don't enjoy at Anganwadi in the absence of toys	13	13.9	25.7
Because it is very far	4	2.8	0
He is going to school	19	33.3	28.5
Child gets fear	5	2.8	3.5

The following main findings have emerged from this table.

- Almost all respondents (96-98%) felt it important to send a child aged 5-5.5 years to AWC for pre school education.
- Almost 78 percent of the respondents in intervention districts (74% in intervention and 82% in intermediate AWCs) and 69 percent in control district were sending their child to AWC for pre school education against a figure of about 97 percent of the respondents who perceived it to be important.
- On an average, children were going to AWC on almost all the working days in a month (21-22 days).

- Those mothers/ caregivers who were not sending their child to AWC were further asked the reasons for not sending their child to AWC. The following reasons were cited by them
  - Non –availability of supplementary nutrition at AWC regularly
  - Not opening of AWC regularly
  - No one at home to take the child to AWC
  - Non – availability of toys at AWC
  - The child was going to school

### 5.3.2 Perception about sending the child to school

A series of questions were put to the respondents to assess their perception regarding sending the child to school. Table 5.7 provides such information.

**Table 5.7: Perception of mothers/caregivers for sending the child ages 5-5.5 years to school**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Whether child going to school(n=)</b>	<b>386</b>	<b>404</b>	<b>458</b>
Yes	23.6	18.6	31
No	76.4	81.4	69
<b>Whether the child goes to school happily (n=)</b>	<b>91</b>	<b>75</b>	<b>142</b>
Yes	86.8	92	91.5
No	13.2	8	8.5
<b>Reasons for not sending child to school (n=)</b>	<b>295</b>	<b>329</b>	<b>316</b>
We can not afford to send	21	17.9	42.7
Child is scared of going to school	7.5	3.6	3.8
No nearby school	12.9	8.5	9.2
Child's age was less	49.2	48	28.5
Anganwadi jaise hai	2.4	5.8	13.6
He was going to anganwadi	8.5	18.2	19.3
Sath nehi milti hai	0	0	0.3
<b>Ways to overcome the fear of child for going to school (n=)</b>	<b>17</b>	<b>11</b>	<b>12</b>
Uske sath jaakar thodi der beth kar aate hai	11.8	9.1	8.3
Bache ke dar ki chanbin ki	11.8	18.2	16.7
We said they give food	0	0	8.3
Use samjate hai	23.5	45.5	0
DK/CS	52.9	18.2	50
Not specified	5.9	9.1	16.7
<b>Whether the child goes to preschool (n=)</b>	<b>386</b>	<b>404</b>	<b>458</b>
Yes	34.2	33.9	24.5
No	65.8	66.1	75.5

**Table 5.7: Perception of mothers/caregivers for sending the child ages 5-5.5 years to school (Contd..)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Type of learning in preschool (n=)</b>	<b>132</b>	<b>137</b>	<b>112</b>
Story	31.1	15.3	1.8
Counting	37.9	46	17
Poem	13.6	12.4	8
Song	10.6	7.3	1.8
Jokes	0	4.4	0
Reading	6.8	8	23.2
Writing	8.3	6.6	11.6
Varnmala	14.4	25.5	11.6
A,B,C,D	28	24.8	45.5
Game	3.8	0.7	2.7
Picture	0	1.5	0
Not specified	16.7	17.5	23.2

On analysis, the following findings have emerged.

- Almost 21 percent of the respondents in intervention districts (24% in intervention and 19% in intermediate AWCs) and 31 percent in control district were sending their child to school
- On asking whether their child was going to school happily, more than 85 percent in intervention and 91 percent in control district replied in affirmative.
- Those respondents who were not sending their child in school were asked the reasons for the same. The main reasons cited by them were
  - » Less age of the child for sending to school
  - » Non – affordability of sending the child to school.
  - » The child was going to AWC
- Almost 34 percent of the respondents (21% in Janjgir and 50% in korba) reported that their child was going for pre school education. The proportion of such respondents was 24 percent in control district.
- Majority of those whose child was going to pre – school reported that their child was learning counting and varnmala of Hindi & English in their pre – school classes.

#### **65 5.4 Status of development of children aged 5 – 5.5 years**

All the surveyed mothers / caregivers of children aged 5-5.5 years were asked a set of question, whether their child had started certain activities related to gross motor, fine motor, cognitive, language and social emotional. They have been discussed below under each had.

##### **5.4.1 Gross motor**

A vast majority of the respondents reported that their child

- “Walks heel-to-toe forward along line on floor without losing balance” (84% in both intervention and control district).
- “Walks heel-to-toe backward along line on floor without losing balance” (76-78% in both intervention and control district).
- “Can jump on one foot” (95% in intervention & 94% in control district) (Table 5.8).

**Table 5.8: Key milestones achieved by children aged 5-5.5 years under gross motor (Percentage)**

key activities/mile stones under gross motor (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
	386	404	458
Child walks heel-to-toe forward along line on floor without losing balance	87	81.2	84.5
Child walks heel-to-toe backward along line on floor without losing balance	77.5	78.5	76.6
Can jump on one foot	93.8	96.3	94.1

#### 5.4.2 Fine motor

"Child copies a square with good corners", "child prints two or three letters of name" and "child can colour neatly within a closed outline" were reported by 37 percent, 41 percent and 25 percent of the respondents in intervention districts. The proportion of such respondents were quite high in control district. They were 71 percent, 77 percent and 57 percent respectively (Table 5.9).

**Table 5.9: Key milestones achieved by children aged 5-5.5 years under fine motor (Percentage)**

key activities/mile stones under fine motor (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
	386	404	458
Child copies a square with good corners	38.3	35.6	71
Child prints two or three letters of name	42.2	39.1	77.1
Child can colour neatly within in a closed outline	24.4	25	57.2

#### 5.4.3 Cognitive

- "Child can do sorting and classification based on two features (sorts cards with pictures that vary by shape and color into two piles, switching between one dimension and the other as signaled by a border on the cards" (48% in intervention and 53% in control district).
- "Child understands big-short, left-right, under-up, inside-outside concepts" (83% in intervention and 89% control district)
- "Child can recognize 1-9 numbers" (52% in intervention and 71% control district)
- "Child can arrange objects in sequence and in pattern" (34% in intervention and 61% control district).
- "Child show familiarity with local surrounding and environment" (46% in intervention and 88% control district) (Table 5.10).

**Table 5.10: Key milestones achieved by children aged 5-5.5 years under cognitive (Percentage)**

key activities/mile stones under cognitive (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
	<b>386</b>	<b>404</b>	<b>458</b>
Child can do sorting and classification based on two features	45.9	49.8	52.6
Child understands big-short, left-right, under-up, inside-outside concepts	85.5	80.2	88.6
Child can recognize 1-9 numbers	52.8	50.7	70.7
Child can arrange objects in sequence and in pattern	35.8	32.2	61.1
Child show familiarity with local surrounding and environment	46.9	44.3	88.2

#### 5.4.4 Language

A vast majority of the respondents reported that their child

- “can narrate an incident or experience clearly and in sequence” (82% in intervention and 95% in control district).
- “Can recite a rhyme/poem” (70% in both intervention and 86% in control district)
- “Ask questions without hesitation” (69% in intervention and 91% in control district)
- “Can follow two steps instructions” (70% in intervention and 86% in control district) (Table 5.11).

**Table 5.11: Key milestones achieved by children aged 5-5.5 years under language (Percentage)**

key activities/mile stones under language	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>386</b>	<b>404</b>	<b>458</b>
Can narrate an incident or experience clearly and in sequence	81.6	82.2	95
Can recite a rhyme/poem	68.7	70.5	86.2
Ask questions without hesitation	71	66.3	91.5
Can follow two steps instructions	69.2	71	85.6

#### 5.4.5 Social Emotional

A vast majority of the respondent reported that their child

- “Accepts other children’s ideas for sharing and playing” (59% in intervention and 84% control district).
- “Offers to help other children who have difficulty with a task” (57% in intervention and 79% control district).
- “Maintain personal hygiene” (62% in intervention and 83% control district).
- “Keeps belongings organized” (48% in intervention and 71% control district).
- “Can concentrate on a task till completion” (30% in intervention and 72% control district).
- “Participates actively in small groups” (50% in intervention and 72% control district) (Table 5.12).

**Table 5.12: Key milestones achieved by children aged 5-5.5 years under social emotional**  
(Percentage)

key activities/mile stones under social emotional	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>386</b>	<b>404</b>	<b>458</b>
Child accepts other children's ideas for sharing and playing	63	54.7	84.3
Child offers to help other children who have difficulty with a task	58	55.9	79.3
Child maintain personal hygiene	63	61.4	82.8
Child keeps belongings organized	49	48	71.2
Child can concentrate on a task till completion	29.5	30.7	72.5
Participate actively in small groups	50.8	50	72.3

## 66 5.5 Awareness of mothers on age specific needs and rights of children

### 5.5.1 Awareness about registration of birth of the child

All the surveyed mothers / caregivers of children aged 3-3.5 years and 5-5.5 years were asked whether they knew that registration of birth of the child is necessary even if the child is born at home. Table 5.13 provides such information.

**Table 5.13: Distribution of mothers / caregivers by their Knowledge about registration of birth of the child**  
(Percentage)

Knowing that birth registration of child is necessary even in home delivery	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>(n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	87.8	88.9	88.4
No	12.2	11.1	11.6

- Almost 88 percent of respondents in both intervention districts (80% in Janjgir and 97% in korba) and control district knew that the registration of birth of child is necessary even if the child is born at home

### 5.5.1 Knowledge about elements of quality care of a child

On asking what are the elements of quality care of a child, the major elements cited by the respondents were:

- Good environment where child can freely play and sleep (43% in intervention and 70% in control district)
- Guidance to child to develop age related skills through good parenting (42% in intervention district and 50% in control district).
- Monitoring of the child's growth (61% in intervention and 51% in control district)
- Proper diet to child for growth (53% in intervention districts and 36% in control district) (Table 5.14).

**Table 5.14: Knowledge about elements of quality care of a child****(Percentage)**

Knowledge about elements of quality care of a child (n=)	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
	<b>828</b>	<b>844</b>	<b>924</b>
Good environment where child can freely play and sleep	41.7	44	70
Guide child to develop age related skills through good parenting	42.1	41	50.5
Monitoring child's growth	62.4	59.1	51
Proper diet to child for growth	55.6	50.9	35.8
Pre-schooling for children under 5 years and elementary schooling for children 5+ years	25.1	24.2	13.6
Encourage child for going to school and learning new things	16.4	16.1	13.6
Make child remember his/her name, father's name, telephone number/address/name of village for safety of child when go out to city or village fair	3.9	4.6	9.4
Not specified	2.1	1.3	5.6

### **67 5.6 Cross tabulation to see the impact of caste and education of mothers / caregivers on child development**

Cross tabulation of some related development indicators of children have been studied by caste and educational level of mothers / caregivers. They have been provided in Tables 5.16 A to 5.43 A in Annexure -2). After analyzing the results, it is observed that

- Education of caregivers seems to have influence on taking the child outdoor to show things, having the toys by child to play at home and taking care by father (Table 5.21A, Table 5.23A and Table 5.25A in Annexure -2).

## 68 CHAPTER -VI

### 69 KNOWLEDGE ABOUT GOVERNMENT SCHEMES

A number of government schemes have been implemented in the state of Chattisgarh for the upliftment of women. This chapter discusses about what the mothers / caregivers know about these schemes. District - wise Table 6.1A to 6.8A have been given in Annexure -2 of the report.

#### 70 6.1 Women awareness camp

Table 6.1 provides information on awareness of mother/ caregivers about these camps

**Table 6.1: Knowledge of mothers/caregivers about women awareness camp (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Knowledge of women awareness camp (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	21.4	19.9	15.3
No	78.6	80.1	84.7
<b>Activities undertaken in the camp (n=)</b>	<b>177</b>	<b>168</b>	<b>141</b>
Imparting knowledge about schools initiated by dept. of woman & child development	85.3	85.1	88.7
Educating about their school, problems, economic development and legal rights	74.6	71.4	78
<b>Participation in the camp (n=)</b>	<b>177</b>	<b>168</b>	<b>141</b>
Yes	30.5	29.8	39
No	69.5	70.2	61

Form Table 6.1, the following findings have emerged.

- Only about one - fifth of the respondents in intervention districts (17% in Janjgir and 24% in Korba district) and 15 percent in control district knew about this scheme.
- Out of those who knew about the scheme, 85 percent in intervention districts (74% in Janjgir and 94% in Korba district) and 89 percent in control district reported imparting knowledge about school initiated by department of woman and child development as an activity undertaken in the awareness camp.
- "Educating women about schools, problems, economic development and legal rights" as an activity undertaken in the camp was reported by 73 percent and 78 percent of the respondents in intervention and control district respectively.
- Out of those who were aware of the awareness camp, 30 percent of the respondents in intervention districts (19% in Janjgir and 38% in korba district) and 39 percent in control district participated in such camps.

#### 71 6.2 Self help groups

All the surveyed respondents were asked whether they knew any SHG of women functioning in their village. Those who were aware of any SHG of women, were further asked a set of questions to assess what they knew about its functioning. Table 6.2 provides such data.

**Table 6.2: Knowledge of mothers/caregivers about self help groups (Percentage)**

Particulars	Intervention districts	Control district
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	<b>Intervention AWCs</b>	<b>Intermediate AWCs</b>	<b>Control AWCs</b>
<b>Awareness of functioning of any SHG of women in the village (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	38	35.2	28
<b>Objective of the SHG (n=)</b>	<b>315</b>	<b>297</b>	<b>259</b>
Making women economically and socially developed	80.3	81.1	73.7
Providing loans to start enterprise	41	43.4	48.6
Paise jama karte hai	11.7	11.8	1.5
DK/CS	2.9	3.4	6.6
<b>No of women who are members of such group (n=)</b>	<b>315</b>	<b>297</b>	<b>259</b>
Less than 10	15.2	12.5	37.5
10-20	81.9	86.5	60.2
20+	2.5	1	1.5
Not specified	0.3	0	0.8
<b>Whether any age group of members is specified (n=)</b>	<b>315</b>	<b>297</b>	<b>259</b>
Yes	14	13.8	4.6
<b>Age group specified (n=)</b>	<b>44</b>	<b>41</b>	<b>12</b>
18-20	59.1	46.3	8.3
25-30	4.6	26.8	16.7
35 – 45	22.7	19.5	50
45+	11.4	7.3	16.6
Not specified	2.3	0	8.3
<b>Whether member of any SHG (n=)</b>	<b>315</b>	<b>297</b>	<b>259</b>
Yes	25.1	19.9	32.4
<b>No. of years, since member of any SHG (n=)</b>	<b>79</b>	<b>59</b>	<b>84</b>
1-5 years	68.4	66.1	78.6
6-10 years	13.9	20.3	13.1
More than 10 years	3.8	3.4	3.6
Not specified	13.9	10.2	4.8
<b>Activities undertaken by SHG (n=)</b>	<b>79</b>	<b>59</b>	<b>84</b>
Promotion of savings among members	84.8	91.5	60.7
Loan to members for household needs	70.9	67.8	53.6
Loan to members for income generation activities	36.7	28.8	26.2

After analyzing their responses, the following findings have emerged.

- Slightly less than two - fifths of the respondents (43% in Janjgir and 30 percent in Korba district) and 28 percent in control district had expressed their awareness of functioning of any SHG of women in their village.
- Regarding their knowledge about objectives of the SHG, a vast majority of them (81% in intervention and 74% in control district) reported "making women economically and socially developed" as an objective of the group.

- Almost 42 percent of them in intervention districts (30% in Janjgir and 59% in korba district) and 49 percent in control district cited "providing loans to start enterprise" as its objective.
- Regarding number of woman members of the SHG, 84 percent in intervention districts (86% in Janjgir and 81% in korba district) and 60 percent in control district reported 10-20 in a group.
- A vast majority of them (86% in intervention districts and 95% in control district) expressed that there was no age limit for the eligibility to become a member of the SHG.
- Very few respondents (22%) in intervention districts (19% in Janjgir and 28% in korba district) and 32 percent in control district reported to be a member of any SHG.
- The average number of years of the SHG since functioning worked out to be around 4 years.
- Regarding activities to be undertaken by such SHGs, 88 percent of the respondents who were members of the SHG in intervention districts (85% in Janjgir and 90% in Korba district) and 61 percent in control district reported "promotion of saving among members". Other activities cited by them were "loan to members for household needs" (70% in intervention and 54% in control district) and "loan to members for income generation activities" (33% in intervention and 26% in control district).

### 72 6.3 Kishori shakti yojana

Table 6.3 provides information on awareness of mothers / caregivers on kishri shakti yojana.

**Table 6.3: Knowledge of mothers/caregivers about Kishori Shakti Yojana (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of kishori shakti yojana (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	22.1	19.2	26.5
No	77.9	80.8	73.5
<b>Knowledge about the scheme (n=)</b>	<b>183</b>	<b>162</b>	<b>245</b>
Selection of three adolescent girls of 11-18 yrs for helping the AWW	80.3	80.2	94.7
Free nutrition to girls per week	72.7	71.6	88.2
Accumulation of knowledge about the scheme	25.7	35.8	21.2

The following findings have emerged from Table 6.3.

- Almost one – fifth of the respondent (16% in Janjgir and 25% in korba district) and 26 percent in control district had heard of the kishori shakti yojana.
- Regarding their knowledge about the scheme, four – fifths of them in intervention (59% in Janjgir and 95% in Korba district) and 95 percent in control district reported that "three adolescent girls of age groups of 11-18 years were selected under the scheme to help the AWW". Other activities undertaken under the scheme cited by them were "free nutrition to girls per week" (72% in intervention districts and 88% in control district) and "accumulation of knowledge about the scheme" (30% in intervention districts and 21% in control district).

### 73 6.4 Chattisgarh mahila kosh rin yojana

- Only about 3 percent of the respondents in intervention districts and 6 percent in control district expressed their awareness of the scheme (Table 6.4 ).
- Regarding year of starting the scheme, 63 percent of them in intervention districts (76% in Janjgir and 52% in Korba district) and 20 percent in control district did not know about when the scheme was started. Almost 21 percent in intervention districts (20% in Janjgir and 22% in korba) reported 2003 as the year of starting the scheme. In control district, one – half of them reported that it was started in 2005 (Table 6.4A in Annexure -2).
- About 83 percent of them in intervention districts (76% in Janjgir and 89% in korba) and 91 percent in control district reported "loan to women and self help groups on easy terms" as the main function of scheme (Table 6.4).
- Regarding the maximum loan given to SHGs and rate of interest on which it was given to them, a good number of them did not specify any thing. No concrete conclusion could be drawn, as there was a mix of responses (Table 6.4).
- Only 27 percent of them in intervention districts (37% in intervention and 14% in intermediate AWCs) and 24 percent in control district had availed of any benefit under the scheme (Table 6.4).

**Table 6.4: Knowledge of mothers/caregivers about Chhatisgarh Mahila Kosh Rin Yojna (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of chhatisgarh mahila kosh rin yojana (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	3.6	2.6	5.8
<b>Functions of the scheme(n=)</b>	<b>30</b>	<b>22</b>	<b>54</b>
Loan to women and self help groups on easy terms	80	86.4	90.7
Save money	0	0	1.9
Not specified	20	13.6	7.4
<b>Maximum amount given to SHG's(n=)</b>	<b>30</b>	<b>22</b>	<b>54</b>
< Rs 10,000	16.7	18.2	25.9
Rs 10,001-20,000	23.3	13.6	42.6
More than 20,000	20	36.4	7.4
Don't know / can't say	40	31.8	24.1
<b>Rate of interest (n=)</b>	<b>30</b>	<b>22</b>	<b>54</b>
SHGs			
5% yearly	40	54.5	25.9
5.5% yearly	10	0	5.6
6% yearly	3.3	9.1	7.4
6.5% yearly	10	0	35.2
Not specified	36.7	36.4	25.9
Voluntary Organizations			
3%	0	0	1.9
5% yearly	3.3	13.6	35.2
5.5% yearly	0	4.5	5.6
6% yearly	0	0	1.9
Not specified	96.7	81.8	55.6
<b>Whether taken benefit from this scheme (n=)</b>	<b>30</b>	<b>22</b>	<b>54</b>
Yes	36.7	13.6	24.1

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### 76 6.5 Dowry prohibition Act, 1961 and 2004

All the respondents under the survey were asked whether they knew about dowry prohibition act and if yes, they were further questioned what they knew about it, Table 6.5 provides their responses.

**Table 6.5: Knowledge of mothers/caregivers about Dowry Prohibition Act, 1961 and 2004 (Percentage)**

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of dowry prohibition act, 1961 &amp; 2004 (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	32.5	30.8	57.8
No	67.5	69.2	42.2
<b>Knowledge about the act (n=)</b>	<b>269</b>	<b>260</b>	<b>534</b>
Any form of abuse causing harm or injury to the physical and / or mental health of the woman or compromising her life and safety	54.3	51.2	84.5
Any harassment for dowry or to meet any other unlawful demand	63.6	58.5	63.5
Threat to cause injury or harm	47.6	52.3	47.9
Prohibits giving or taking of dowry	61	61.5	31.6

The main findings are as follows:

- About one – third of percent of the respondents in intervention districts (48% in Janjgir and 14% in Kobra) and 58 percent in control district expressed their awareness of the act.
- About three - fifths of them in intervention districts each reported that the act prohibits “any harassment for dowry or to meet any other unlawful demand” and “giving or taking of dowry; with vast variation across the study intervention districts. The corresponding figures of such respondents in control district were 63 percent and 32 percent respectively.
- About 53 percent of them in intervention districts ( 43% in Janjgir and 85% in Korba district) and 84 percent in control district reported that “the dowry act does not permit any form of abuse causing harm or injury to the physical and / or mental health of the woman or comprising her life and safety”
- Slightly less than one – half of them in both intervention and control district; with vast variation across the study intervention districts expressed that the act does not permit “any threat to cause injury or harm to woman”.

## **77 6.6 Domestic violence act , 2005 for women**

- Regarding awareness of domestic violence act, about 24 percent in intervention districts (32% in Janjgir and 14% in korba district) were aware of it. The proportion of such respondents was higher in control district (56%) (Table 6.6).
- Almost all of them knew that the act prevents violence against women at home (Table 6.6).

- Regarding knowledge of registration of complaint against violence, 82 percent of them (79% in Janjgir and 90% in korba district) and 96 percent in control district had expressed their knowledge of the places where women can register their complaint (Table 6.6).
- Majority of them (92% in intervention districts and 89% in control districts) reported "police / magistrate" where a woman can register their complaint. District office for registering the complaint was reported by 19 percent of them in intervention districts and 40 percent in control district (Table 6.6).

**Table 6.6: Knowledge of mothers/caregivers about Domestic Violence Act, 2005 for Women**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of domestic violence Act (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	25.4	21.7	55.8
<b>Knowledge about act (n=)</b>	<b>210</b>	<b>183</b>	<b>516</b>
To prevent violence against women at home	99.5	100	99.8
Others	0.5	0	0.2
<b>Knowledge of registering the complaint against violence (n=)</b>	<b>210</b>	<b>183</b>	<b>516</b>
Yes	82.9	80.9	95.9
<b>Place of registration of complaint (n=)</b>	<b>174</b>	<b>148</b>	<b>495</b>
District office	16.7	21.6	40.2
Police / Magistrate	89.1	94.6	88.7
Others (sarpanch, court and society)	10.9	1.4	5

### 78 6.7 Swavalamban yojana

All the surveyed respondents were asked whether they knew about the swavalamban yojana and if yes, they were further questioned what they knew about the scheme and whether they availed of any benefit of the scheme. Table 6.7 provides such data.

**Table 6.7: Knowledge of mothers/caregivers about Swavalamban Yojana**

(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of swavalamban yojana (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	8.3	5.8	12.1
<b>Knowledge about the yojana (n=)</b>	<b>69</b>	<b>49</b>	<b>112</b>
It is for poor women whose husband has expired or legally divorced or unmarried women in the age group of 35-45 years	89.9	83.7	92.9
These women are made self reliant by giving training to earn at least Rs 5000/-per month	76.8	75.5	74.1

**Table 6.7: Knowledge of mothers/caregivers about Swavalamban Yojana (Contd..)**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
These women should be below poverty line of age between 18-50 years	36.2	38.8	33
Annual income of family should be less than Rs. 48,000/ and women should be resident of Chattisgarh	8.7	26.5	1.8
<b>Whether availed benefit of this scheme (n=)</b>	<b>69</b>	<b>49</b>	<b>112</b>
Yes	24.6	20.4	23.2

The main findings emerged out from this table are as follows:

- Only 7 percent of the respondents in intervention districts (4% in Janjgir and 10% in korba) and 12 percent in control district knew about the scheme.
- A vast majority of them in both intervention and control district reported that "it is for poor women whose husband has expired or legally divorced or un married women in the age group of 35-45 years" (87% in intervention and 93% in control district) and "it is to make women self reliant by giving training to earn at least Rs. 5000-/- per month" (76% in intervention and 74% in control district).
- Only 23 percent of them in both intervention and control district reported to have availed of the benefits of the scheme.

## 79 6.8 Saksham yojana

All the covered respondents under the survey were asked whether they were aware of the saksham yojana and if yes, what they knew about the scheme. Table 6.8 provides such information.

**Table 6.8: Knowledge of mothers/caregivers about Saksham Yojana**  
(Percentage)

Particulars	Intervention districts		Control district
	Intervention AWCs	Intermediate AWCs	Control AWCs
<b>Awareness of Saksham yojana (n=)</b>	<b>828</b>	<b>844</b>	<b>924</b>
Yes	3.5	3.2	21.2
<b>Knowledge about the yojana (n=)</b>	<b>29</b>	<b>27</b>	<b>196</b>
It is for poor women whose husband has expired or legally divorced or unmarried in the age group of 35-45 years	75.9	81.5	98
To make the women independent by giving loan	41.4	70.4	84.7
A loan of Rs 100,000/- is given to start business at home at 6.5% rate of interest	31	44.4	49
Women should be below poverty line and age should be between 18 to 50 years	37.9	25.9	21.9
Annual income of family should be less than Rs. 48,000/ and women should be resident of Chattisgarh	13.8	25.9	2

The following main findings have emerged from the table.

- Only 3 percent of the respondents in intervention districts (4% in Janjgir and 2% in Korba) were aware of the scheme. The proportion of such respondents was higher in the control district (21%).
- About four-fifths of them in intervention districts (70% in Janjgir and 95% in Korba) and 98 percent in the control district knew that "the scheme is for poor women whose husband has expired or legally divorced or unmarried in the age group of 35-45 years". "Making the women independent by giving loans" as an aim of the scheme was reported by 55 percent in intervention districts (45% in Janjgir and 74% in Korba) and 85 percent in the control district.

## 80 CHAPTER – VII

### 81 DEVELOPMENT TEST OF CHILDREN AGED 3-3.5 YEARS AND SCHOOL READINESS OF CHILDREN AGED AND 5-5.5 YEARS

This chapter has been divided into two sections. The first section deals with children aged 3-3.5 years. These children were given an ICMR development screening test that included a number of milestones achieved by children aged 3-3.5 years under components of gross motor; vision and fine motor; hearing, language & concept development; self help skills and social skills. Through this test, it was assessed whether the child had achieved these milestones or not. To assess their nutritional status, both weight and height measurements were obtained for each child.

The second section of this chapter deals with children aged 5-5.5 years. They were tested for school readiness through administering a school readiness instrument. This instrument had two parts. In the first part, these children were tested for their achievements in pre – mathematical concepts, number concepts and language skills & reading readiness by showing various pictures under each of 10 activities. In the second part, they were assessed on the behavioural aspects by asking a series of questions to their mother / care giver. In addition, both their weight and height measurements were taken to assess their nutritional status. This chapter presents only the highlights along with the summary tables. For more detailed findings , Tables 7.1A to 7.38A in Annexure – 2 may be referred.

#### 82 7.1 Children aged 3-3.5 years

##### 7.1.1 Profile of children aged 3-3.5 years

About half of them in intervention districts were male, while 47 percent of them were male in control district. More than 90 percent of them belonged to SC/ST or OBC. In most of the cases (98% in intervention districts and 92% in control district), the mother of the child was the respondent. In case of those where caregiver was the respondent , they were mostly grand mother of the child. About 54 percent of children in intervention districts and 64 percent in control district were administered an ICMR screening test at AWC (Table 7.1A in Annexure - 2).

##### 7.1.2 Milestones achieved by children aged 3-3.5 years

###### Gross motor

- More than two – thirds of the children could “stand on one foot with help”, “walk backwards”, “get up from squatting position with out help” and “touch opposite ear by taking hand over the head”.
- About two – fifths in intervention districts and one – half in control district were able “to carry a wooden block on head and walk 5 steps”, while about one – half in both intervention and control district could hop on one foot”.
- Overall achievement of milestones is marginally better among female than male children in both intervention and control district. It is also marginally better among SC and OBC than ST children in intervention & intermediate AWCs, but it is better among SC/ST than OBC children in control AWCs (Tables 7.2A – 7.4A in Annexure -2).

###### Vision & fine motor

- More than 80 percent of the children could be able “to pick up cube/ pebble / marble” , “to attempt imitation of scribble”, “to draw a straight line in imitation” and to thread one

bead with nylon wire” in intervention & intermediate AWCs and control AWCs , whereas drawing a diamond in imitation could be completed by 5 percent or less children (Tables 7.5A – 7.7A in Annexure -2).

### Hearing , language & concept development

- More than half of the children achieved all the milestones except “recognizing 3 colours” , “singing two lines of song/folk poem” and “completing a sentence”. These milestones were achieved by less than 40 percent of children (Tables 7.8A – 7.10A in Annexure -2).

### Self help skills

- Hardly 1 percent of children in intervention districts and less than 5 percent in control district achieved each of the milestones under this component (Tables 7.11A in Annexure -2).

### Social skills

- Around 90 percent of children in intervention , intermediate and control AWCs “could tell their name”, while around 80 percent in intervention district and 73 percent in control district “could tell their gender”.
- “Playing with other children” and “understanding rules of game” were expressed by 2-3 percent of children.
- There was no difference by gender and caste of the child in achieving the milestones under this component (Tables 7.12A – 7.14A in Annexure -2).

### Overall scoring

- Overall more than 90 percent of the children in intervention and control district have scored more than 50 percent of marks out of 44 in achievement of milestones. Children are better in overall scoring in control district (about one – third obtained more than 75% marks out of 44) than in intervention AWCs (19%) and intermediate AWCs (16%), showing no gender differentials.
- Children belonging to SC and OBC are marginally better in overall scoring than ST in intervention districts, whereas children belonging to SC/ST are marginally better than OBC in control district (Table 7.1 and Table 7.2).

**Table 7.1: Distribution of children aged 3-3.5 years by quartiles on overall scoring on all milestones and gender**

Quartiles on overall scoring on all milestones	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
(n=)	221	221	442	219	221	440	218	248	466
< 25%	2.3	0.5	1.4	0	1.4	0.7	0.5	2.4	1.5
25.1 -50%	14.5	11.8	13.1	12.8	10.9	11.8	3.7	6	4.9
50.1 -75%	64.3	68.8	66.5	69.9	72.9	71.4	64.7	58.1	61.2
> 75%	19	19	19	17.4	14.9	16.1	31.2	33.5	32.4

**Table 7.2: Distribution of children aged 3-3.5 years by quartiles on overall scoring on all milestones and caste**

Quartiles on overall scoring on all milestones	Total Janjgir and korba		Control district (Raigarh)
	Intervention AWCs	Intermediate AWCs	Control AWCs

	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
<b>(n=)</b>	<b>102</b>	<b>124</b>	<b>201</b>	<b>92</b>	<b>118</b>	<b>212</b>	<b>145</b>	<b>77</b>	<b>240</b>
< 25%	0	2.4	1.5	0	1.7	0.5	1.4	1.3	1.7
25.1 -50%	8.8	21.8	10.9	12	13.6	10.8	6.2	2.6	5
50.1 -75%	69.6	58.9	67.7	71.7	71.2	72.6	53.8	62.3	65.4
> 75%	21.6	16.9	19.9	16.3	13.6	16	38.6	33.8	27.9

## 83 7.2 Children aged 5-5.5 years

### 7.2.1 Profile of children aged 5-5.5 years

About half of children in intervention AWCs, 57 percent in intermediate AWCs and 52 percent in control AWCs were male. More than 95 percent of them belonged to SC/ST or OBC. In most the cases (96% in intervention, 98% in intermediate and 92% in control AWCs), the mother of the child was the respondent. If caregiver was the respondent, they were mostly grand mother of the child. More than 90 percent of children go to AWC. About 56 percent of the children in intervention districts and 60 percent in control district were given the school readiness test at the AWC (Table 7.18A in Annexure -2).

### 7.2.2 Scoring on school readiness

The school readiness instrument includes three categories of competencies – pre mathematical concept; number concepts and language skills & reading readiness. In school readiness instrument, a number of pictures were shown to the child indicating activity number, questions asked under the activity and the possible scores a child could obtain. The details are given below:

Activity no.	Question asked	Possible scores
1. Three trees numbering A, B and C with some fruits	1. Which fruit do you see in each of the pictures? 2. In which picture you can see the <b>least</b> number of fruit? 3. In which picture you can see the <b>most</b> number of fruit?	0. for incorrect answer or unable to answer 1. for 1 correct answer 2. for all the correct answers (maximum)
2. Two pictures numbering A and B with a hut and a child	1. In which picture is the child at the back of the hut?	0. for incorrect answer or unable to answer 1. for correct answer (maximum)
3. Four pictures of banana numbering A, B, C and D	Describe sequence in words  Identifies the sequence only by pointing to the pictures	0. for incorrect answer or unable to answer 3. If the child is able to correctly identify the sequence, only by pointing to the pictures. 5. If the child is able to describe sequence in words and correctly (maximum)
4. 6 pictures of fruits and vegetables	1. Point to each picture and ask the child, "what is this?"; "Is it a fruit or vegetable?" 2. Then ask the child to show you/point out all the vegetables and then all the fruits separately.	0. for incorrect answer or unable to identify any fruits / vegetables correctly 4. If the child is able to identify at least 2 fruits and 2 vegetables 6. If the child is able to identify all fruits and vegetables (maximum)
5. Instructions for the child to follow		0. Unable to follow either of these instructions 2. If child is able to follow a simple instruction 4. If child is able to follow series of instructions.

Activity no.	Question asked	Possible scores
6. Pictures with number written against them	First, ask the child to read each number then ask the child to match each number with the picture showing same number of objects	(maximum) 0. Unable to match 1. Able to match 1 2. Able to match 2 3. Able to match 3 (maximum)
7. Three pictures / objects numbering A, B and C –out of them two begin with the same sound	1.Point to each picture and ask the child, "What is this?" Once the child identifies the picture ask what is the beginning sound in pronouncing the name? 2.Then ask which of these two pictures has the same beginning sounds?	0. Unable to identify 1. Each picture , if child is able to identify the beginning sound 3. If child is able to indicate similar pictures correctly. (maximum)
8. Various pictures of circles ,triangles and rectangulars numbering 8 (A) and 8 (B)	A. What is this shape? After circle which is the next shape? After rectangle which is the next shape? B. After circle which is the next shape?	0. Both A. and B unable to complete 1. Able to complete A 4. Able to complete B 5. Able to complete Both (A and B) (maximum)
9. Two pictures numbering A of child studying and B for child eating food	1. First ask the child to look at the pictures carefully. 2. Ask what do you see in this picture? (one picture at a time) 3. If the child is unable to respond, describe each picture (in one sentence) and ask the child to identify the one that fits your description.	0.Ubale to describe/ identify 1. If child is able to identify both, one picture is described correctly. 2. If child is able to describe either/both pictures correctly but in incomplete sentences. 3. If child is able to describe one picture correctly in complete sentence. 6. If child is able to describe both pictures correctly in complete sentences. (maximum)
10. Numbers in various sizes of circles	1. Ask the child to first read out each number. 2.Then ask the child to identify the number in the small circle. 3.Then ask the child to point to the number which is greater than the number in the circle.	0. Unable to identify 2. Able to identify

### Scoring under individual activity

- None of the children correctly answered all the questions asked in activity 1 and 3 and less than 20 percent of children correctly answered all the questions asked under activity 6,7,8 and 10.
- All the questions asked in activity 4 were answered correctly by about one – half of children in intervention districts and 30 percent in control district. Two – thirds or more children answered correctly all the questions asked in activity 2 and 5. Fifty four percent of children in intervention district and one – third in control district answered correctly all the questions asked in activity 9. (Table 7.19A in Annexure -2).

### Overall scoring on school readiness

- About 34 percent of children in control district and about one - fifth of children in intervention districts have scored up to 25 percent marks out of total score of 40 in the school readiness instrument, while about 30 percent in intervention and 17 percent in control district have scored more than 50% marks. Thus overall scoring is better in intervention districts than control districts.
- Male children and children belonging to SC and OBC are marginally better in overall scoring on school readiness than other children (Table 7.3 and Table 7.4)

**Table 7.3: Distribution of children aged 5-5.5 years by quartiles on overall scoring on school readiness according to gender of the child**

**(Percentage)**

Quartiles on scoring	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>(n=)</b>	<b>192</b>	<b>194</b>	<b>386</b>	<b>232</b>	<b>172</b>	<b>404</b>	<b>240</b>	<b>218</b>	<b>458</b>
< 25%	19.8	22.2	21	22.4	20.9	21.8	33.3	35.8	34.5
-25.1-50%	55.2	43.8	49.5	50.4	52.3	51.2	50.4	47.2	48.9
50.1-75%	18.2	30.9	24.6	25.4	23.3	24.5	16.3	15.1	15.7
>75%	6.8	3.1	4.9	1.7	3.5	2.5	0	1.8	0.9

**Table 7.4: Distribution of children aged 5-5.5 years by quartiles on overall scoring on school readiness according to caste**

**(Percentage)**

Quartiles on scoring	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
<b>(n=)</b>	<b>77</b>	<b>105</b>	<b>197</b>	<b>67</b>	<b>133</b>	<b>191</b>	<b>148</b>	<b>76</b>	<b>227</b>
< 25%	18.2	23.8	20.8	16.4	31.6	17.3	23	43.4	39.2
25.1-50%	53.2	52.4	47.2	40.3	51.1	56.5	55.4	50	44.1
50.1-75%	23.4	19	27.9	38.8	16.5	23.6	21.6	6.6	15
>75%	5.2	4.8	4.1	4.5	0.8	2.6	0	0	1.8

The school readiness instrument includes three categories of competencies – pre mathematical concepts , umber concepts , language skills and reading readiness. All the 10 activities listed out in the instrument have been classified into these three categories and overall score obtained by children have been worked out by their sex and caste. The next sections discuss about them one by one.

### Overall scoring on pre – mathematical concepts

- About 32 percent of children in intervention , 35 percent in intermediate and 54 percent in control AWCs, have scored upto 25% marks (out of 19) on pre – mathematical concepts, showing no gender differentials. Intervention AWCs are marginally better than intermediate but far better than control AWCs (Table 7.5)
- SC and OBC children are better in all the categories of AWCs than other children (Table 7.6).

**Table 7.5: Distribution of children aged 5-5.5 years by school readiness scores for pre – mathematical concept according to gender of the child**

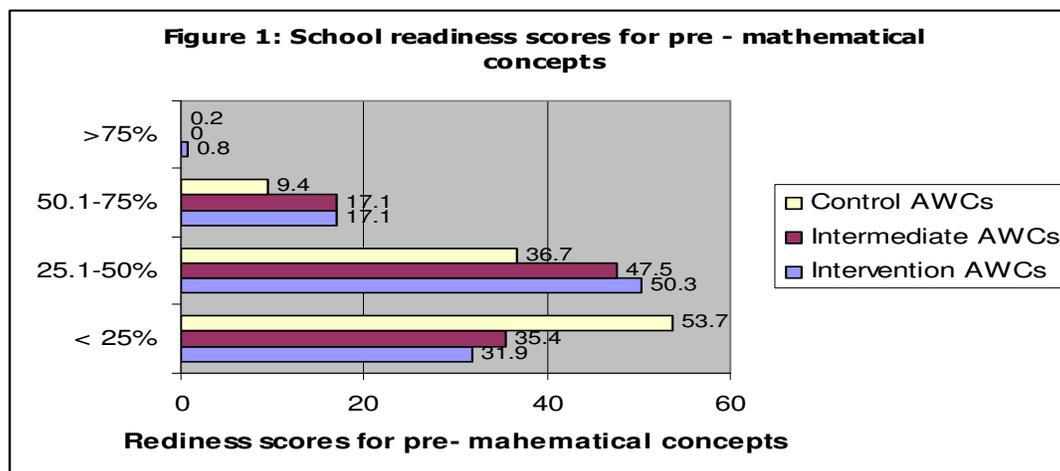
**(Percentage)**

School readiness scores for pre – mathematical concept	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
(n=)	192	194	386	232	172	404	240	218	458
< 25%	32.8	30.9	31.9	36.6	33.7	35.4	54.2	53.2	53.7
25.1-50%	51	49.5	50.3	45.7	50	47.5	37.9	35.3	36.7
50.1-75%	14.6	19.6	17.1	17.7	16.3	17.1	7.9	11	9.4
>75%	1.6	0	0.8	0	0	0	0	0.5	0.2

**Table 7.6: Distribution of children aged 5-5.5 years by school readiness scores for pre – mathematical concept according to caste**

**(Percentage)**

School readiness scores for pre – mathematical concept	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
(n=)	77	105	197	67	133	191	148	76	227
< 25%	28.6	37.1	30.5	25.4	48.1	32.5	54.7	61.8	51.1
25.1-50%	51.9	48.6	51.3	46.3	44.4	49.2	35.1	34.2	37.4
50.1-75%	19.5	13.3	17.8	28.4	7.5	18.3	10.1	3.9	11
>75%	0	1	0.5	0	0	0	0	0	0.4



### Overall scoring on number concepts

- About four – fifths of children have scored upto 25% marks (out of 5) on number concepts in intervention and control district. Female children in intermediate AWCs and male children in control AWCs are placed marginally better than other children , while there is no gender differences in intervention AWCs (Table 7.7).
- OBC children are marginally better in intervention and control AWCs while SC children are better in intervention AWCs than other children (Table 7. 8).

**Table 7.7: Distribution of children aged 5-5.5 years by school readiness scores for number concept according to gender of the child**

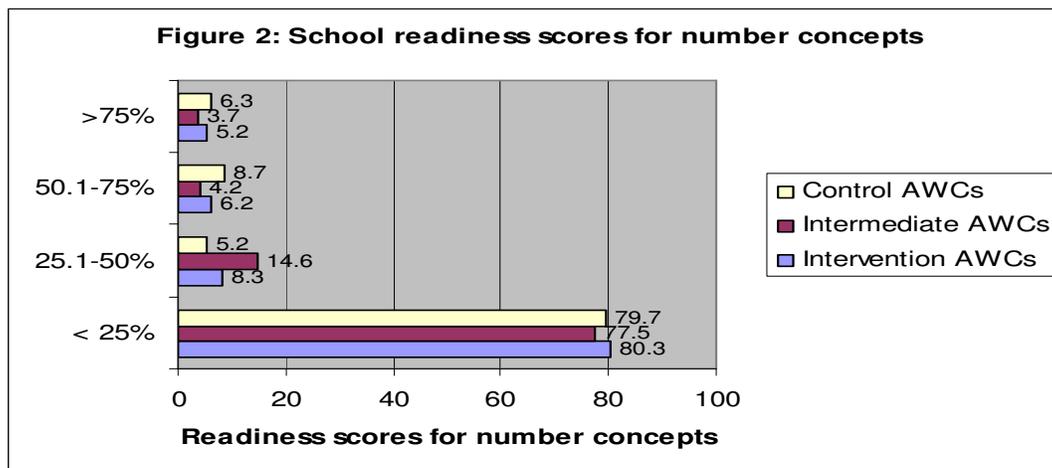
**(Percentage)**

School readiness scores for pre – number concept	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
(n=)	192	194	386	232	172	404	240	218	458
< 25%	79.7	80.9	80.3	80.2	73.8	77.5	75	84.9	79.7
25.1-50%	7.8	8.8	8.3	14.2	15.1	14.6	6.3	4.1	5.2
50.1-75%	5.2	7.2	6.2	2.6	6.4	4.2	11.7	5.5	8.7
>75%	7.3	3.1	5.2	3	4.7	3.7	7.1	5.5	6.3

**Table 7.8: Distribution of children aged 5-5.5 years by school readiness scores on number concept according to caste**

**(Percentage)**

School readiness scores on pre – number concept	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
(n=)	77	105	197	67	133	191	148	76	227
< 25%	83.1	85.7	77.2	68.7	85.7	75.4	80.4	84.2	77.5
25.1-50%	6.5	5.7	9.6	26.9	9.8	14.7	5.4	3.9	5.7
50.1-75%	5.2	5.7	6.6	1.5	3	5.8	10.8	3.9	9.3
>75%	5.2	2.9	6.6	3	1.5	4.2	3.4	7.9	7.5



### Overall scoring of language skills and reading readiness

- Slightly over half of children have scored more than 50% marks (out of 16) on language skills and reading readiness in intervention districts. The proportion of such children is 41 percent in control AWCs, showing there by that AWCs in intervention districts are better than control AWCs .There is no gender differentials in scoring on this competency (Table 7. 9).
- SC children are marginally better in all categories of AWCs than other children (Table 7. 10).

**Table 7.9: Distribution of children aged 5-5.5 years by school readiness scores on language skills & reading readiness according to gender of the child**

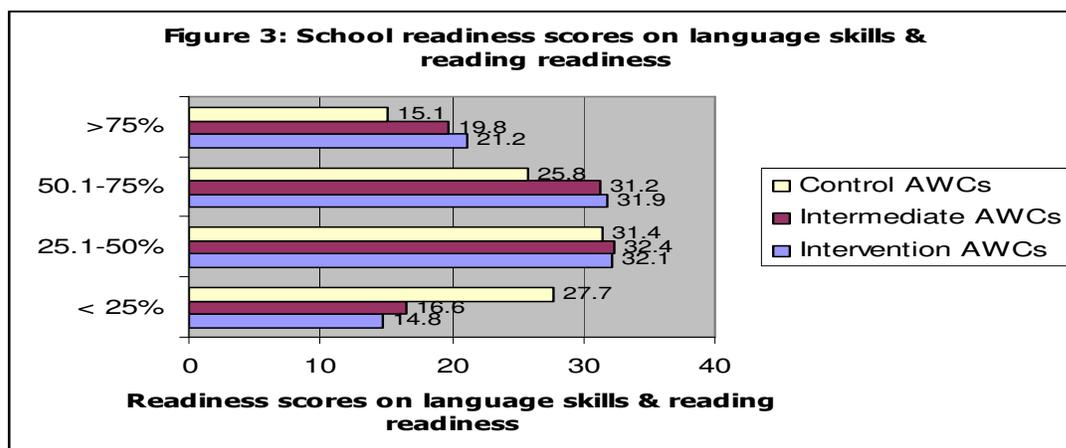
**(Percentage)**

School readiness scores on language skills & reading readiness	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
(n=)	192	194	386	232	172	404	240	218	458
< 25%	15.6	13.9	14.8	15.1	18.6	16.6	27.9	27.5	27.7
25.1-50%	29.2	35.1	32.1	36.2	27.3	32.4	30.4	32.6	31.4
50.1-75%	32.8	30.9	31.9	30.2	32.6	31.2	26.7	24.8	25.8
>75%	22.4	20.1	21.2	18.5	21.5	19.8	15	15.1	15.1

**Table 7.10: Distribution of children aged 5-5.5 years by school readiness scores on language skills & reading readiness according to caste**

**(Percentage)**

School readiness scores on language skills & reading readiness	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
(n=)	77	105	197	67	133	191	148	76	227
< 25%	7.8	21.9	14.2	7.5	22.6	15.7	17.6	32.9	31.3
25.1-50%	42.9	31.4	28.4	31.3	35.3	31.4	15.5	47.4	37.4
50.1-75%	32.5	23.8	36	31.3	27.1	33.5	43.9	13.2	18.5
>75%	16.9	22.9	21.3	29.9	15	19.4	23	6.6	12.8



### 7.2.3 Scoring on adaptive behavior

#### Scoring on individual adaptive behavior

A set of 20 questions related to adapted behavior of the child were asked from his/her mother / caregiver , If the mother / caregiver tells that the child always does, the child has been given score 2 and if the respondent tells that the child does it sometime , then the child has been allotted score 1. In other responses it has been considered score 0. Table 7.29A in Annexure - 2 provides such responses.

- More than 50 percent of the respondents replied for scoring 2 by their child for 15 questions out of 20, whereas less than 50 percent of the respondents have given score 2 to their child and 5 questions on addressing elders with respect, emotional adjustment , emotional adjustment – perseverance , socialization - helps others, and communication – coherent narration.

### Overall scoring on adaptive behavior

For working out overall scoring on adaptive behaviour , score 1 had been given , if the respondent says that her / his child always does that activity i.e. score 1 against score 2 given earlier. Thus , a child can score a maximum of 20 points on adaptive behavior.

**Table 7.11: Distribution of children aged 5-5.5 years by quartiles on overall scoring on adaptive behavior according to gender of the child**

**(Percentage)**

Quartiles on overall scoring on adaptive behavior	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>(n=)</b>	<b>192</b>	<b>194</b>	<b>386</b>	<b>232</b>	<b>172</b>	<b>404</b>	<b>240</b>	<b>218</b>	<b>458</b>
≤25%	7.8	3.6	5.7	7.3	3.5	5.7	2.1	0.9	1.5
26-50%	33.9	33.5	33.7	36.2	27.3	32.4	25	16.1	20.7
51-75%	37.5	40.7	39.1	40.9	43.6	42.1	51.3	54.6	52.8
>75%	20.8	22.2	21.5	15.5	25.6	19.8	21.7	28.4	24.9

**Table 7.12: Distribution of children aged 5-5.5 years by quartiles on overall scoring on adaptive behavior according to caste**

**(Percentage)**

Quartiles on overall scoring on adaptive behavior	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
<b>(n=)</b>	<b>77</b>	<b>105</b>	<b>197</b>	<b>67</b>	<b>133</b>	<b>191</b>	<b>148</b>	<b>76</b>	<b>227</b>
≤25%	7.8	3.8	6.1	9	5.3	4.2	2.7	2.6	0.4
26-50%	39	31.4	33.5	40.3	30.1	31.9	27.7	21.1	16.7
51-75%	40.3	33.3	40.6	38.8	45.9	40.8	39.2	55.3	60.4
>75%	13	31.4	19.8	11.9	18.8	23	30.4	21.1	22.5

- Slightly over 60 percent of the children have scored more than 50% marks (out of 20) on adaptive behavior in intervention districts. The proportion of such children is 78 percent in control district. Thus children in control district are better in overall scoring on adaptive behavior. There is no differences between intervention and intermediate AWCs (Table 7.11).
- Female children are marginally better in overall scoring on adaptive behavior in intervention districts than other children. There is no gender differentials in control district (Table 7.11).
- ST and OBC children are marginally better in overall scoring on adaptive behavior in all categories of AWCs than SC children (Table 7.12).

## 84 7.3 Nutritional status of children

The data on weight and height were used to calculate three summary indices of nutritional status of children, which affects children's susceptibility to disease and their chances of survival.

- Weight for – age
- Height for – age
- Weight for height

The three nutritional status indices are expressed in standard deviation units (Z –scores) from the median for the international reference population. Children who fall more than two standard deviations below the reference median are considered to be undernourished, while those who fall more than three standard deviations below the reference median are deemed to be severely undernourished.

Each of the indices provides some what different information and nutritional status. The height –for – age index measures linear growth retardation among children. Children who are more than two standard deviations below the median of the reference population in terms of height – for – age are considered short for their age or stunted.

The weight – for – height index measures body mass in relation to body length. Children who are more than two standard deviations below the median of the reference population in terms of their weight – for – height are considered to be too thin or wasted.

Weight – for – age is a composite measure which takes into account both chronic and acute under nutrition. Children who are more than two standard deviations below the reference median on this index are considered underweight.

### 7.3.1 Nutritional status of children aged 3-3.5 years

Table 7.13 & Table 7.14 shows the nutritional status of children aged 3-3.5 years by sex and caste respectively. Less than 40 percent all children are under weight (34% intervention, 36% in intermediate and 38% in control AWCs), while less than one – fifth are stunted (18% in intervention and 17% in intermediate AWCs). The proportion of such children is 26 percent in control AWCs.

**Table 7.13: Nutritional status of children aged 3-3.5 years by weight -for -age , height –for- age and weight – for – height and gender**

**(Percentage)**

Nutritional status of children	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Weight -for – age (n=)</b>	<b>221</b>	<b>221</b>	<b>442</b>	<b>219</b>	<b>221</b>	<b>440</b>	<b>218</b>	<b>248</b>	<b>466</b>
Below-3 SD	13.6	6.8	10.2	9.6	11.3	10.5	14.7	21.8	18.5
Below-2 SD *	34.4	33	33.7	34.2	38	36.1	39.9	36.3	38
<b>Height –for- age(n=)</b>	<b>221</b>	<b>221</b>	<b>442</b>	<b>219</b>	<b>221</b>	<b>440</b>	<b>218</b>	<b>248</b>	<b>466</b>
Below-3 SD	8.6	8.6	8.6	7.3	10.4	8.9	17.4	18.1	17.8
Below-2 SD*	17.6	18.6	18.1	17.4	16.7	17	23.4	27.8	25.8
<b>Weight – for – height (n=)</b>	<b>221</b>	<b>221</b>	<b>442</b>	<b>219</b>	<b>221</b>	<b>440</b>	<b>218</b>	<b>248</b>	<b>466</b>
Below-3 SD	10	4.1	7	11.9	7.2	9.5	4.1	1.6	2.8
Below-2 SD*	27.1	21.7	24.4	20.5	28.5	24.5	22	25.8	24

\* Includes children who are below – 3 SD from the international reference population median

**Table 7.14: Nutritional status of children aged 3-3.5 years by weight -for -age , height –for- age and weight – for – height and caste**

**(Percentage)**

Nutritional status of children	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
<b>Weight -for –age (n=)</b>	<b>102</b>	<b>124</b>	<b>201</b>	<b>92</b>	<b>118</b>	<b>212</b>	<b>145</b>	<b>77</b>	<b>240</b>
Below-3 SD	9.8	8.1	11.4	7.6	8.5	13.7	13.1	18.2	21.7
Below-2 SD *	31.4	33.9	35.8	35.9	41.5	33	35.2	39	40
<b>Height –for- age(n=)</b>	<b>102</b>	<b>124</b>	<b>201</b>	<b>92</b>	<b>118</b>	<b>212</b>	<b>145</b>	<b>77</b>	<b>240</b>
Below-3 SD	6.9	15.3	6	7.6	13.6	7.1	9.7	16.9	23.3
Below-2 SD*	14.7	13.7	21.4	14.1	20.3	17	25.5	27.3	25.4
<b>Weight – for – height (n=)</b>	<b>102</b>	<b>124</b>	<b>201</b>	<b>92</b>	<b>118</b>	<b>212</b>	<b>145</b>	<b>77</b>	<b>240</b>
Below-3 SD	7.8	4	8.5	8.7	5.1	12.7	3.4	1.3	2.9
Below-2 SD*	24.5	23.4	25.4	28.3	22	24.1	17.2	32.5	25.4

\* Includes children who are below – 3 SD from the international reference population median

The proportion of children who are severely under nourished is also notable – one out of 10 children in case of weight – for – age in intervention districts & one out of five children in control district and 9 percent & 18 percent respectively in case of height – for – age . Perhaps the most serious nutritional problem measured (wasting) is also quite evident in the study districts, affecting one in every 4 children.

In intermediate AWCs , female children are slightly more undernourished than male children . OBC children in intervention AWCs are more likely to be undernourished than other children , while ST children are more in intermediate AWCs than other children.

### 7.3.2 Nutritional status of children aged 5-5.5 years

Table 7.15 and Table 7.16 provides values of three indices on nutritious status of children aged 5-5.5 years by sex and caste of the child respectively. Around two – fifths of children in intervention districts and 38 percent in control district are under weight , while less than one – fourth are stunted (24% in intervention, 21% in intermediate and 24% in control AWCs).

**Table 7.15: Nutritional status of children aged 5-5.5 years by weight -for -age , height – for- age and weight – for – height according to gender of the child**

**(Percentage)**

Nutritional status of children	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Weight -for -age (n=)</b>	<b>192</b>	<b>194</b>	<b>386</b>	<b>232</b>	<b>172</b>	<b>404</b>	<b>240</b>	<b>218</b>	<b>458</b>
Below – 3 SD	14.1	12.4	13.2	16.8	12.8	15.1	9.2	11	10
Below – 2 SD*	50.5	33.5	42	42.7	37.2	40.3	42.1	34.4	38.4
<b>Height -for- Age (n=)</b>	<b>192</b>	<b>194</b>	<b>386</b>	<b>232</b>	<b>172</b>	<b>404</b>	<b>240</b>	<b>218</b>	<b>458</b>
Below – 3 SD	6.8	9.8	8.3	14.2	5.2	10.4	7.9	10.1	9
Below – 2 SD *	26.6	20.6	23.6	22	20.9	21.5	27.5	21.1	24.5
<b>Weight – for – height (n=)</b>	<b>192</b>	<b>194</b>	<b>386</b>	<b>232</b>	<b>172</b>	<b>404</b>	<b>240</b>	<b>218</b>	<b>458</b>
Below – 3 SD	8.3	3.6	6	5.6	5.8	5.7	3.8	2.3	3.1
Below – 2 SD *	26.6	22.2	24.4	27.6	25	26.5	15.8	18.8	17.2

\* Includes children who are below – 3 SD from the international reference population median

**Table 7.16: Nutritional status of children aged 5-5.5 years by weight -for -age , height –for- age and weight – for – height according to caste**

**(Percentage)**

Nutritional status of children	Total Janjgir and korba						Control district (Raigarh)		
	Intervention AWCs			Intermediate AWCs			Control AWCs		
	SC	ST	OBC	SC	ST	OBC	SC	ST	OBC
<b>Weight -for -age (n=)</b>	<b>77</b>	<b>105</b>	<b>197</b>	<b>67</b>	<b>133</b>	<b>191</b>	<b>148</b>	<b>76</b>	<b>227</b>
Below – 3 SD	5.2	18.1	13.2	16.4	17.3	13.6	7.4	13.2	11
Below – 2 SD*	44.2	38.1	43.1	37.3	41.4	41.4	31.8	35.5	43.6
<b>Height –for- age (n=)</b>									
Below – 3 SD	1.3	8.6	10.2	10.4	17.3	6.3	6.8	14.5	8.4
Below – 2 SD *	24.7	25.7	21.8	23.9	26.3	17.8	19.6	17.1	30
<b>Weight – for – height (n=)</b>									
Below – 3 SD	6.5	6.7	5.6	9	5.3	4.7	4.7	1.3	2.6
Below – 2 SD *	14.3	26.7	26.4	32.8	18.8	30.4	13.5	22.4	18.5

\* Includes children who are below – 3 SD from the international reference population median

The proportion of children who are severely undernourished is also notable – 13 percent in intervention , 15 percent in intermediate & 10 percent in control AWCs and about one – tenth in case of height – for –age. Perhaps the most serious nutritional problem measured (wasting) is also quite evident in the study districts, affecting one in every 4 children in intervention districts and 17 percent of children in control districts.

Male children are more likely to be undernourished in intervention and control districts than female children ; whereas OBC children are more likely to be undernourished in control district than other children.

## **85 CHAPTER –VIII**

### **ANGANWADI WORKERS AND FUNCTIONING OF ANGANWADI CENTERS**

This chapter discusses awareness of the AWWs on earlier development and growth of children ages 3-3.5 years and 5-5.5 years in the study districts. It starts with information on

their profile, working experience and training received to work as AWW. The AWWs were interviewed to collect information on their knowledge of the activities she performs and on functioning of the AWCs; focus was on the information related to the growth and development of children.

## **86 8.1 Background characteristics of AWWs**

### **8.1.1 Profile of AWWs**

A total of 181 AWWs could be interviewed against a target 186 (62 in each district). About half of the surveyed AWWs were in age group of 30-39 years (64% in intervention , 51% in intermediate and 33% in control AWCs) . Their mean age was around 37 years. Around three – fifths of them had completed at least high school education and all of them except one were Hindu. Almost 95 percent of AWWs belonged to SC/ST (49%) or other background class (46%). About 88 percent were currently married, 6 percent were widowed / divorced / separated and 7 percent were never married. For more details, Table 8.1A in Annexure -2 may be referred.

### **8.1.2 Working experience**

More than three – fifths of AWWs in intervention districts had been working as AWW for more than 10 years, while 59 percent in control district had been there in this position for less than 6 years. Only 15 AWWs worked as sahayika before joining as an AWW (Table 8.2A in Annexure -2).

### **8.1.3 Training status**

All except one in Raigarh reported to have received training to work as AWW. All of them have received institutional training with practical & mock sessions, while 94 percent reported to have received training an supervised practice at AWC and community. Average duration of the training was about 25 days including 21 days for institutional training with practical & mock sessions and 4 days for supervised practice at the AWC & community.

About three – fourths of them reported involvement of CDPO and ICDS supervisor in imparting training to them, while involvement of any NGO and National Institute of Public Cooperation and Child Development were reported by about half (48% in intervention and 51% in intermediate AWCs) and about one – third respectively.

Regarding broad topics covered during the training , more than 90 percent mentioned " nutrition & health" ; while " early childhood care & development" and "background of ICDS " were reported by 66 percent and 53 percent of AWWs. "Communication, advocacy & community participation" and "management of AWC" were least reported by less than 40 percent of AWWs.

With regard to segments of pre – school education covered during the training, they mostly reported “physical & motor development” (84%), “language” (70%), “early childhood care & development in integrated child development services” (63%) and “importance of pre-school education” (50%).

More than 85 percent of them attended any refresher course in intervention and intermediate AWCs . The proportion of such AWWs in Raigarh was 52 percent. They mainly attended refresher course in “pre – school education”, “community growth chart” and “growth monitoring”. For more details, Table 8.3A in Annexure – 2 may be seen.

## 87 8.2 Infrastructure and equipment of AWCs

**Location of AWC:** Majority of the AWCs (more than 85%) were functioning in Government building or rented building. About one – tenth of the AWCs were functioning in the building provided by panchayat (7%) or shared with school (3%) (Table 8.1).

**Population covered:** Majority of AWWs (64% in intervention, 68% in intermediate and 87% in control AWCs) covered a population of less than 900. About One – fifth of AWWs in intervention districts and one – tenth in control district covered a population of 900 – 1100; while one – tenth intervention and 3% in control district covered more than 1100 (Table 8.1).

**Access to a ground for children to play:** Almost three – fifths of AWCs (62% in intervention, 56% in intermediate and 66% in control AWCs) had an access to any ground for children to play (Table 8.1).

**Table 8.1: Location of AWCs, population covered and access to play ground for children to play**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
(n=)	61	59	61
<b>Location</b>			
Govt. Building	73.8	76.3	55.7
Rented building	16.4	17.0	29.5
Building provided by Panchayat	6.6	3.4	11.5
Bldg shared with school	3.3	3.4	3.3
<b>Population covered</b>			
< 900	63.9	67.8	86.9
900-1100	23	20.3	9.8
1101-1500	13.1	10.2	3.3
More than 1500	0	1.7	0
<b>Easy access to a ground</b>			
Yes	62.3	55.9	65.6
No	37.7	44.1	34.4

**Growth monitoring items:** All AWCs (except 20) had weighing scale and in four – fifths of them, weighing scale was found to be in good condition. Height measuring scale and measuring tape were available in only 7 and 5 AWCs respectively. Height measuring scale was in good condition in all these 7 AWCs, while measuring tape was found to be good in 4 AWCs . Stock of growth monitoring charts for a year (old or new) was only available in all the 61 intervention AWCs (Table 8.2).

**Table 8.2: Availability of growth and condition monitoring items at AWC**  
(Percentage)

Availability and condition of growth monitoring items	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Availability (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
<b>Weighing scale</b>	90.2	83.1	93.4
<b>Height measuring scale</b>	4.9	1.7	4.9
<b>Measuring tape</b>	8.2	0	0
<b>Condition</b>			
<b>Weighing scale (n=)</b>	<b>55</b>	<b>49</b>	<b>57</b>
Good	80	71.4	87.7
<b>Height measuring scale (n=)</b>	<b>3</b>	<b>1</b>	<b>3</b>
Good	100	100	100
<b>Measuring tape (n=)</b>	<b>5</b>	<b>0</b>	<b>0</b>
Good	80	0	0
<b>Stock of growth monitoring charts for a year (old or new growth monitoring charts) (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	100	0	0

**Educational & playing material for children:** Toys are available in less than one – fifth of AWCs in intervention districts , while blocks are available in only 3 percent of AWCs in adequate number. Picture books and books are available in adequate number in only one – third of AWCs in intervention districts. The position in control districts is better for all educational material except books. In less than 50 percent of AWCs in intervention districts the condition of toys and blocks was found to be good , while for picture books and books the condition was found to be good in more than 50 percent of AWCs in intervention districts. (Table 8.3).

**Table 8.3: Availability & condition of playing & education material at AWC**  
(Percentage)

Availability of items in adequate quantity	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Toys	14.8	18.6	63.9
Blocks	3.3	3.4	49.2
Picture books	34.4	32.2	47.5
Books	36.1	32.2	24.6
<b>Condition of available material for children</b>			
<b>Toys (n=)</b>	<b>42</b>	<b>40</b>	<b>57</b>
Very Good	2.4	7.5	29.8
Good	19	17.5	43.9
Somewhat good	40.5	30	15.8
Poor	31	40	3.5
Very poor	7.1	5	7

**Table 8.3: Availability & condition of playing & education material at AWC (Contd..) (Percentage)**

Availability of items in adequate quantity	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Blocks (n=)</b>	<b>17</b>	<b>10</b>	<b>43</b>
Very Good	0	0	23.3
Good	17.6	30	53.5
Somewhat good	41.2	10	14
Poor	17.6	40	4.7
Very poor	23.5	20	4.7
<b>Picture books (n=)</b>	<b>44</b>	<b>46</b>	<b>40</b>
Very Good	6.8	6.5	17.5
Good	47.7	43.5	50
Somewhat good	29.5	34.8	20
Poor	11.4	10.9	2.5
Very poor	4.5	4.3	10
<b>Books (n=)</b>	<b>43</b>	<b>46</b>	<b>24</b>
Very Good	7	6.5	20.8
Good	46.5	52.2	37.5
Somewhat good	37.2	30.4	25
Poor	4.7	6.5	4.2
Very poor	4.7	4.3	12.5

**88 8.3 Knowledge of maternal health and nutrition**

All the surveyed AWWs were asked about their perception on components of good antenatal care, safe delivery, type of services need to be provided during postnatal period and intake of micronutrients by women after post – partum period. Table 8.4 provides such information.

**Table 8.4: Knowledge of AWWs about maternal health & nutrition (Percentage)**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Components of good antenatal care</b>	<b>61</b>	<b>59</b>	<b>61</b>
Early registration	86.9	81.4	83.6
Antenatal checkup	55.7	66.1	78.7
TT vaccination	88.5	93.2	93.4
Iron Folic supplementation	45.9	49.2	55.7
Rest and care	42.6	44.1	34.4
Birth preparedness	67.2	49.2	52.5
Access to & consumption of supplement food / additional meal	23	16.9	41
Access to Janani Suaksha Yojana	41	50.8	54.1
The access to convergent VHND	3.3	5.1	1.6
<b>Safe delivery refers to- (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Institutional delivery	98.4	100	93.4
Home delivery by trained health personnel	32.8	25.4	52.5

**Table 8.4: Knowledge of AWWs about maternal health & nutrition (Contd..)**  
(Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Services need to be provided during postnatal period (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Post natal check up	85.2	79.7	93.4
Counseling for Infant and young child feeding	75.4	74.6	82
Micronutrients (IFA, Vit A)	37.7	61	34.4
<b>Women avail micronutrients after post-partum period (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	91.8	91.5	83.6
No	1.6	3.4	6.6
Don't know	6.6	5.1	9.8

The following findings have emerged from this table.

- About 90 percent of AWWs perceived "TT vaccination as a component of good antenatal care, while about four – fifths of them felt" early registration of pregnancy", about two – thirds reported "antenatal checkup up" and 56 percent mentioned "birth preparedness".
- Other components of good antenatal care perceived by 40-55 percent of AWWs were: "rest & care", "access to JSY" and "iron folic supplementation". "Access to & consumption of supplement food / additional meal" and "access to convergent VHND" were perceived by least number of AWWs respectively.
- Almost all of them perceived "institution delivery" as safe ,while one – third in intervention , 25 percent in intermediate and 52 percent in control AWCs felt that "home delivery conducted by a trained health personnel" as also a safe one.
- Regarding post – natal care services, more than 75 percent of AWWs reported that a woman should receive post natal checkup and should get counseling for infant and young child feeding. Intake of micronutrients (IFA, vitamin A) was least reported by (38% in intervention , 61% in intermediate and 34% in control AWCs)
- With regard to availing of micronutrients by women after post partum period, 84 percent of AWWs or more replied in affirmative.

Further, AWWs were asked about what they understand about hand washing hygienic practice and what advice they give to mothers about sanitary practices to be followed. Their voluntary responses have been recorded without any prompting (Tables 8.4A in Annexure - 2).

- "Washing hands with water after toilet" and "washing hands with soap before eating" were reported by 53 percent and 52 percent of AWWs. The proportion of such AWWs was lower in the control district of Raigarh.
- Between 40 and 50 percent of the AWWs reported: "washing hands before eating", "washing hands with water after cleaning the child after defecation", "washing hands with soap or ash after toilet" and "washing hand with soap or ash after cleaning the child after defecation". "Washing hands with soap or ash after eating" and "washing hands with soap before cooking" were reported by less than 40 percent of the AWWs.
- More than 60 percent of AWWs reported that they advise mothers to wash their hands before cooking or serving food, to ask to child to wash hands after defecation and to make sure that child cleans the teeth daily. About two – fifths of AWWs advice mothers to wash hands before feeding the child and to wash hands after cleaning the child after defecation.

## 89 8.4 Knowledge about child health, development and nutrition

### 8.4.1 Knowledge about neonatal care

On asking what they knew about neonatal care to be given to a child within 30 days after birth, more than 80 percent of AWWs reported to give BCG vaccination and the child's birth should be registered. Between 55 and 72 percent reported, "no bath to child for at least 24 hours after birth" and "exclusive breast feeding" (Table 8.5).

More than 90 percent of AWWs were of this opinion that nothing should be applied on the cord (Table 8.5).

**Table 8.5: Knowledge of AWWs about neonatal care** (Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Knowledge about neonatal care to be given to children (within 30 days after birth) (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Birth registration	93.4	86.4	82
BCG vaccination	86.9	91.5	91.8
Thermal control / practice of kangaroo method	34.4	40.7	60.7
No bath to child for at least 24hrs after birth	57.4	69.5	72.1
Exclusive breastfeeding	65.6	69.5	60.7
<b>Opinion about applying anything on the cord of neonate after birth or thereafter (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Nothing	95.1	98.3	91.8
Only dry it using cotton	1.6	0	3.3
Apply oil	1.6	1.7	3.3

- More than 95 percent of AWWs had reported voluntary without prompting correct knowledge about the number of doses of various vaccinations (BCG, DPT, Polio & Measles) against six preventable diseases to be given to a child (Table 8.6).

**Table 8.6: knowledge of AWWs about vaccinations to be given to infants** (Percentage)

Correct knowledge on vaccination doses (n=)	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
BCG	100	100	100
Polio	100	100	93.4
DPT	98.4	98.3	95.1
Measles	98.4	96.6	100
Vit A	100	100	86.9
Booster dose 1	96.7	93.2	85.2

- Regarding breast feeding practices more than 90 percent of AWWs reported correct knowledge voluntary without prompting that a woman should "feed colostrum" immediately after birth (99%), "initiate breast feeding within an hour of birth" (97%), "breast feed exclusively for 6 month" (92%) and "continue breastfeeding for more than a year" (92%) (Table 8.7).

**Table 8.7: Knowledge of AWWs about correct breast feeding practices**

(Percentage)

Correct breast feeding practices	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
<b>Feeding colostrum immediately after birth</b>			
Correct	100	100	98.4
Incorrect	0	0	1.6
<b>Start BF within 1 hour of birth</b>			
Correct	98.4	93.2	98.4
Incorrect	1.6	6.8	1.6
<b>Exclusive BF for 6 months, no water or no other liquid item along with breastfeeding</b>			
Correct	95.1	94.9	85.2
Incorrect	4.9	5.1	14.8
<b>Continuation of BF for more than one year</b>			
Correct	96.7	94.9	85.2
Incorrect	3.3	5.1	14.8

- On asking preventive measures for keeping a new born healthy and protecting him/her from any illness, 76 percent reported that nothing should be applied on the cord. Other measures cited by AWWs were: "delay in giving a bath (61%), "placing the baby in contact with mother's skin for warmth" (57%), "initiation of early breast feeding" (59%) and "drying and keeping the baby warm" (49%). (Table 8.8).

**Table 8.8: Knowledge of AWWs about preventive measures for keeping a new born healthy and protecting from any illness**

(Percentage)

Preventive measures for keeping a new born healthy and protecting from any illness	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Delay in giving a bath	62.3	62.7	57.4
Applying nothing on the cord	80.3	78	68.9
Drying and keeping the baby warm	47.5	50.8	49.2
Placing the baby in contact with mother's skin for warmth	49.2	57.6	63.9

- About 92 percent of AWWs [lower in Raigarh (80%)] reported of drawing growth monitoring charts for all children enrolled at their AWC. Out of them, 74 percent reported of drawing monitoring charts for children aged 3 years and above every six months (Table 8.9).

**Table 8.9: Use of growth monitoring chart by AWWs**

(Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Whether draws growth monitoring charts for all children (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	95.1	100	80.3
<b>Frequency of drawing monitoring charts for children ages 3 years and more (n=)</b>	<b>58</b>	<b>59</b>	<b>49</b>
Every six months	70.7	62.7	89.8
Once a year	12.1	10.2	6.1
Monthly	12.1	15.3	2
Quarterly	3.4	8.5	0
Not specified	1.7	3.3	2.0

- Regarding correct age of child for introducing complementary feedings, 56 percent of AWWs reported 6 months and 29 percent mentioned 7-8 months (Table 8.10).
- The largest number of AWWs reported 6 months as the age of the child to start supplementary nutrition, while 30 percent mentioned 7-8 months (Table 8.10).

**Table 8.10: Knowledge on introducing complementary feeding to children**

(Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Correct age of child for introducing complementary feeding (semi-solid food) (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
< 6 months	1.6	1.7	1.6
6 months	57.4	57.6	52.5
7-8 months	21.3	25.4	41
After 8 months	19.7	15.3	3.3
Missing	0	0	1.6
<b>Age at which supplementary nutrition for children should be started (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
< 6 months	1.6	1.7	0
6 months	44.3	45.8	44.3
7-8 months	24.6	22	42.6
9-10 months	13.1	11.9	9.8
More than 10 months	16.4	18.6	3.3

- About 92 percent of AWWs correctly reported the age of the child (9 months) when 1st dose of vitamin A should be given to the child (Table 8.11).

**Table 8.11: knowledge of AWWs about age of the child for giving 1<sup>st</sup> dose of Vitamin A**

(Percentage)

Age at which first dose of vitamin A should be given to a child (n=)	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
< 9 months	4.9	6.8	6.6
9 months	93.4	93.2	88.5
1 year	1.6	0	1.6
Missing	0	0	3.3

- On asking what advices AWW should give to a caretaker if the child is malnourished , more than 70 percent advise caretaker to "bring the child regularly to AWC for taking supplementary nutrition" and "to give milk to the child. Other advices reported by AWWs

were: "referral the child to nutrition rehabilitation center", "referral to pediatrician of nearby hospital" (Table 8.12).

**Table 8.12: Type of advices being given to caretakers of malnourished children (Percentage)**

Advice given to the caretaker	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
(n=)	61	59	61
<b>Malnourished</b>			
Bring child regularly to AWC for taking supplementary Nu	73.8	74.6	78.7
Advice mother to give milk to child	72.1	66.1	75.4
Nutritive diet to child	13.1	8.5	3.3
Others	3.2	5.1	1.6
<b>Severely malnourished</b>			
Refer the child to nutrition rehabilitation centre	45.9	37.3	47.5
Refer the child to pediatrician of nearby hospital	67.2	69.5	65.6
Advice mother to give high protein calorie diet to child	29.5	13.6	37.7
Consult the doctor	11.5	11.9	0
Others	3.2	1.7	0

#### 8.4.2 Knowledge about common illness in children

Further, AWWs were asked what are the common sicknesses of children, what are the signs / symptoms of diarrhoea and respiratory infection and whether diarrhoea can be prevented. Table 8.5A in Annexure -2 provides such information. The following findings have emerged from this table.

- Diarrhoea and fever were reported as the common sicknesses of children by 86 percent in 71 percent of AWWs respectively, while about one – third mentioned respiratory infection.
- Regarding symptoms of diarrhoea, loose or watery stool and frequent stools were cited by 80 percent and 61 percent of AWWs. Other symptoms reported by AWWs were: fever, abdomen pain, tiredness / moody/ crying a lot etc.
- When AWWs were asked about the causes of diarrhoea, they reported "eating stale foods" and eating food touched by flies, while 43 percent each cited "eating food from street vendors" and "drinking dirty water".
- Regarding symptoms of respiratory infection, they mainly cited cough and sneezing as its symptoms. Other symptoms reported by AWWs were: wheezing sound, sore throat, fever, difficult breathing, rapid / fast breathing etc.

#### 8.4.3 Involvement of father in taking care of children

All the surveyed AWWs were asked whether fathers get themselves engaged in taking care of their children and if yes, they were further questioned about the kind of help provided by husbands in taking care of children. In addition, AWWs were asked whether they interact with fathers. Table 8.13 provides such information.

**Table 8.13: knowledge of AWWs about fathers' support in child care** (Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Whether fathers get engaged in care of the children (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	90.2	98.3	86.9
<b>Help provided by fathers (n=)</b>	<b>55</b>	<b>58</b>	<b>53</b>
Giving bath	83.6	91.4	90.6
Helps in eating	60	48.3	84.9
Takes the child to AWC	36.4	36.2	54.7
Helps in learning	32.7	29.3	54.7
Helps in dressing	38.2	34.5	49.1
Plays with child	30.9	29.3	28.3
<b>Whether interaction with fathers (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	65.5	56.9	64.2

From the table, the following findings have emerged.

- About 92 percent of AWWs reported involvement of fathers in taking care of the children
- Mainly they involvement themselves in giving bath (89%) and helping the child in eating (64%), taking the child to AWC (42%) and helping in dressing the child (40%).
- Sixty two percent of AWWs interact with fathers

## 90 8.5 Activities undertaken in AWCs

### 8.5 1 Activities undertaken to implement ICDS in the area

The AWWs were asked three types of questions to assess what activities they had undertaken to implement ICDS scheme in the area. The first question was on what activities they had undertaken for implementation of the ICDS in their own area.. In the second question they were asked all the services they provided at AWCs; the response was voluntary, without any probe. In the third question, they were asked about their activities on generating community awareness of their services. These three questions are being analyzed in this section.

The AWWs were asked whether they had undertaken various activities to implement ICDS programme in the area. They were asked about each activity one by one. Their responses are shown below in Table 8.14:

**Table 8.14: Distribution of AWWs by activities undertaken for implementation of ICDS program****(Percentage)**

Activities	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Village Mapping	45.9	49.2	68.9
Rapport Building with Community	75.4	72.9	67.2
Conducting Community Survey	72.1	67.8	57.4
<b>Enlisting Beneficiaries</b>			
a. Children 0-6 years	93.4	94.9	95.1
b. Children 'At Risk'	63.9	55.9	45.9
c. Expectant and Nursing Mothers	90.2	84.7	96.7
d. Adolescent Girls	80.3	88.1	95.1
Birth and Death Registration	75.4	84.7	77

Though most of the AWWs were undertaking most of the desired functions for implementation, but there was variation in their percentages. Most of them (more than 90%) had undertaken work of enlistment of children 0-6 years, expectant and nursing mothers and adolescent girls. The least reported activity was "village mapping". The work was better in the control district compared to the intervention districts.

When asked about the services they were providing at the AWCs, about 70- 80% reported providing supplementary nutrition and immunization services to mothers and children. About 60% were providing health and nutrition education to mothers (Table 8.15). The least reported services were:

- Detection of disability among children
- Referral services, and
- Growth monitoring, very important job they are expected to perform.

**Table 8.15: Reported services being provided to beneficiaries at AWC**  
**(Percentage)**

Services provided to beneficiaries	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Preparation/distribution of supplementary nutrition	78.7	76.3	93.4
Growth monitoring	44.3	47.5	57.4
Immunization & Health Check- up of Children & Mothers	72.1	83.1	68.9
Referral services	41	50.8	63.9
Detection of disability among Children	23	18.6	23
Providing treatment of Minor Ailments	8.2	18.6	19.7
Management of childhood Illnesses	19.7	20.3	26.2
Health and Nutrition Education	63.9	61	62.3
Non-formal Preschool Education Activities	27.9	28.8	18

The AWWs were making women aware of their (AWCs) services by visiting households and by counseling the parents/families/communities. (Table 8.16 )

**Table 8.16: Distribution of AWWs by ways to spread awareness in community about different health issues**

**(Percentage)**

Ways to spread awareness in community about health issues	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>(n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Counsel Parents/ families/communities	55.7	40.7	67.2
Use of Traditional and folk media	18	8.5	27.9
Organize awareness campaign	14.8	22	47.5
Organize street plays/nukkad natak	4.9	6.8	24.6
House to house visit	93.4	100	90.2
Prepare communication and education material	6.6	8.5	11.5

### 8.5.2 Functioning of AWWs

The AWWs were asked various aspects of functioning of the AWCs. Their answers are reported in **Table 8.6A in Annexure -2**. Major findings are:

- Almost all the AWCs open 5-6 days a week. They work for about 17-18 hours a week—about three hours every day.
- Ration is provided on weekly basis
- They take help of Sahayika for bringing (from home) and taking care of children
- Almost all the AWWs reported to be making home visits—mean number of home visits reported was 11-13 every month; every visit was of about 20-25 minutes. These visits were being used to give awareness of services and counseling on the benefits of the services (Table 8.7A in Annexure -2).
- Almost 50% AWCs in the intervention districts reported to be working with Self Help Groups (SHGs) in the villages. They talk about savings schemes and the services for mothers and children.. Very small percent AWWs reported to be working with any other group in the villages.
- More than 95% reported organization of Nutrition and Health Day (NHD) every month. Most of the expected activities are carried out there—there is some variation. More details on the NHD can be seen in Table 8.17.

**Table 8.17: Distribution of AWWs by NHDs being held in their area of work**

**(Percentage)**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Nutrition and health days (NHD) held at AWC (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Yes	95.1	96.6	90.2
<b>Frequency of organizing NHDs at AWC (n=)</b>	<b>58</b>	<b>57</b>	<b>55</b>
Monthly	84.5	96.5	78.2
Once in 2-3 months	15.5	3.5	14.5
Other frequency	0.0	0.0	7.3

**Table 8.17: Distribution of AWWs by NHDs being held in their area of work (Contd.) (Percentage)**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Time (month &amp; year) when the last NHD was held (n=)</b>	<b>58</b>	<b>57</b>	<b>55</b>
Jan-12	44.8	43.9	18.2
Feb-12	39.7	47.4	49.1
Mar-12	3.4	3.5	27.3
Late 2011 (Nov., Dec. 2011)	12.0	5.3	5.4
<b>Activities in NHDs (n=)</b>	<b>58</b>	<b>57</b>	<b>55</b>
ANC registration	55.2	59.6	65.5
ANC checkups by ANM	36.2	45.6	34.5
TT vaccination to pregnant women by ANM	84.5	86	83.6
IFA distribution	50	57.9	40
Distribution of supplementary nutrition to children	60.3	68.4	67.3
Pregnant women	67.2	50.9	49.1
Adolescent girls	24.1	21.1	34.5
Distribution of take home ration for children	36.2	28.1	27.3

### 8.5.3 Functioning of and activities undertaken during pre-school education

The AWWs were asked information related to (i) their understanding of the preschool education, (ii) functioning of the pre-school education, and (iii) activities undertaken in the pre-school sessions. These aspects are reported in this section (Table 8.18) .

#### 8.5.3.1 Understanding of pre-school education

Table 8.18: shows the responses on AWW's understanding of the pre-school education

**Table 8.18: AWW's understanding of the pre-school education**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Definition of preschool education (n= )</b>	<b>61</b>	<b>59</b>	<b>61</b>
Sharirik mansik samajik Vikas Karvana	13.1	3.4	9.8
Prathmik shikshak se pehle bacho me school ane padhne ki Eccha prerit karna	23	16.9	27.9
Chart se padhna	9.8	5.1	3.3
Sing song	13.1	16.9	6.6
Telling story	9.8	11.9	9.8
Colour	1.6	3.4	4.9
Language	0	1.7	1.6
Picture	0	0	3.3
Playing activities	21.3	25.4	4.9
Teaching activities	6.6	6.8	1.6
Telling family name	0	0	1.6
Cannot say	4.9	5.1	6.6

**Table 8.18: AWW's understanding of the pre-school education (Contd..)**  
(Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>Importance of preschool education for children's development (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
Help in learning	88.5	88.1	95.1
Prepare children for going to school	72.1	52.5	85.2
Children learn basics	60.7	59.3	44.3
School achievement	37.7	47.5	21.3
Not reported	1.6	0	3.3
<b>At what age, children should be enrolled for preschool education and for how many years (n=)</b>	<b>61</b>	<b>59</b>	<b>61</b>
<b>Age at which enrolled</b>			
3 years	63.9	57.6	91.8
4 years	1.6	1.7	4.9
5 years	0	5.1	0
6 years	34.4	33.9	1.6
Not reported	0	1.7	1.6
<b>Number of years for which enrolled</b>			
2 year	1.6	1.7	0
3 year	75.4	71.2	18
> 3 year	23	25.4	75.4
Not reported	0	1.7	6.6
Average	3.64	3.67	5.37

It may be noted that there is a large variation on understanding of pre-school education-- different respondents have reported in different form of the activities they undertake. Obviously comprehensive understanding of its role in overall development and growth of children is lacking. Mostly reported its importance in preparing children to enter into regular schools—learning of words, language and numbers is the reported focus; no emphasis is being given to its need for growth and development of children.

### 8.5.3.2 Functioning of pre-school education

Table 8.19 gives some aspects of the functioning of the pre-school education

**Table 8.19:- Functioning of the pre-school education**

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
(n=)	<b>61</b>	<b>59</b>	<b>61</b>
<b>AWCs undertake pre-school education session</b>			
	98.4	96.6	96.7
<b>No. of groups of children enrolled for pre-school education (n=)</b>	<b>60</b>	<b>57</b>	<b>59</b>
One	35	33.3	55.9
Two	20	14	23.7
Three	8.3	21.1	3.4
More than 3	36.7	31.6	16.9

**Table 8.19-: Functioning of the pre-school education (Contd..)**  
(Percentage)

Particulars	Intervention districts / Category of AWCs		Control
	Intervention	Intermediate	Raigarh
<b>No. of days per week pre-school sessions are held (n=)</b>	<b>60</b>	<b>57</b>	<b>59</b>
1-3	5.0	3.6	5.1
4-6	43.3	45.5	27.1
Not reported	51.7	50.9	67.8
Mean	5.34	5.46	5.16
<b>Place where children sit (n=)</b>	<b>60</b>	<b>57</b>	<b>59</b>
Bare floor	13.3	26.3	1.7
Mat/Dari	83.3	71.9	98.3
Others	3.3	1.8	0
<b>Place where classes are held (n=)</b>	<b>60</b>	<b>57</b>	<b>59</b>
Room	95	94.7	94.9
Open space	3.3	3.5	5.1
Others	1.7	1.8	0
<b>AWCs reported existence of teaching plan</b>	<b>8.2</b>	<b>6.8</b>	<b>6.6</b>

Though most of the AWCs reported pre-school education sessions but they did not report number of days per week when such sessions are held. It suggests that, perhaps, pre-school sessions are not being held regularly. This idea gets confirmed when it was noticed that AWWs did not have any session plans.

### 8.5.3.3 Activities undertaken in preschool education

The respondents were asked about the activities undertaken in the pre-school education. This information was collected on the basis of their spontaneous responses as well as after probing for each activity. These responses on activities are shown in Table 8.20:

**Table 8.20 : Activities undertaken for preschool education**  
(Percentage)

Pre-school Activity	Intervention district		Intermediate district		Control district	
	Spontaneous	Additional with probe	Spontaneous	Additional with probe	Spontaneous	Additional with probe
Language activity	68.3	8.3	52.6	14.0	96.6	0.0
Learn pre-number concepts and number identification	70.0	13.3	66.7	17.5	71.2	0.0
Hear stories	78.3	10.0	75.4	15.8	96.6	0.0
Tell stories/news	56.7	3.3	49.1	1.8	66.1	0.0
Sing songs/recite poems	80.0	15.0	71.9	8.8	94.9	1.7
Draw pictures, clay etc	15.0	13.3	24.6	7.0	55.9	5.1
Play with toys	56.7	21.7	50.9	24.6	91.5	3.4
Play with 1blocks	15.0	13.3	8.8	17.5	49.2	5.1
Read picture books	53.3	15.0	42.1	21.1	76.3	5.1
Nature walk	21.7	8.3	22.8	7.0	33.9	1.7
Puppetry	8.3	8.3	3.5	3.5	30.5	5.1

Most of the AWWs reported activities of language, learning numbers, hearing and telling stories, singing songs or reciting poems, playing with toys, and reading picture books.

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Activities which were reported by less than 50% respondents were drawing pictures, playing with blocks, nature walk and puppetry. The situation is much better in control district when compared with the intervention districts.

## 91 CHAPTER- IX

### 92 OBSERVATIONS ON THE PRE-SCHOOL EDUCATION PROGRAMME AT THE SERVICES OF ANGANWADI CENTRES

This study collected data on anganwadi centres and their functioning in two ways. In the first approach, the AWWs were interviewed to collect information on their knowledge of the activities she performs and on functioning of the AWCs; focus was on the information related to her activities (programme contents) related to the growth and development of children. The second approach was to observe AWCs, for their physical infrastructure and contents of the services for children ages 0-3 years and the contents of the pre-school education. While the information based on the interview of the AWWs has been discussed in chapter VIII, this chapter discusses the findings of the observations on the AWCs.

The checklist developed for the pre-school education programme has observations recorded in three major components:

- Existence of infrastructure in the AWCs, and
- Coverage of the pre-school programme content, which was further divided into six sub-sections (i) learning /play aids, programme schedule and class arrangements, (ii) personal care, hygiene and habit formation, (iii) language and reasoning experience, (iv) creative activities, (v) social development,
- Services to children 0 – 3 years

While making observations on three components of services at AWCs, the checklist had categorized these components in different sub-components within a broad category of a component. For instance, component of pre-school education was further divided into five sub-components (learning, personal care and hygiene, language and reasoning experience, creative activities and Social development activities). Each of these sub-component was further sub-divided into a few activities related to development of the sub-component. While making observation, the field investigator had to categorize the level of the activity into poor situation, intermediate situation and the best situation (all relative terms and have been defined in the checklist). This type of categorization had advantage that these levels could be scored from 0 to 2—score zero for the poorest situation and score two for the best situation. Therefore, we have two indicators for each activity—**percent distribution of the AWCs into three levels** and **mean score of the activity**, computed on the basis of scoring levels of 0,1 or 2.

Next sections of this chapter will study each of these component/sub-component and the activity, one by one.

#### 93 9.1 Physical infrastructure at the AWCs

Seven sub-components of the infrastructure were observed for the study. They were (1) toilet availability and use, (2) availability of water in toilets, (3) hazards around the centre (AWC) or pre-school classes, (4) clean/unclean surroundings near the AWC and pre-school classes, (5) safety level of the building, (6) noise pollution, and (7) sitting facility for children. Table 9.1 shows percentage distribution of the AWCs and the mean score for each of these seven sub-components.

**Table 9.1: Distribution of AWCs on quality of available physical infrastructure and mean on each sub-component**

(Percentage)				
Q.No.	Scoring on availability of physical infrastructure	Intervention AWCs	Intermediate AWCs	Control AWCs
	(n=)	62	60	62
<b>1.</b>	<b>Toilet availability and use</b>			
	Toilet is not available or is not used by any child.	66.1	70	64.5
	Toilet is available and used by some children but more than half use open spaces.	27.4	21.7	14.5
	Toilet is available and all or more than half of the children use the toilet and not open spaces.	6.5	8.3	21
	Mean score	0.404	0.383	0.565
<b>2</b>	<b>Availability of water in toilet</b>			
	Toilet has no water available	69.4	71.7	59.7
	Toilet has water for washing but not flushing.	21	23.3	14.5
	Toilet has water for washing and flushing.	9.7	5	25.8
	Mean score	0.404	0.333	0.661
<b>3.</b>	<b>Hazards around the center or preschool</b>			
	There is one or more of these hazards within 10 meters of the building or play area and without a protective barrier.	54.8	60	48.4
	There is more than one or more of these hazards beyond 10 meters of the building or play area and without a protective barrier.	33.9	26.7	16.1
	There are no hazards or there is a protective barrier such as good wall and lockable gate between the children and the hazards.	11.3	13.3	35.5
	Mean score	0.565	0.533	0.871
<b>4.</b>	<b>Clean / unclean surroundings</b>			
	There is one or more of these unclean conditions within 10 meters of the building/ center and without a protective barrier.	45.2	43.3	46.8
	There is one or more of these unclean conditions beyond 10 meters of the building or play area and without a protective barrier	48.4	50	30.6
	There are no unclean conditions or there is a protective barrier such as a good wall and lockable gate between the children and this unclean condition	6.5	6.7	22.6
	Mean score	0.614	0.634	0.758



**Table 9.1: Distribution of AWCs on quality of available physical infrastructure and mean on each sub-component (Contd..)**

		(Percentage)		
Q.No.	Scoring on availability of physical infrastructure	Intervention AWCs	Intermediate AWCs	Control AWCs
	(n=)	62	60	62
5.	<b>Safety level of building</b>			
	Three or more of the conditions (listed in the checklist) exist	40.3	51.7	27.4
	Two of the conditions exist	43.5	36.7	33.9
	None or one of the conditions exists	16.1	11.7	38.7
	Mean score	0.757	0.601	1.113
6.	<b>Noise pollution</b>			
	Most of the time while observing, the sound from outside sources prevents hearing of conversation in the center.	21	33.3	11.3
	For some of the time the sound from outside prevents hearing of conversation.	58.1	45	30.6
	There is no disturbance from outside source which prevents hearing of conversation most of the time.	21	21.7	58.1
	Mean score	1.001	0.884	1.468
7.	<b>Sitting facility for children</b>			
	Children are sitting on a bare floor with no covering.	35.5	41.7	4.8
	Children are on a mat but it is torn or unclean or not enough for all.	43.5	33.3	37.1
	Children are sitting on chairs or a clean mat.	21	25	58.1
	Mean score	0.855	0.833	1.533

It may be noted that majority of the AWCs are at the poorest level of the infrastructure on all components except the components of "noise pollution" and "sitting facility" where the second poorest levels is the largest. In the case of component of "cleanliness", both the poorest and second poorest levels are about equal in proportion. Infrastructure of the control AWCs seems to be better than the intervention/intermediate AWCs.

The scores of each component are also shown in the Table. Though the mean scores could vary from 0 to 2 but the actual score on most of the items was less than 1—slightly better in control district than other two districts.

## 94 9.2 Programme content of pre-school education (3-6 year children)

As stated earlier, the programme content of the pre-school education has been divided into five (children's) development sub-components: (1) learning/play aids, programme schedule and class arrangements, (2) personal care, hygiene and habit formation, (3) language and reasoning experience, (4) creative activities, and (5) social development. Within each component, there are a few activities whose level is being assessed and scored 0 to 2. The analysis of each of these sub-component has been shown in Tables 9.2 to 9.6.

### 9.2.1 Learning/play aids, programme schedule and class arrangements

This sub-component has been subdivided into three activities--class arrangement, weekly/daily schedule and class display; their analysis is shown in Table 9.2. It may be noted that the largest percent of AWCs on all the activities fall in the levels 0 (poorest) or 1 (intermediate/second poorest), though 27 percent to 32 percent AWCs also fall in the best level (score 2). The level of activities in control districts are better. The mean score for the intervention districts is less than 1 but the score in the control district is more than 1, suggesting that condition/situation of the AWCs in the control district on the dimension under study is better than the intervention/intermediate AWCs.

**Table 9.2: Distribution of AWCs on levels of quality of learning/play aids infrastructure covering programme schedule and class arrangements and the mean score of each component.**

(Percentage)				
Q.No.	Scoring on learning / play aids , programme schedule and class arrangement	Intervention AWCs	Intermediate AWCs	Control AWCs
1.	<b>Class arrangement</b>	62	60	62
	Classroom does not appear to be arranged in any way for conducting activities with children.	45.2	53.3	21
	Classroom is arranged with materials but not in any evident way for facilitating activities.	33.9	35	30.6
	Classroom has been arranged with specific activities activity corners or areas for different kinds of activities such as blocks' corner, dolls' corner etc	21	11.7	48.4
	Mean score	0.759	0.584	1.274
2.	<b>Weekly / daily schedule</b>			
	Teacher does not have nor appears to follow any pre-planned schedule of activities and routine care (Eating, sleeping, toileting) take up most of the day.	35.5	36.7	27.4
	Teacher has/displays a planned schedule but is not observed to be using it.	45.2	45	21
	Teacher is conducting the program, to a large extent, according to a planned schedule.	19.4	18.3	51.6
	Mean score	0.84	0.816	1.242
3.	<b>Class display</b>			
	There is no display in the classroom and if there is, it is of materials which is not meant for children or which they cannot understand.	37.1	38.3	25.8
	Children can understand the display but it is placed too high on the wall and not easily visible to the children.	43.5	36.7	22.6
	Display is interesting for and easily understood by children and is also placed at their eye level so that they can see easily.	19.4	25	51.6
	Mean score	0.823	0.867	1.258



## 9.2.2 Personal care, hygiene and habit formation

This sub-component has been subdivided into three activities—hand washing practices, independent toileting and eating independently; their analysis is shown in Table 9.3. It may be noted that the largest percent of AWCs on all the activities under this sub-component falls in level 1 (second level), though 21 percent to 31 percent AWCs also fall in the best level (score 2). The mean score for the intervention districts is less than 1 but the score in the control district is more than 1, suggesting that condition/situation of the AWCs in the control district on the dimension under study is better than the intervention/intermediate AWCs.

**Table 9.3: Distribution of AWCs by levels of hand washing and hygiene practices and mean scores**

(Percentage)				
Q.No.	Scoring on personal care, hygiene and habit formation	Intervention AWCs	Intermediate AWCs	Control AWCs
	(n=)	62	60	62
1.	<b>Hand washing</b>			
	Children do not wash hands after toileting or before meals.	41.9	33.3	8.1
	Children wash hands for one of these activities.	35.5	50	38.7
	Children wash hands both after toileting and before eating food.	22.6	16.7	53.2
	Mean score	0.807	0.834	1.451
2	<b>Independent toileting</b>			
	Less than one third of the children above age 3 years can do toileting without assistance.	30.6	21.7	17.7
	About half of the children above 3 years can do toileting without assistance.	61.3	65	41.9
	More than half of the children above 3 years can do toileting without assistance.	8.1	13.3	40.3
	Mean score	0.775	0.916	1.225
3.	<b>Eating independently</b>			
	Less than one third of the children above age 3 years can eat most of a meal on their own.	38.7	38.3	6.5
	About half of the children above age 3 years are able to feed themselves and complete most of the meal on their own.	41.9	43.3	25.8
	More than half of the children above age 3 years able to feed themselves and complete most of the meal on their own	19.4	18.3	67.7

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	Mean score	0.807	0.799	1.612
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### 9.2.3 Language and reasoning experience

This sub-component has been subdivided into nine activities—receptor language; listening opportunities, expressive language—speaking opportunities, classroom environment, activities, materials for developing, activities for reading, writing and number readiness, activities for reading, writing and number, children’s participation in outdoor activities for gross motor development, and activities for fine motor development; their analysis is shown in Table 9.4. It may be noted that the largest percent of AWCs on the all the activities falls in the levels 0 (poorest level), except classroom environment and activities for reading, writing and number. The mean score for the intervention AWCs is mostly less than 1. The score in the control district is more than 1, suggesting that condition/situation of the AWCs in the control district on the dimension under study is better than the intervention/intermediate AWCs.

**Table 9.4: Distribution of AWCs by levels of language and reasoning experience and mean scores**

Q.No.	Scoring on language and reasoning experiences (n=)	(Percentage)		
		Intervention AWCs	Intermediate AWCs	Control AWCs
1.	<b>Receptor Language- Children</b>	<b>62</b>	<b>60</b>	<b>62</b>
	Less than one third of the children seem to understand the language used by the teacher.	43.5	41.7	6.5
	About half of the children seem to understand the language used by the teacher.	33.9	35	25.8
	More than half of the children seem to understand the language used by the teacher.	22.6	23.3	67.7
	Mean score	0.791	0.816	1.612
2	<b>Listening opportunities</b>			
	Children have no opportunities to listen to language through a planned activity, other than the teacher’s instructions.	45.2	51.7	14.5
	Children have opportunity to listen to language through at least one planned activity in a day such as storytelling, rhyme or a listening game.	25.8	25	24.2
	Children have opportunities to listen to more than one planned activity for listening to language in a day such as storytelling, rhyme or a listening game.	29	23.3	61.3
	Mean score	0.838	0.716	1.468

**Table 9.4: Distribution of AWCs by levels of language and reasoning experience and mean scores (Contd..)**

Q.No.	Scoring on language and reasoning experiences (n=)	(Percentage)		
		Intervention AWCs	Intermediate AWCs	Control AWCs
3.	<b>Expressive Language- speaking opportunities</b>	<b>62</b>	<b>60</b>	<b>62</b>
	Children have few or no opportunities to speak in class.	45.2	48.3	9.7
	Children get opportunity to speak but only through using single words/short sentences in answer to teacher's questions.	32.3	33.3	29
	Children are encouraged to and have many opportunities in the course of the day to speak on their own and share their queries, ideas and experiences.	22.6	18.3	61.3
	Mean score	0.775	0.699	1.516
4.	Children are not allowed to talk with their peers or with the teacher during class, other than as part of an activity or when teacher ask a question.	45.2	33.3	4.8
	Children are allowed to talk but not encouraged to talk with their peers or with the teacher on their own, other than during an activity or when teacher asks a question.	17.7	23.3	40.3
	<b>Children talk freely and comfortably with their peers and teacher but do not disturb the class.</b>	37.1	43.3	54.8
	Mean score	0.919	1.099	1.499
	<b>Activities, materials for developing</b>			
5.	No activities and materials are used with children for helping them develop their cognitive skills like classification, seriation, reasoning, pattern making, sequencing etc.	46.8	50	11.3
	Activities and materials are used but mainly for demonstration or use by a few children and not for all children.	25.8	23.3	30.6
	<b>Activities and material are used in ways that ensure all children in the class are participating</b>	27.4	26.7	58.1

	and which gives them opportunity to handle or manipulate the materials and learn through doing.			
	Mean score	0.806	0.767	1.468

**Table 9.4: Distribution of AWCs by levels of language and reasoning experience and mean scores (Contd..)**

Q.No.	Scoring on language and reasoning experiences (n=)	(Percentage)		
		Intervention AWCs	Intermediate AWCs	Control AWCs
		<b>62</b>	<b>60</b>	<b>62</b>
6.	<b>Activities for reading, writing and number readiness</b>			
	No activities are conducted or materials used for helping children above 4 years develop readiness for reading, writing and number such as phonetics, sound visual association , odd man out , pre number concepts, picture book reading etc .	56.5	60	11.3
	Activities are conducted or materials used for helping children above 4 years develop readiness for reading, writing and number by involving only a few children in the class.	32.3	30	32.3
	Activities are conducted or materials used for reading, writing and number by involving all children in the class.	11.3	10	56.5
	Mean score	0.549	0.5	1.453
7.	<b>Activities for reading, writing and number</b>			
	Teacher teaches reading, writing and/or number work using formal, rote memorizing methods like repeating from the blackboard, chart or textbook to all children.	38.7	31.7	12.9
	Teacher teaches reading, writing and/or number work to all children with the help of activities using alphabet cards, number cards, objects etc.	29	35	38.7
	Teacher does not teaching reading, writing or number work formally at all or teaches through activities to only children above 5 years of age who are ready for it	32.3	33.3	48.4
	Mean score	0.936	1.016	1.355
8.	<b>Children's participation in outdoor activities for gross motor development</b>			
	Teacher does not conduct any outdoor play activities with children.	56.5	40	25.8
	Teacher conducts outdoor activities during the day but only half or less than half of the children participate.	27.4	26.7	35.5
	Teacher conducts outdoor activities in way that ensure	16.1	33.3	38.7

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	most/all children participate.			
	Mean score	0.596	0.933	1.129

**Table 9.4: Distribution of AWCs by levels of language and reasoning experience and mean scores (Contd..)**

**(Percentage)**

Q.No.	Scoring on language and reasoning experiences	Intervention AWCs	Intermediate AWCs	Control AWCs
	<b>(n=)</b>	<b>62</b>	<b>60</b>	<b>62</b>
9.	<b>Activities for fine motor development</b>			
	Teacher does not conduct any activities with children for developing for development of fine motor skills e.g. threading, tracing, cutting, blocks, drawing etc.	48.4	40	16.1
	Teacher conducts at least one or two activities for fine motor development but only half or less than half the children participate.	33.9	33.3	29
	Teacher conducts activities for fine motor development in a way that most or all children participate.	17.7	26.7	54.8
	Mean score	0.693	0.867	1.386

#### 9.2.4 Creative activities

This sub-component has been subdivided into two sub-components—individual and group recitation and children’s participation (in arts and craft activities); their analysis is shown in Table 9.5. It may be noted that the largest percent of AWCs on both the activities falls in the level 0 (poorest level) for the Intervention and Intermediate level AWCs and the level 2 (best level). This poor and high level of the activities is reflected on the mean scores—less than 1 in intervention/intermediate districts and more than 1 in control districts—level of activities in control district is better than intervention/ intermediate AWCs.

**Table 9.5: Distribution of AWCs by levels of components of Creative Activities and mean scores**

**(Percentage)**

Q.No.	Scoring on Creative Activities	Intervention AWCs	Intermediate AWCs	Control AWCs
	<b>(n=)</b>	<b>62</b>	<b>60</b>	<b>62</b>
1.	<b>Individual and group recitation</b>			
	Children do not get any opportunity for recitation of rhymes	56.5	51.7	17.7
	Children get opportunity to recite/sing in a group/whole class.	25.8	31.7	29
	Children get opportunity to recite/sing both in a group and individually.	17.7	16.7	53.2
	Mean score	0.612	0.651	1.354
2	<b>Children’s Participation</b>			
	Teacher does not conduct any arts/ crafts activities throughout the day with children.	45.2	46.7	14.5
	Teacher does conduct one or two art/crafts activities during the day but only half or less than half of the children participate.	32.3	40	32.3
	Teacher does conduct one or two art/crafts activities with children and most or all children participate/get	22.6	13.3	53.2

	the opportunity.			
	Mean score	0.775	0.666	1.387

### 9.2.5 Social development

This sub-component has been subdivided into five activities—teachers’ greetings on arrival and departures, children’ greetings on arrival and departures, cooperation and sharing (with each other), (timing provided) for free play, and quality of teacher and child interactions; their analysis is shown in Table 9.6. It may be noted that the largest percent of AWCs on the first three activities had reported poor situation in intervention and intermediate level districts; the situation was much better in the control AWCs. In the last two sub-components the situation was better in the intervention/intermediate districts compared to the first three activities. In the case of control districts, situation is much better. This poor and high levels of the activities is reflected on the mean scores, shown in the Table.

**Table 9.6: Distribution of AWCs by levels of different components of Social development and mean scores**

(Percentage)				
Q.No.	Scoring on Social development	Intervention AWCs	Intermediate AWCs	Control AWCs
1.	<b>Teacher’s greeting on arrival and departure</b>	62	60	62
	AWW does not greet and/or say goodbye to children at the time of arrival and leaving.	46.8	48.3	19.4
	Teacher greets and/or says good bye to some children but not to all at the time of arrival and leaving.	32.3	35	30.6
	Teacher ensures she greets/says goodbye to every child at the time of arrival and leaving.	21	16.7	50
	Mean score	0.743	0.684	1.306
2	<b>Children’s greeting on arrival and departure</b>			
	Less than one third of the children individually greets or say good bye to the teacher at the time of arrival and/or departure.	58.1	51.7	27.4
	At least half the number of children individually greets or say good bye to the teacher at the time of arrival and/or departure.	21	21.7	21
	Most /all children individually greet or say good bye to the teacher at the time of arrival and /or departure.	21	26.7	51.6
	Mean score	0.63	0.751	1.242
3.	<b>Cooperation and sharing</b>			
	Teacher organises activities in such a way that there is no opportunity for children to learn to share or	50	43.3	14.5

	help each other.			
	Unplanned opportunities do come up for children to share and help each other but teacher does not consciously make use of them.	25.8	28.3	53.2

**Table 9.6: Distribution of AWCs by levels of different components of Social development and mean scores (Contd..)**

(Percentage)

Q.No.	Scoring on Social development	Intervention AWCs	Intermediate AWCs	Control AWCs
	Teacher plans the activities in ways that would encourage sharing and helping and actively promotes it among the children.	24.2	28.3	32.3
	Mean score	0.742	0.849	1.178
4.	<b>Free play</b>			
	Teacher does not provide any time for free play during the day.	29	30	12.9
	Teacher provides for less than one third of the time for free play.	38.7	25	30.6
	Teacher provides for at least one third of the time for free play and sets up the classroom with materials to facilitate the play.	32.3	45	56.5
	Mean score	1.033	1.15	1.436
5.	<b>Quality of teacher child interaction</b>			
	Most of the time the teacher is controlling and authoritarian and talks down to the children by giving instructions, scolding or punishing .	16.1	15	4.8
	Most of the time the teacher is indifferent to the children and does not get involved with them more than is required for teaching.	53.2	38.3	14.5
	Most of the time the teacher converses very pleasantly and meaningfully with the children and creates an environment for children to interact freely with her.	30.6	46.7	80.6
	Mean score	1.144	1.317	1.757

### 95 9.3 Levels of services for children ages 0-3 years

Observations were also made on some aspects of the services which AWCs should provide to children ages 0 – 3 years. Three services, in particular were observed:

- Maintaining and keeping records of 0 -3 registered children
- Educating caregivers on child care practices (for children ages 0-3 years), and
- Educating mothers on nutrition and health related priorities
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The observations were recorded by scoring them 0 (poor level), 1 (intermediate level) or 2 (highest level). As stated earlier, the definition of these levels is shown in the observation checklist for children. The results are shown in Table 9.7. It may be noted that services to children 0-3 on all services were of intermediate level (score 1) in intervention and intermediate level AWCs. In the case of control districts, the level of services was at the highest level (as

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defined in the checklist). These levels of services are reflected in the mean scores shown for each service.

## 96 9.4 Summing up

It seems that the control district of Raigarh has better infrastructure, better level of services for children ages 0-3 years and better contents of pre-school education programme. In contrast, infrastructure, services for children ages 0-3 years and pre-school education content is poor in intervention and intermediate AWCs in intervention districts. No clear cut differences were found in intervention and intermediate level of intervention districts.

**Table 9.7: Distribution of AWCs by levels of different components of services for children 0-3 years and mean scores**

(Percentage)				
Q.No.	Scoring on 0-3 years age group	Intervention AWCs	Intermediate AWCs	Control AWCs
	<b>(n=)</b>	<b>62</b>	<b>60</b>	<b>62</b>
1.	<b>Maintaining and keeping records of 0-3 registered children</b>			
	Is not aware of the need to maintain records of infants growth and does not maintain any records of the children	11.3	8.3	4.8
	Is aware of the need and method for regular growth monitoring but does not do it on a regular basis.	53.2	53.3	29
	Is aware of the importance of regular growth monitoring and maintains updated records for each child.	35.5	38.3	66.1
	Mean score	1.242	1.299	1.612
2	<b>Educates caregivers about child care practices</b>			
	Is not aware of the importance of early stimulation/interaction with children and is not conducting any home visits or caregivers' meetings to educate them about it. .	21	18.3	14.5
	Is aware of the importance of early stimulation/interaction with children but is not conducting any home visits or caregivers' meetings to educate them about it. .	46.8	51.7	33.9
	Is aware of the importance of early stimulation/interaction and has regular interaction with mothers/care givers through home visits or meetings about it.	32.3	30	51.6
	Mean score	1.114	1.117	1.371
3.	<b>Educates caregivers on Nutrition and health related priorities</b>			
	Is not aware of the importance of basic nutrition and health related aspects for child's growth and is not conducting any home visits or caregivers' meetings to educate them	17.7	23.3	19.4

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	about it. .			
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**Table 9.7: Distribution of AWCs by levels of different components of services for children 0-3 years and mean scores (Contd..)**

		(Percentage)		
Q.No.	Scoring on 0-3 years age group	Intervention AWCs	Intermediate AWCs	Control AWCs
	(n=)	<b>62</b>	<b>60</b>	<b>62</b>
	Is aware of the importance of basic health and nutrition related messages like breastfeeding, colostrum, nutritional supplementation etc but is not conducting any home visits or caregivers' meetings to educate them about it. .	43.5	45	35.5
	Is aware of the importance of basic health and nutrition related messages like breastfeeding, colostrum, and nutritional supplementation and has regular interaction with mothers/care givers through home visits or meetings about it.	38.7	31.7	45.2
	Mean score	1.209	1.084	1.259

**97 CHAPTER -X**  
**98 AWARENESS AND INVOLVEMENT OF SUPERVISORY CADRE (OF ICDS) ON**  
**ACTIVITIES OF GROWTH AND DEVELOPMENT OF CHILDREN**

This chapter discusses, in two sections A (Mukhya Sevika)& B (CDPO), awareness and involvement of the supervisory cadre of ICDS programme ( Mukhya Sevikas and CDPOs) on development and growth of children ages 3 to 3.5 years and 5 to 5.5 years in the intervention districts. In the case of CDPOs, data was also available for the control district (Raigarh) It starts with information on their demographic profile, training and their work experience with functioning of the AWCs. This chapter presents only the highlights of the information collected on aspects related to growth and development of children. More detailed tables on other aspects are given in Tables 10.1A to 10.37A for Mukhya Sevika and 10.38A to 10.60A for CDPO in the Annexure-2

**99 10.1 Mukhya Sevika**

**10.1.1 Profile of Mukhya Sevikas**

Most of the respondents in this category belonged to ST (because of coverage of district of Korba), had education of 10 or more years, were working for more than 10 years in this position and were of ages 40 years and above. (For more details, see Table 10.1A and Table 10.2A in Annexure -2).

**10.1.2 Training on sessions in pre-school education**

The supervisors reported to have received training on all components of ICDS for which they are responsible. When asked specifically about their training on aspects related to development and growth of children, their responses are shown in Table 10.1 (For other components of their training, see Table10.3A in Annexure -2)

**Table 10.1 : Reported training received in components of growth and development covered in pre-school education**

Components of child growth & Development	(Number)		
	Janjgir	Korba	Total
<b>No. of supervisors interviewed</b>	<b>6</b>	<b>7</b>	<b>13</b>
Early childhood care & development	5	2	7
Physical and motor development	5	7	12
Cognitive development	4	6	10
Early childhood stimulation	6	7	13
Language development	6	7	13
Psycho-social development	5	7	12
Development of creative, aesthetic expression and science exposure	2	6	8

Note: We are giving actual number of respondents since number is small.

It may be noted that most of the respondents had reported to have received training except in "Early childhood care and development" and "Development of creative, aesthetic expression and science exposure".

### 10.1.3 Reported functioning of the AWCs

As expected, most of the supervisors (Mukhya Sevikas) reported that they were visiting the AWCs and supervising activities of AWWs. According to them, all AWWs were regular in conduct of their activities including pre-school education (Tables 10.4A to 10.11A in Annexure -2).

The supervisors were asked "what percent of the beneficiaries are being registered in the AWCs". It was reported that 90% or more beneficiaries are registered in the AWCs except children 3-6 years, where the reported figure was about 86%.

### 10.1.4 Activities in pre-school education

The supervisors were asked what activities are being conducted by AWWs in their pre-school sessions. Their responses were sought on voluntary basis. If voluntary response did not report for a particular activity expected to be conducted, then they were specifically asked about the activity. Their responses (spontaneous + probed) are shown in Table 10.2 .

**Table 10.2 : Reported activities undertaken by AWWs in the pre-school sessions**  
(Number)

Activities conducted by AWW in pre-school sessions	Janjgir	Korba	Total
<b>Number of respondents</b>	<b>6</b>	<b>7</b>	<b>13</b>
Language activities	6	7	13
Learn pre-number concepts and number identification	4	7	11
Hear stories	6	7	13
Tell stories	3	5	8
Sing songs /recite poems	6	7	13
Draw pictures	6	7	13
Play with toys	6	7	13
Play with blocks	5	6	11
Read picture books	5	7	12
Nature walk	2	5	7
Puppetry	0	1	1

Note: We are giving actual number of respondents since number is small.

It may be noted that, according to them, the required activities are being undertaken most in most of the AWCs except "puppetry", "nature walk" and "telling stories".

In order to probe further in the pre-school education, the supervisors were asked a direct question "What kind of activities/practices are required to stimulate the child at early ages. Majority of them did not report any activity, perhaps suggesting that they do not know about them—only about 40% reported "telling story", or "reading poems". No other activity was reported as requirement for stimulation of the children at early ages. This direct questioning and answers may suggest that supervisor were, perhaps, not clear about activities to be carried out in pre-school sessions to stimulate the children.

### 10.1.5 Activities in AWCs for developing various attributes of children of different ages

The supervisors were asked what activities AWWs do to develop specific attributes in children in the ages 3 to 3.5 years. Their spontaneous responses are shown in Table 10.3.

**Table 10.3: Reported activities of AWWs to develop certain attributes among children ages 3 to 3.5 years**

Activities undertaken to develop certain attributes in children ages 3 to 3.5 years	(Number)		
	Janjgir	Korba	Total
<b>Behavioural aspects</b>			
<b>No. of respondents</b>	<b>6</b>	<b>7</b>	<b>13</b>
1. Seating children in separate groups	2	2	4
2. Develop individuality by giving separate tasks	2	2	4
3. Informal education	2	2	4
4. To say hello/bye bye	2	0	2
5. Tell about relationships	1	1	2
6. DK	0	3	3
<b>Developmental aspects</b>			
1. Nutritious food	1	2	3
2. Child care	0	1	1
3. Shown pictures	5	2	7
4. Shown colour	4	1	6
5. Healthy growth	3	0	3
6. DK	0	4	4

Note: We are giving actual number of respondents since number is small.

It may be seen that only a few activities undertaken in the AWCs could be reported by the supervisors and that too by a few supervisors. Thus, it may seem that, perhaps, the supervisors do not know much about the activities undertaken at the AWCs to develop certain attributes in children ages 3 to 3.5 years.

Similar questions were asked for children ages 5 to 5.5 years. Those responses are shown in Table 10.19A in Annexure -2. It may be noted that only a small percent of supervisors are able to list the activities undertaken in classes for children ages 5 to 5.5 years.

### 10.1.6 Milestones in the development of children

Knowledge of supervisors on children's development and growth was further asked by asking to report the ages when children achieve certain milestone in their growth/ development. Table 10.4 presents their answers (model values of ages).

**Table 10.4: Modal values of ages (in months) reported for achieving the milestones**

Milestones	Janjgir	Korba	Total
First smile	< 3	3	<3 & 3
Roll over on own	5	4	4
Crawling	7	8	7
Ability to hold a pen or a stick	6 & 9	9, 10, & 12	9
Ability to say one word	12	10	10
Ability to speak sentences	18	18	18

There are slight differences in the reported modal ages in two districts, perhaps, reflecting differences in the background of the population living in these two districts. A look at the table 10.15A in Annexure -2 suggests that answers on the ages at milestones are distributed over a vast range though the modal ages reported are shown above. The distribution suggests lack of knowledge of supervisors on the ages at milestones.

### 10.1.7 Milestones children ages 3 to 3.5 years achieve

The supervisors were asked about their awareness of different milestones reached by children ages 3 to 3.5 years by asking about each possible milestone. Their responses are shown in Table 10.5.

**Table 10.5: Reported milestones reached by children ages 3 to 3.5 years**

(Number)

Milestones	Janjgir	Korba	Total
No. of respondents (n=)	6	7	13
<b>Behavioural aspects</b>			
1.Asks too many questions	6	7	13
2. Curious to know about body parts	5	7	12
3.Like to do things for themselves	6	7	13
4. Start recognizing gender differences and will correctly say "I am a boy or girl"	4	7	11
<b>Developmental aspects</b>			
1. Can name a picture	5	6	11
2. Name at least one colour	5	7	12
3.Knows his/her name, age & sex	2	7	9
4. Able to put his/her own shirt but will need help with shoes and buttons	5	7	12
5. Can jump in a place and stand briefly on one foot	6	7	13
6. Can speech three to four words	5	7	12
7. Comprehend the meaning of " smaller" and "bigger" and "on" or "under"	5	7	12
8. Can open door	4	6	10
9. Can brush teeth	5	7	12
10. Tried to eat without support	6	7	13
11. Tells about toilet needs	6	7	13

Note: We are giving actual number of respondents since number is small.

There are differences in the reporting of supervisors in two districts.

### 10.1.8 Milestones children ages 5 to 5.5 years achieve

The supervisors were asked about their awareness of different milestones reached by children ages 5 to 5.5 years by asking about each possible milestone. Their responses are shown in Table 10.6.

**Table 10.6: Reported milestones reached by children ages 5 to 5.5 years** (Number)

key mile stons (n= All respondents)	Intervention districts		Total
	Janjgir	Korba	
(n=)	6	7	13
<b>1. Gross Motor</b>			
Children walks heel-to-toe forward along line on floor without losing balance	6	7	13
Children walks heel-to-toe backward along line on floor without losing balance	6	7	13
Can jump on one feet	6	7	13
<b>2. Fine motor</b>			
Children copies a square with good corners	5	7	12
Children prints two or three letters of name	3	7	10
Children can colour neatly within in a closed outline	3	7	10
<b>3. Cognitive</b>			
Children can do sorting and classification based on two features	4	7	11
Children understands big-short, left-right, under-up, inside-outside concepts	6	7	13
Children can recognize 1-9 numbers	4	7	11
Children can arrange objects in sequence and in pattern	3	7	10
Children show familiarity with local surrounding and environment	4	7	11
<b>4. Language</b>			
Can narrate an incident or experience clearly and in sequence	3	7	10
Can recite a rhyme/poem	6	7	13
Ask questions without hesitation	5	7	12
Can follow two steps instructions	5	7	12
<b>5. Social Emotional</b>			
Children accepts other children's ideas for sharing and playing	6	7	13
Children offers to help other children who have difficulty with a task	5	7	12
Children maintain personal hygiene	2	7	9
Children keeps belongings organized	4	7	11
Children can concentrate on a task till completion	1	7	8
Participate actively in small groups	6	7	13

Note: We are giving actual number of respondents since number is small.

Though most of the respondents reported “yes” to various milestones asked for children ages 5 to 5.5, the awareness was better in supervisors in Korba than in Janjgir. Specific milestones where awareness is lacking can be seen in the above Table.

### 10.1.9 Monitoring & Supervision of the AWCs

Several questions were asked as to how the supervisors monitor the work of AWWs. It is mostly done through the monthly reports which are received regularly.

### 10.1.10 Assessment of the supervisors’ knowledge on various aspects of growth and development of children

The supervisors were given an assessment sheet with some open ended and some close ended questions to assess their knowledge of different aspects of growth and development of children. They were expected to answer all those questions either by writing some short points or by marking multiple choice questions. This section presents analysis of their responses.

1. When asked about key **important needs of children and their caregivers**, the majority of responses were like these:

Key important needs reported by more than 50% respondents—large to small for children : 1.Immunization, 2.Nutritious food, 3.Informal education
For caregivers: No need was reported by more than 50% respondents.

While children’s needs were known to the supervisors but they lacked knowledge of the needs of their mothers/caregivers.

2. When asked about the **needs of children for their growth and development into happy and healthy children**, the majority of responses were the same as important needs, reported above, but none of these responses reached 50% level. Two important needs described were nutritious food (6 out of 13 supervisors) and availability of play items (5 out of 13).
3. When supervisors were asked whether there is any relationship of health and nutrition to physical, language, and the cognitive development of children, most of them answered in affirmative but they could not articulate/describe how good health/ nutrition affects development and growth of children.
4. The supervisors were asked **features of the child-centred pre-school education**, most of them reported correctly that the children “should be engaged in different kinds of activities”, “Children should be divided as per age” and “Child developed materials should be displayed in the AWC”.
5. Most of the supervisors could list different areas of child development correctly.
6. When supervisors were asked whether they new about rights of children. Only 62 percent reported in affirmative. When further asked to report those rights, only three rights, namely, “nutritious food”, “immunization” and “health check ups were reported by more than 50% supervisors.
7. In addition, the supervisors were asked to answer several questions with multiple choice answers to assess their knowledge on ANC, right breast feeding practices and possible problems of neonatal death. Their responses on these questions have been given in Tables 10.32A to 10.36A in Annexure -2 (we have highlighted responses related to their knowledge in regard to growth and development of children in the text of the chapter).

As pointed out earlier, data for CDPOs is available for three districts—two intervention and the third for control (Raigarh). The number of CDPOs interviewed in three districts were 17 -- Jangir (9), Korba (7) and Raigarh (1). This section presents results from their responses.

### 10.2.1 Profile of CDPOs

Most of the respondents in this category belonged to ST ( 9 out of 17 CDPOs covered), had education of 12 or more years, majority of them were Hindus (12 out of 17), were working for more than 10 years in this position and were of ages 40 years and above. (For more details, see Tables 10.38A and 10.39A in Annexure -2 ).

### 10.2.2 Training on sessions in pre-school education

It is surprising that only 11 of the 17 CDPOs, covered in the study, reported that they had received training in their various roles and functions. When asked about topics which were covered in the training (from those who had some training on their roles), all or most of them reported receiving training in "child centered development approach" (11/11), "life cycle basis for interventions" (9/11) and "child's right perspective" (11/11), the areas related to growth and development of children (Table 10.40A in Annexure -2).

### 10.2.3 Availability of equipment to monitor growth and development of children

The respondents (CDPOs) were asked about availability of the monitoring equipment in the AWCs they were supervising. Their reporting is shown in Table 10.7

**Table 10.7: Number of reported monitoring equipments in AWCs being supervised by CDPOs in different geographical areas**

Equipment for monitoring	Intervention districts			Control district	Total
	Janjgir	Korba	Total		
<b>No. of Anganwadi Centres with <u>working</u> equipment for monitoring growth of children</b>					
<b>Average number of AWCs under supervision</b>	<b>230</b>	<b>346</b>	<b>281</b>	<b>407</b>	<b>288</b>
Weighing scales	176	234	201	407	213
Growth cards	156	253	198	233	203
<b>No. of CDPOs reporting status of monitoring charts in their areas</b>					
Adequate no. of old growth monitoring charts	8/9 <sup>1</sup>	6/7	14/16	1/1	15/17
Adequate no. of New growth monitoring charts	6/9	6/7	12/16	1/1	13/17
<b>No. of AWCs having adequate number of items required in pre-school education in AWCs in their own areas</b>					
Toys	200	242	218	233	219
Blocks	224	264	241	233	241
Picture books	213	272	240	233	240
Books	184	263	219	233	232

It may be noted that about 70 percent of the AWCs have weighing scales. The status of growth cards is also similar. When CDPOs were asked about the status of the toys, blocks, picture books and books, needed for growth and development of various faculties of children, they had reported that only 60 to 70 percent AWCs had them in adequate numbers.

<sup>1</sup> Numerator represent the figure of CDPOs who report adequate number and denominator is the total number of CDPOs interviewed.

There was no problem in regard to the monitoring charts. Almost all the CDPOs reported their availability in adequate supplies—though in some AWCs supply of new cards had not reached yet.

#### 10.2.4 Monitoring the work of AWWs

The CDPOs reported that they regularly monitor the work of the anaganwadi centres which included the monitoring the growth of children and sessions on the pre-school education. The major source of monitoring was monthly reports and periodic visit to the AWCs. (See Table 10.44A in Annexure -2).

#### 10.2.5 Assessment of the CDPOs' knowledge on various aspects of growth and development of children

The CDPOs were given an assessment sheet with some open ended and some close ended questions to assess their knowledge of different aspects of growth and development of children. They were expected to answer all those questions either by writing some short points or by answering questions showing multiple choices. This section presents highlights of analysis of their responses, remaining answers can be seen in Tables **10.58A** in Annexure - 2

1. When asked about key **important needs of children and their caregivers**, the majority of responses were like these:

Key important needs reported by more than 40% respondents-large to small <b>For children:</b> 1.Supplementary nutrition, 2.Health facilities, 3.Immunization
Key important needs reported by more than 40% respondents-large to small <b>For caregivers:</b> 1. Supplementary nutrition, 2. Timely feeding children (35%)

It may be noted that only small percent reported need for pre-school education to bring about balanced growth and development of children. This point may suggest that pre-school education does not get much attention of the CDPOs.

2. When asked about the **needs of children for their growth and development into happy and healthy children**, two important responses were "cleanliness" and "supplementary nutrition"; again pre-school education and its various activities did not find mention.
3. When CDPOs were asked whether there is any relationship of health and nutrition to physical, language, and cognitive development of children, all of them answered in affirmative but they pointed out only physical growth without any mention of language and cognitive development of children. It may also be suggestive of their lack of emphasis on these developmental aspects of children.
4. The CDPOs were asked whether children ages 0-3/3-6 years are facing some challenges in their growth and development. Only 58% of them reported that they were facing challenges. The challenges reported for children 0-3 years were "health facilities" and "(right) home environment". For children ages 3-6 years, major challenges reported were "(quality) non-formal education" and "(need for) supplementary nutrition".

5. Only 65% CDPOs reported that fathers have a role in the growth and development of their children. Only role they reported for fathers was "love the children"
6. The CDPOs were asked **features of the child-centred pre-school education**, most of them reported correctly that the children "should be engaged in different kinds of activities", "Children should be divided as per age" and "child developed materials should be displayed in the AWC".
7. When the CDPOs were asked about the activities children ages 3 to 4 should engage in, their responses were in very general form—"doing exercise", "identifying colour".
8. When the CDPOs were asked about the activities children ages 5 to 6 should engage in, their responses were again in very general form—"reciting poems"etc.
9. When CDPOs were asked about rights of children. Only two rights, namely, "supplementary nutrition" and "immunization" were reported by 50% or more CDPOs. About 40% also reported "non-formal education" and "health facilities" as rights of children.