



An Assessment of Performance of ICDS scheme through Anganawadi Centres and its impact on Nutrition and Health of young children in Madhya Pradesh

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Abbreviations

ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWW	Anganwadi Worker
BLO	Booth Level Officer
ICDS	Integrated Child Development Services
IEC	Information Education and Communication
IMNCI	Integrated Management of Neonatal and Childhood Illness
IYCF	Infant and Young Child Feeding
MIS	Management Information System
NFHS	National Family Health Survey
PMMVY	Pradhan Mantri Matru Vandana Yojana
PSE	Pre School Education
RRS	Rapid Reporting System
SHG	Self Help Group
SNP	Supplementary Nutrition Programme
THR	Take Home Ration
VHND	Village Health and Nutrition Day
WCD	Women and Child Development

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Assessment of ICDS Anganwadi and its impact on Nutrition of Young Children

1. Introduction

Children in the age group 0-6 years constitute around 158 million of the population of India (2011 census). These children are the future human resource of the country. India has the maximum number of malnourished children in the world – 1 in every 3 children is malnourished. Government of India and United Nation World Food Programme published a new report in 2019 named as “Food and Nutrition Security Analysis, India, 2019” where it clearly reveals that hunger and malnutrition prevails among children in large pockets of the country. According to UNICEF, 38 percent of children younger than five years of age in India are stunted. Stunting and undernutrition are thought to be responsible for death of a large number of children globally (*Devi, 2020*). Childhood malnutrition is a leading cause of child morbidity and mortality.

The recent national level surveys also highlight the malnutrition levels which has sparked off debate on the probable reasons for prevalence of disturbing levels of malnutrition among children in spite of the programmes being implemented to improve the nutrition levels. In India as per 4th round of National Family Health Survey (NFHS) conducted in 2014–2015, 38.4, 21 and 35.7 percent of children below 5 years suffer from stunting, wasting and underweight respectively which is a decline from 47.9, 19.8 and 42.5 percent respectively (NFHS III, 2005–2006). National Family Health Survey-5 (2019-21) shows that in 13 out of 22 states and union territories for which data are available, the percentage of children with stunted growth has increased. Anaemia is a major health challenge among children, nearly 59 percent of children (6-59 months) are anaemic according to NFHS-4. Age of the child, sex of the child, education of mother, type of family and income of the household are significantly associated with the nutritional status of children and play an important role in the nutritional status of under 5 years children (*Davey et al., 2014*; *Silva & Silva, 2015*; *Baghel et al., 2018*). Under-nutrition is high among children in the country with low utilization of services and there exist significant inequalities across regions/states and other social indicators along with economic status (*Paul et al., 2017*).

To deal with this problem of malnutrition and anemia among children 0-6 years, GoI launched the Integrated Child Development Services (ICDS) Scheme on 2nd October,

1975. It is one of the flagship programmes of the GoI and represents one of the world's largest and unique programmes for early childhood care and development. It provides pre-school non-formal education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality on the other. The beneficiaries under the Scheme are children in the age group of 0-6 years, pregnant women and lactating mothers.

Integrated Child Development Services (ICDS) programme is the unique early childhood development programme in India, which has brought about a welcome transition in the health and nutrition levels of young children during its journey over the past four decades of its existence. By providing a package of services, comprising of supplementary nutrition, immunisation, health check-up, referral services to children below six years of age and expectant and nursing mothers, non-formal pre-school education to children of the age group 3-6 years and health and nutrition education to women in the age group 15-45 years, the programme includes the coverage of the nutrition and health care needs of the most vulnerable young children in particular in India. ICDS Scheme is a Centrally-sponsored Scheme wherein the Union Government is responsible for programme, planning and infrastructure costs and States are responsible for programme implementation.

Anganwadi Centres form the platform of service delivery and one AWC per 1000 population is the basic norm in a rural/urban project and one for population of 700 in a tribal project, with suitable adjustments, wherever necessary, in the light of local conditions. The population norms have later been revised by lowering the population upper limit to 800 and the minimum population norm has been fixed at 300 in non-tribal, hilly, desert, difficult areas while for other areas it has been fixed at 400. The rural communities and slum dwellers are entitled to get coverage from an "Anganwadi on demand".

ICDS Scheme was kicked off in 1975 in 33 Blocks (Projects) with 4891 AWCs. The number of projects was expanded to 5652 with nearly 6 lakh AWCs by the end of 9th Plan. By 2012, the number of AWCs operational was 13,04,611 under 6908 projects and in March 2019, 13,72,872 AWCs were operational. The ICDS Scheme covers more than 85 million mothers and children in India. Of this 30.2 million are beneficiaries of Pre School Education imparted through AWCs (<https://icds-wcd.nic.in/>).

The ICDS workforce comprises the Anganwadi Workers (AWWs), Anganwadi Helpers, Supervisors, Child Development Project Officers (CDPOs) and District Programme Officers

(DPOs). Anganwadi Worker, a lady selected from the local community, is a community based frontline honorary worker of the ICDS Programme. She is also an agent of social change, mobilizing community support for better care of young children, girls and women.

The ICDS workforce comprises the Anganwadi Workers (AWWs), Anganwadi Helpers, Supervisors, Child Development Project Officers (CDPOs) and District Programme Officers (DPOs). Anganwadi Worker, a lady selected from the local community, is a community based frontline honorary worker of the ICDS Programme. She is also an agent of social change, mobilizing community support for better care of young children, girls and women. Besides, the Medical Officers, Auxiliary Nurse Midwife (ANM) and Accredited Social Health Activist (ASHA) form a team with the ICDS functionaries to achieve convergence of different services (<https://icds-wcd.nic.in/icds.aspx>).

Over the years the scheme has been able to cover a large population and it is beyond doubt that the nutritional levels have improved tremendously. Improvement in nutrition levels is reflected in the U5MR which has declined by 6.7 percent per year during the period 2008–2016, an improvement from 3.3 percent during 1990–2007 (SRS, 2016). However there has been decline in the coverage of the scheme. For instance, the number of beneficiaries of ‘Supplementary Nutrition’ in the year 2017 was 9.82 crores, which fell to 8.91 crores in 2018 and to 8.74 crores in 2019. In 2020, the total number of beneficiaries receiving supplementary nutrition is 8.63 crores as of August 2020. Between 2016 & 2019, the number of beneficiaries fell by more than 14 percent.

The National Nutrition Strategy with the Vision - “Kuposhan Mukh Bharat” is committed to ensuring that every child, adolescent girl and woman attains optimal nutritional status- especially those from the most vulnerable communities. Programmes are being continuously placed for improving the nutrition levels of children, the latest being the POSHAN Abhiyaan launched in March 2017. It aims at improving the nutritional status of children from 0-6 years, Adolescent Girls, Pregnant Women and Lactating Mothers. Initially it was rolled out in 315 districts in 36 States/UTs. By 2021, the programme has been implemented in almost all the districts. The Mission envisages enhanced focus on under-three children through specific initiatives aimed at motivating and mobilising behaviour change among the functionaries, beneficiaries. The community-based events are envisaged as a platform for disseminating essential messages and to counsel pregnant women and lactating women on appropriate health and nutrition behaviours and healthy practices.

POSHAN Abhiyaan envisages establishing a system where programme functionaries will become more effective by learning to plan and execute each task correctly and consistently through methodical, on-going capacity building, called 'Incremental Learning Approach (ILA)' and the community at large (<https://icds-wcd.nic.in/nnm>).

Covid-19 pandemic has affected every sphere of life and so is with the ICDS services. Preschool activities were suspended across all Anganwadis following the Government order. As an alternative strategy, digitization of IEC was initiated and in many states digital educational materials was envisaged to maintain continuity of services. Also Government support for AWWs and helpers have been made as they played a good role in sustaining the primary functions through alternative strategies and also mitigating the Covid-19 crisis in rural communities. Strategies were adopted to continue most of the service delivery by distributing supplementary nutrition benefits door to door as in states like Kerala, Madhya Pradesh etc. To counter COVID-19 pandemic spread, the Union government provided smartphones to 62,000 anganwadi centres of the six states to track the services offered at the anganwadi centres. It would also help identify daily reports of food provided to children. These centres collected data to identify 12,000 malnourished in 46 districts across Andhra Pradesh, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh and Rajasthan.

The Ministry of Health and Family Welfare issued directions to all States/UTs on home delivery of IFA, and other essential medicine like ORS, calcium and zinc, to target beneficiaries in containment zones. There has been increased budgetary allocations for provision of food. "Fortification of Rice and its distribution under Public Distribution System" for a period of three years beginning 2019-20 was already approved. To ensure adequate supply of food grains to the public, Government of India allowed states to collect food grains on credit from the Food Corporation of India for three months starting from April, 2020 (Nair, 2020). Despite the fact the ICDS has presence in almost all communities across the country, targeted interventions, coupled with inter-sectoral approach is at the fulcrum of achieving SDGs related to child nutrition and health. NITI report on accelerating progress in nutrition in India projected that with appropriate interventions stunting among children can be reduced from base level of 37.5% in 2016 to projected level of 31.9% in 2022 and further 30.3% in 2025. Similarly, projected reduction in wasting has been from base level of 22.0% in 2016 to 13.3% in 2022 and 12.8% in 2025 (NITI, 2020)

Objectives of the ICDS Scheme are:

- to improve the nutritional and health status of children in the age-group 0-6 years;
- to lay the foundation for proper psychological, physical and social development of the child;
- to reduce the incidence of mortality, morbidity, malnutrition and school dropout;
- to achieve effective co-ordination of policy and implementation amongst the various departments to promote child development; and
- to enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

The ICDS Scheme offers a package of six services, viz.

- Supplementary Nutrition
- Pre-school non-formal education
- Nutrition & health education
- Immunization
- Health check-up and
- Referral services

However, ICDS hasn't delivered the desired result since its inception i.e. four decades ago. This could be due to infrastructural problems, lack of awareness and proper utilization by the local people, inadequate program monitoring and corruption in food supplies, etc. (Sahoo et al., 2016). Still many Anganawadi Centres (AWCs) have problems with regard to their building and infrastructure (Gopal. et al., 2006, Dhinwa et al., 2020, Vakilna & Nambiar, 2020). Due to inadequacy of equipment, undesirable condition of AWCs, lack of co-ordination between the staff, AWCs are not able to provide all the services to the maximum extent (Gopal. et al., 2006, Joshi, 2018, Yasin & Azim, 2019). In addition, Anganawadi Workers (AWWs) face many problems like inadequate honorarium, excessive record maintenance and lack of help from the community and they cannot deliver all the services due to lack of infrastructure and space (Patil & Doibale, 2013, Sahoo et al., 2016, Bhatnagar & Bhadra, 2017, Bartwal & Singh, 2019).

Immunization, supplementary nutrition, health check-ups, Non formal pre-school Education and referral services were the major services received by the children (Harikrishna et al., 2020). Mothers with higher education, who belong to upper castes, urban area, and richer section of the society were significantly less likely to utilise the ICDS compared with illiterate mothers who belong to SCs/STs, rural areas and poorer section of the society. (Paul et al., 2017, Harikrishna et al., 2020). Child don't like the taste of the food, meant for poor, Distance, Place was unhygienic and Poor quality of the food are the common reasons found for not utilising supplementary nutrition service (Harikrishna et al., 2020). They face problem

in referral services also due to non-availability of transport facilities and hence refer the cases to Primary Health Centres which are at the nearest distance and easy to approach (Gopal. et al., 2006).

However, some studies highlighted the good Supplementary nutrition services provided at AWCs, in terms of both quantity and quality and AWCs with good logistics (Sivanesan et al., 2016, Meena et al., 2017, Dhinwa et al., 2020). The nutritional status of children attending Anganwadis is found to be better compared to those not attending the Anganwadis. (Kshirsagar, Vinayak Yadavrao, 2019) and a significant number of AWCs were rated as good in providing pre-school education due with teaching aid kit, Charts and Posters etc. (Dhinwa et al., 2020). Immunization services were satisfactory with good coverage and were being conducted through health centre's collaboration (Meena et al., 2017).

As regards to perception of mothers towards ICDS is concerned, usually mothers felt AWWs behave friendly with them, ICDS is beneficial to their children and quite a large majority of the mothers accepted quantity and quality of supplementary food (Biswas et al., 2010, Chudasama et al., 2015). Though in few studies mothers are not happy with the quality of food served to their children in the Anganwadis (Sivanesan et al., 2016).

In this background, wherein the ICDS services has been disrupted and newer initiatives are being implemented to maintain and improve the nutritional levels of the children, it is important to assess the implementation of different programmes that target improvement of nutrition levels of children under five years, understand the status of implementation of ICDS services, utilization of ICDS services and the service delivery aspects. Such an inquiry would help in identifying the challenges and shortfalls in service delivery thereby enabling implementation of alternative strategies to address the malnutrition levels of the children.

Hence, an attempt has been made in this study to assess the performance of ICDS scheme through Anganawadi centres and its impact on health and nutrition of young children with following specific objectives

1. To assess the status of implementation of ICDS scheme and performance of Anganawadi centres
2. To understand the providers' (Anganawadi worker) perspectives on performance of Anganawadi centres and challenges faced by them
3. To study the beneficiaries' perspectives (mothers of children 3-6 years) on services received from Anganawadi centres

1.1 Survey Design and Sample Implementation

It was decided to implement the study in one District of Madhya Pradesh and Sagar district was selected given the situation of COVID-19 pandemic. The sample design is adequate to provide the estimates for the district as a whole. Sample size estimated scientifically is 320 mothers who have children between 3-6 years of age including non-response rate. Hence it was decided to select 32 AWCs, equal proportion from urban and rural areas as that of existing number of AWCs in the District. From each AWC, 10 mothers who have children 3-6 years of age were selected with the help of the list available at the AWC.

1.2 Selection of AWCs in Sagar district

Sagar district has 16 ICDS Projects namely- Banda, Bina (Rural), Bina (New), Deori, Gadakota, Jaisinagar, Kesli, Khurai, Malthon, Rahatgarh, Raheli, Sagar (Rural-1), Sagar (Rural-2), Sagar (Urban-1) Sagar (Urban-2) and Shahgarh. It has total 2633 AWCs of which 2369 (90 percent) are in rural areas and remaining 263 (10 percent) AWCs are in the urban areas. Same proportions of AWCs are selected from Rural (28 in number) and urban (4 in number) areas by using Systematic Random Sampling method. In Gadakota project, AWCs of Gadakota town were reassigned status of urban AWCs recently, so AWC covered from Gadakota town was considered as urban.

1.3 Study Tools and Data collection

The service statistics related to nutritional and health status of children was gathered from available secondary sources. For the study 29 AWCs were covered out of 32 selected AWCs. AWWs were interviewed to understand the activities conducted by them including distribution of supplementary nutrition, organizing immunization camps, health checkup camps and referral services provided by them during previous 2 years along with challenges faced by them. In all, 174 mothers of children 3-6 years were interviewed by face to face and telephonic method to understand their perspectives towards ICDS scheme. For study, service statistics checklist, AWW schedule and mothers schedule were used. The data collection was done during 09.02.2022 to 10.03.2022 by one research investigator through field visit and one research investigator interviewed mothers telephonically. All the filled-in schedules were office edited thoroughly before data entry. The data entry was done in CSPro 7.6. The data was analyzed in CSPro 7.6 and SPSS 21.

2. Service Statistics of AWCs in the District and selected AWCs

As mentioned earlier, information was collected on service statistics of all the 29 AWCs for the year 2019-20 and 2020-21. As depicted total 222279 children got the benefit of supplementary nutrition in Sagar district during 2019-20 and it reduced to 210883 beneficiaries during 2020-21. Number of boys beneficiaries was slightly more during 2019-20 whereas during 2020-21 number of girls beneficiaries is more than boys for supplementary nutrition in Sagar district. There was 6.1 percent decline in number of boys beneficiaries as against 4.2 percent decline in number of girls SNP beneficiaries during 2019-20 and 2020-21.

Figures 2.1, 2.2 and 2.3 present ICDS project-wise number of Total, Boys and Girls SNP beneficiaries respectively. It is seen that except Rahatgarh project, all other projects have registered a decline in number of SNP beneficiaries.

In rural ICDS projects, there was a decline of 5.5 percent, 6.5 percent and 4.5 percent respectively for total, boys and girls SNP beneficiaries. In Urban ICDS project this decline was 2.0 percent, 2.5 percent and 1.5 percent respectively for total, boys and girls. This shows that there was larger decline in rural areas as compared to urban areas in SNP beneficiaries.

Among rural ICDS projects, there were more number of girls beneficiaries than boys in Gadakota, Kesli, Rahatgarh, Khurai, Malthon and Shahgarh projects during 2020-21. In 2019-20, except Sagar R2 and Shahgarh projects all other projects had more boys than girls.

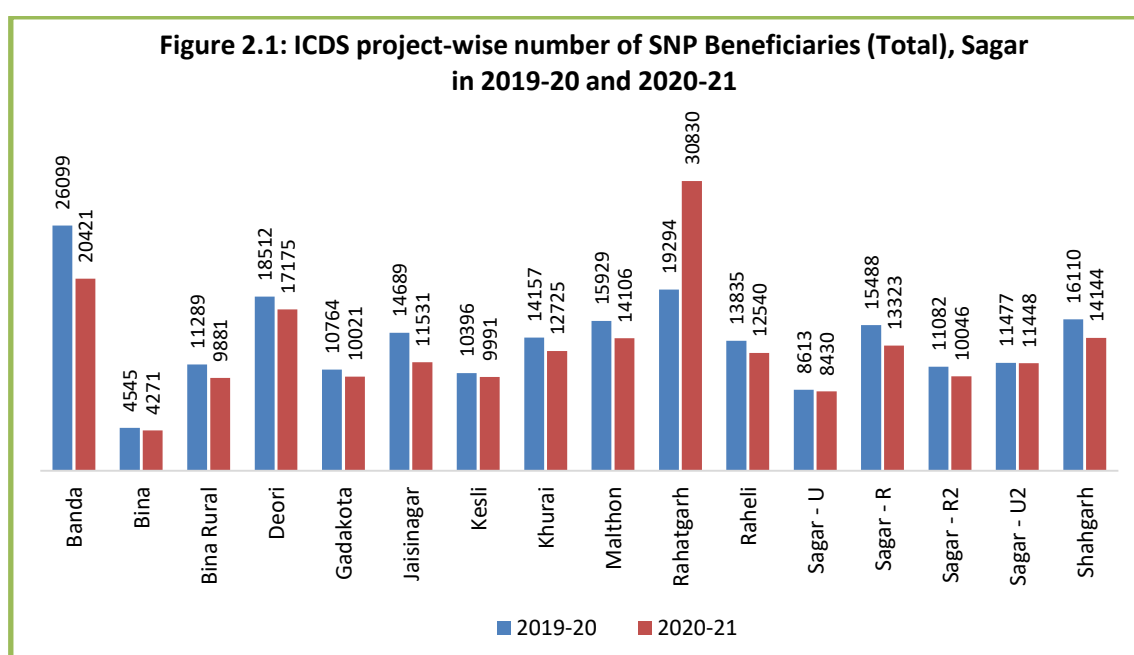


Figure 2.2: ICDS project-wise number of SNP Beneficiaries (Boys), Sagar in 2019-20 and 2020-21

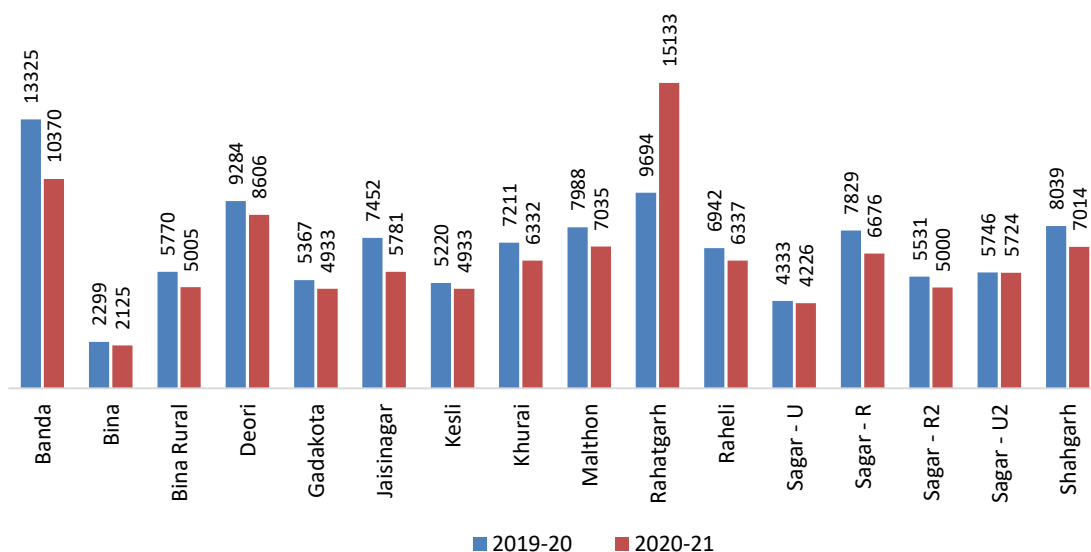
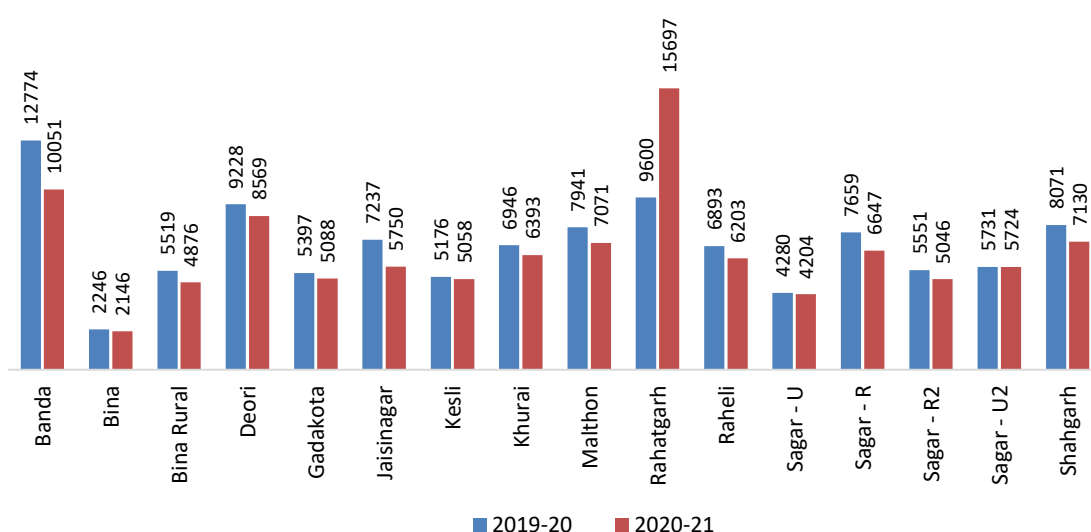


Figure 2.3: ICDS project-wise number of SNP Beneficiaries (Girls), Sagar in 2019-20 and 2020-21



With regards to basic infrastructure, 24 of 29 AWCs were of type 'Main' and six were 'Mini' type; 25 were in rural area and 4 were from urban areas; 16 of them were functioning in their own government building, 9 at rented buildings and 3 were functioning in school premises and one was utilizing community building. Though all the AWCs were functioning in pucca buildings but buildings of three AWCs were in dilapidated conditions. Except 4 AWCs all had drinking water facilities. Only 3 AWCs had functional toilet facility with water supply

in toilet. All the AWCs had AWWs and except 5 mini AWCs remaining has AWH in-position. None of the selected AWCs had an additional worker or a link worker.

Due to ongoing strike of AWWs in Sagar district, it was very difficult to collect necessary service statistics from the individual AWCs. Data which could be available from the ICDS MIS (www.mpwcdmis.nic.in) was analyzed. Data on nutritional status of children attending supplementary nutrition programme, as shown in Table 2.1 reveals that overall 85.3 percent of the children were of normal category; 13.1 percent were moderately malnourished and 1.6 percent were severely malnourished during 2019-20 in Sagar. Data for 2020-21 was not available through ICDS-MIS. Data on nutritional status of children age 3-5 years for 2019-20 for ICDS projects show that comparatively 14.1 percent boys were moderate to severely malnourished whereas 15.3 percent girls were moderate to severely malnourished in Sagar district.

Table 2.1: Proportion of Boys and Girls age 3-5 years according to nutritional status by ICDS Projects, Sagar, (2019-20)

ICDS-Project	Nutritional Status							
	Boys				Girls			
	Normal	Moderate	Severe	Number	Normal	Moderate	Severe	Number
Banda	87.1	11.7	1.2	12726	85.7	12.4	1.8	12035
Bina	94.8	4.8	0.4	2612	93.9	5.3	0.8	2539
Bina Rural	87.5	11.2	1.2	6109	87.0	11.4	1.6	5768
Deori	93.5	5.2	1.3	9577	92.8	5.8	1.4	9348
Gadakota	84.0	14.3	1.7	5827	82.1	15.4	2.5	5720
Jaisinagar	83.0	14.5	2.4	6812	82.7	14.7	2.5	6686
Kesli	88.5	11.3	0.2	5361	89.1	10.6	0.3	5145
Khurai	84.8	13.7	1.5	7747	82.9	14.8	2.3	7537
Malthon	91.2	7.8	1.0	8046	90.0	8.6	1.3	7884
Rahatgarh	79.2	18.8	2.1	9895	77.8	20.0	2.2	9666
Raheli	82.1	16.4	1.6	6814	80.7	17.3	2.0	6559
Sagar - U	90.5	8.7	0.8	5756	89.7	9.2	1.2	5468
Sagar -R	84.8	13.4	1.8	9456	82.5	14.9	2.5	9039
Sagar-R2	86.7	12.7	0.6	6279	86.1	13.1	0.8	6034
Sagar-U2	81.2	16.5	2.3	6260	79.4	17.7	2.9	6278
Shahgarh	80.6	18.2	1.2	8057	79.5	19.0	1.5	7904
Total	85.9	12.7	1.4	117334	84.7	13.5	1.8	113610

Project-wise, highest proportion of severe malnourishment among boys was in Jaisinagar (2.4 percent) followed by Sagar – U2 (2.3 percent) and Rahatgarh (2.1 percent). In Kesli only 0.2 percent boys were severely malnourished. Similarly, Rahatgarh (18.8 percent) and Shahgarh (18.2 percent) had highest proportion of moderately malnourished boys.

Proportion of moderately malnourished girls was highest in Rahatgarh (20.0 percent) and Shahgarh (19.0 percent) compared to Deori (5.8) and Bina (5.3) where it is lowest amongst all ICDS projects. Proportion of severely malnourished girls was highest in Sagar U2 (2.9 percent) followed by 2.5 percent in Sagar -R, Jaisinagar and Gadakota ICDS projects.

Compared to girls, boys were found to be in better nutritional status as slightly higher proportion of girls were in the category of moderately malnourished and severely malnourished.

3. Perspectives of Anganwadi Workers (AWW)

As mentioned earlier, AWWs of 29 AWCs are interviewed to understand the profile of AWCs, AWWs' background characteristics, services provided at AWC, convergence with other health providers as well as to get the suggestions from AWWs' perspectives.

3.1 Profile of AWCs and Background characteristics of AWWs

Table 3.1 provides the profile of selected AWCs as well as AWWs by place of residence in Sagar district. As observed, among 29 AWCs covered in the study, 38 percent of AWCs were established between the year 1991-2000 and another 49 percent were established during 2001-2010. Comparatively, AWCs of urban area are established recently after the year 2001 than those of rural areas.

Regarding age of the AWWs, 38 percent of the AWWs were in the age group 45+ years and 35 percent were in the age group 35-45 years. Average age of AWWs as a whole was 40.6 years there is marginal difference in mean age of AWW in rural areas (40.5 years) compared AWWs of urban areas (41.3 years). Eighty-six percent AWWs were currently married. In rural area 8 percent AWWs each were unmarried and widowed.

Average years of education is higher (14 years) among urban AWWs compared to AWWs in rural areas (11 years). Overall AWWs have 11.6 years of schooling. In fact three AWWs were post-graduate, five were graduate and eight AWWs had schooling upto 8th standard Nearly two-thirds (59 percent) of the AWWs had studied above 10th standard and two-fifths (41 percent) had schooling between 8th -10th standard.

Table 3.1: Profile of selected Anganawadi Centres and Anganawadi workers by place of residence, Sagar

Background characteristics of AWC and AWW	Rural	Urban	Combined
Year of establishment AWC			
1990 or before	8.0	25.0	10.3
1991-2000	44.0	0.0	37.9
2001-2010	44.0	75.0	48.3
2011-2020	4.0	0.0	3.4
Age of AWW			
Up to 35	32.0	0.0	27.6
35-45	24.0	100.0	34.5
45+	44.0	0.0	37.9
Mean	40.5	41.3	40.6
Marital status of AWW			
Never Married	8.0	0.0	6.9
Currently Married	84.0	100.0	86.2
Widowed	8.0	0.0	6.9
Educational status of AWW			
8-10 std.	48.0	0.0	41.4
Above 10	52.0	100.0	58.6
Mean	11.0	14.0	11.5
Years of experience of AWW			
1-5 years	8.0	25.0	10.3
6-10 years	8.0	25.0	10.3
11-20 years	44.0	50.0	44.8
More than 20	40.0	0.0	34.5
Mean	16.6	9.5	16.5
Place of residence of AWW			
Reside in the same village/Area	84.0	75.0	82.8
Reside in different village/Area	16.0	25.0	17.2
Distance of AWW residence from AWC			
<1 KM	84.0	100.0	86.2
1-3 KM	4.0	0.0	3.4
> 3 KM	12.0	0.0	10.3
Perceived difficulty to commute to AWC			
Feels difficulty	20.0	0.0	17.2
No difficulty	80.0	100.0	82.8
Means of conveyance			
Own Vehicle	8.0	25.0	10.3
Public Transport	4.0	0.0	3.4
Walking	88.0	75.0	86.2
Total AWC/AWW	25	4	29

Average years of experience of covered AWWs was 16.5 years. AWWs in rural areas had at least seven years more experience than their urban counterpart. In rural area AWWs had working experience of 16.6 years compared to AWWs in urban areas (9.5 years). Around

35 percent of them had more than 20 years of experience in serving AWCs and 49 percent of AWWs had been serving for 10 to 20 years.

All the AWWs were asked whether they reside in the same village/area of their AWC or their place of residence is in different village/area. Around 83 percent of the AWWs stay in the same village/area and remaining 17 percent used to stay in different villages/areas. As such, 83 percent of AWWs felt that there is no difficulty to commute to their AWC from their residence. One-fifth of AWWs in rural areas expressed difficulty to commute to AWC. As high as 86 percent of AWWs reported that they reach to their AWC by walking and 10 percent had own vehicle and remaining 3 percent reported that they use a public transport.

3.2 Training Received by AWWs

All the AWWs were asked what all trainings they have received as an AWW and are presented in Table 3.2 by place of residence. In rural area 92 percent and 75 percent in urban areas had received training on pre-school education. About 80 percent AWWs, had got training on growth monitoring and early childhood education.

Table 3.2: Proportion of AWWs received training and the topic of training by place of residence

Proportion of AWWs received training on	Rural	Urban	Combined
Preschool education (PSE)	92.0	75.0	89.7
Early Childhood Education and Development	84.0	75.0	82.8
Growth Monitoring	88.0	50.0	82.8
Refresher training	80.0	50.0	75.9
Infant and Young Child Feeding (IYCF)	72.0	50.0	69.0
ICDS Health checkup	60.0	50.0	58.6
MIS-Rapid Reporting system	64.0	25.0	58.6
Other	20.0	75.0	27.6
Online training for COVID-19 Management	20.0	25.0	20.7
Integrated Management of Neonatal and Childhood Illness (IMNCI)	16.0	0.0	13.8
Adequacy of the training received			
Feel adequate	60.0	25.0	55.2
Feel not adequate	40.0	75.0	44.8
Total AWW	25	4	29

More than 80 percent of AWWs in rural areas had received training on pre-school education, early childhood education and development, growth monitoring and refresher training. It was noted that AWWs joined services prior to 2010 had received most of the trainings compared to AWWs joined recently. AWWs informed that their first training after joining as AWW was of one month duration, which was an induction training. Apart from

induction training, majority AWWs reported to have received week long refresher training at an interval of 3-4 years. AWWs expressed that training on core ICDS activities, such as ICDS health check-up, growth monitoring, pre-school education etc. should be supplemented with adequate IEC material, registers and anthropometric tools. Recently all the AWWs were also given refresher training on correct use of weighing scale and stadiometer. It was reported that adequate training on MIS-Rapid Reporting System (RRS) through mobile phone and App is required. Most of the AWWs are not mobile savvy and they take help from their supervisors, family members in using the mobile application and data entry. It was also observed that AWWs required to be trained in proper maintenance of records and registers and correct filling of register entries.

In response to adequacy of training received, 55 percent (Rural-60%; Urban-25%) felt that the training they have received is adequate. Thirteen (Rural-10; Urban-3) felt that the training received is inadequate. Table 3.2a lists additional training required by AWWs. Four AWWs told that refresher training is required, followed by three AWWs requiring more training on child health issues and Poshan Tracker Mobile App. Detailed training on PSE and RCH issues were also informed by two AWWs each. Additional or supplementary training on growth monitoring, format filling for different ICDS reports and Covid-19 related training was reported by one AWW each. In all 13 AWWs reported 17 trainings.

Table 3.2a: Number of AWWs mentioned additional training is required and issues on which training is required	
Training required on issues (Multiple responses)	Number of AWW
Refresher Training	4
Training on child health	3
Training on Poshan Tracker App	3
More detailed training on PSE	2
Training on RCH issues	2
Growth monitoring	1
Format filling	1
COVID-19 related Training	1
Total Number of AWW	13

3.3 Children Enrolled and attendance at AWCs

As mentioned earlier, all the AWCs were closed during pandemic (2020-21) and hence to understand the number of children enrolled for AWCs, information was collected for the year 2019-20. As observed in Table 3.3, average number of children

enrolled during 2019-20 per AWC is 71 with on average 100 children in urban AWCs and 66 children in rural AWCs. More than one-third (36 percent) AWCs in rural areas had 40 to 70 children enrolled. And 28 percent had 70 to 100 children enrolled.

It is noteworthy to mention that despite the population coverage norm of 1000 population per AWCs. AWWs cited various reasons for high number of enrolled children. Many AWCs register all the children belonging to households in their catchments, irrespective of whether children reside in the villages for most of the time of year or not. In fact, it was informed that grandparents or elder couples insist on registering names of all the children in their family. Many parents have been staying in the nearby cities or other places for employment and come occasionally during festivals and harvesting seasons and get the services for their children from AWCs during their visit to the village.

Table 3.3: Number of children enrolled and attending regularly during Pre pandemic period (2019-20) by place, Sagar

Particulars	Rural	Urban	Combined
Children enrolled during (2019-20)			
Up to 40	24.0	0.0	20.7
41-70	36.0	0.0	31.0
71-100	28.0	75.0	34.5
100+	12.0	25.0	13.8
<i>Mean</i>	66	100	71
Children used to come regularly (2019-20)			
Up to 15	36.0	0.0	31.0
16-30	40.0	50.0	41.4
30+	24.0	50.0	27.6
<i>Mean</i>	23	32	25
Total	25	4	29

Among enrolled children, on an average, 25 children were used to come regularly to the AWCs, (23 in rural areas and 32 in urban areas). Two-fifths of the rural AWCs had recorded the attendance of 16 to 30 children as against 50 percent of urban AWCs.

3.4 Services provided and Hours of functioning of AWCs

All AWWs were asked about the details of services provided at their centre and are presented in Table 3.4 by place of residence.

Table 3.4: Services provided at the AWC and hours of open of AWC by place of residence, Sagar

Particulars	Rural	Urban	Combined
Hours of working of AWW/day			
<6 hours	28.0	50.0	31.0
6 hours	44.0	0.0	37.9
7 hours	28.0	50.0	31.0
Services provided at the AWC			
Supplementary nutrition to children	100.0	100.0	100.0
Supplementary nutrition to pregnant and lactating mothers	92.0	75.0	89.7
Growth Monitoring of children	96.0	50.0	89.7
Vitamin A supplementation	84.0	75.0	82.8
Preschool education	80.0	75.0	79.3
Health checkup for pregnant women	84.0	50.0	79.3
Immunization	76.0	75.0	75.9
Deworming	80.0	50.0	75.9
Health Education	76.0	50.0	72.4
Referral services	64.0	25.0	58.6
Other	52.0	100.0	58.6
Anemia Management	52.0	75.0	55.2
Screening of children for common ailments	48.0	50.0	48.3
Diarrhea management	48.0	25.0	44.8
ARI management	0.0	0.0	0.0
Total AWW	25	4	29

Nearly one-third of AWWs each reported that AWC remains open for upto 5 hours and 7 hours and 38 percent AWWs informed that AWCs opened for 6 hours. For most of the rural AWCs working time is 6 or 7 hours per day from Monday to Saturday. AWCs remain closed on scheduled government holidays. All 29 AWWs mentioned that services related to supplementary nutrition to children is provided at AWC. Nine out of ten AWCs also provide services related to supplementary nutrition to pregnant and lactating mothers and growth monitoring. Ninety-six percent rural AWCs provide monitor growth of children. About 80 percent of AWCs render health check-up of pregnant women, Vitamin-A supplementation and pre-school education. Immunization, deworming and health education services to the community is provided by around 75 percent AWCs.

Less than 60 percent of AWCs provide referral services and management of Anaemia and Diarrhoea. Each AWCs received medicine kit which has iron supplementation syrup for children and ORS. It was informed by the AWWs that ANM from the sub-health centre visit to AWCs on a fixed day (usually Tuesday or Friday) once in a month and all the health care

services are provided by the ANM. AWW usually provide supportive services to ANM and ASHA. It can be mentioned that AWCs have core services related to nutrition supplementation and pre-school education along with IEC for pregnant women and lactating mother. It is noted that majority IEC and awareness activities are done on Tuesday / Friday. AWWs mentioned that apart from core AWC services, they are also providing services related to registration of beneficiaries for Sukanya Samruddhi scheme, Ladli Laxmi Yojan and PMMVY and IEC and health counselling of adolescent girls.

3.5 Supplementary nutrition provided during Pre-pandemic and Pandemic period at AWCs

In Madhya Pradesh, each AWC is supposed to provide ready cooked food to the children age 3-6 years attending AWCs. For adequate nutritional supplementation, each AWC is provided cooked food as per the weekly menu (see Box 1). Cooked food is supplied by the self-help groups (SHGs) in the AWC village as per the number of children in AWC.

During the year 2019-20 i.e., pre-pandemic period, AWCs used to distribute the cooked food items to all the children who attend AWCs. This practice has been shifted to the distribution of groceries or take-home ration either at AWCs or at the door step of children's residence during the pandemic period i.e., 2020-21. The details were asked to the AWWs on the type of food given to the children earlier along with frequency of getting those food in a week and are presented in Table 3.5. Each AWW was asked to provided exactly how many days a week food made of different items are given.

Rice items were provided for two days per week by half of the AWCs (48 percent) and three days per week by 35 percent of AWCs. All the urban AWCs provide rice items twice a week. Rice items include Khichadi, Rice and Dal, Kheer and Pulao. Food items containing cereals were provided twice a week by 38 percent AWCs and more than thrice a week by two-fifths of AWCs. It was noted that food items of rice/cereals and pulses were provided five or more days by 3.4 percent and 13.7 percent of AWCs respectively. Again 52 percent of the AWCs (all of them in rural areas) give rice/cereals item at least thrice a week and 16 percent (all of them in rural areas) provide pulse items at least five days in a week.

Either plain groundnuts or sweet made of groundnuts are distributed once a week by 13.8 percent of AWCs and 8 percent rural AWCs twice a week. In all 79 percent AWCs reported that they never gave groundnut items.

Box 1: Menu for cooked food and THR

मीनू संज्ञा चूल्हा (3 से 6 वर्ष के बच्चों के लिये)

दिनांक	भांग	मात्रा ग्राम में	मात्रा ग्राम में	मात्रा ग्राम में	मात्रा ग्राम में
1 सोमवार	पोष्टिक शिचड़ी	80	खीर-पूड़ी	95	चावल रोटी लड्डू
2 मंगलवार	चूली-मूंगफली	65	खीर-पूड़ी	125	मीठी मसूर
3 बुधवार	मीठी लपसी	50	खीर-पूड़ी	80	मूंगफली चना चिकनी
4 गुरुवार	मीठी लपसी	50	खीर-पूड़ी	85	मीठी मसूर
5 शुक्रवार	चूली-मूंगफली	65	खीर-पूड़ी	80	मूंगफली चना चिकनी
6 शनिवार	पोष्टिक शिचड़ी	80	खीर-पूड़ी	95	चावल रोटी लड्डू

मीनू THR (6 माह से 3 वर्ष के बच्चों के लिये)

दिनांक	वस्त्र	मात्रा ग्राम में	मात्रा ग्राम में	मात्रा ग्राम में
1 सोमवार	हलुआ प्रो मिक्स	600	गहू सोया बर्फी	750
2 मंगलवार	शिचड़ी	625	आटा बेसन लड्डू	750
3 बुधवार	बाल आहार	600	शिचड़ी प्रो मिक्स	750
4 गुरुवार	हलुआ प्रो मिक्स	600	गहू सोया बर्फी	750

पल्लेक मंगलवार को सभी दर्ज शिचड़ियों को 6 दिन का THR एवं खीर-पूड़ी का वितरण किया जाता है।

पूरक पोषण आहार में विविधता के लिए साप्ताहिक सांकेतिक मेनू

दिनांक	पूरक का नाम	दायंता का मात्रा	प्रोटीन (ग्राम)	कैल्शियम
सोमवार	पोष्टिक शिचड़ी	रोटी-मसूर-दूध-खट		
मंगलवार	चूली (मीठी-नमकीन)	खीर-पूड़ी-मूंगफली-आटा		
बुधवार	मीठी लपसी	रोटी-खन की दात		
गुरुवार	मीठी लपसी	खाना पुलाव-पकड़		
शुक्रवार	चूली (मीठी-नमकीन)	रोटी-मूंगदात-हो या		
शनिवार	पोष्टिक शिचड़ी	परादा-सीजनबत हरी		

परियोजना, रहली

In cooked food, breakfast, lunch and a third meal to malnourished children is provisioned as per the chart.

In THR, fixed quantity of pre-mixed ready to cook food items are given.

As per the menu sweet items such as Lapsi or Sheera (sweets made of semolina with sugar/jaggery) is given as pre mix in the THR for all the children and pregnant women. About Two-fifths of AWCs used to distribute milk made of milk power thrice a week and another 10 percent used to provide milk for five days a week. Twenty percent rural AWCs and 25 percent urban AWCs never provided milk. Egg is totally prohibited in the ICDS menu in Madhya Pradesh. The analysis clearly indicates that cereals and pulses along with wheat roti was usually provided to the children at AWCs before pandemic period. In the sweets, Sheera / Halua and Kheer was provided at least once a week by majority AWCs. Some of the AWCs reported that SHGs were not regularly providing meals as per the menu due to varying cost and payment issues. Usually, every Tuesday Kheer-Pudi is provided since all the AWCs organize Mangal-Diwas on every Tuesday to discuss issues of children, pregnant women and adolescents and THR is also distributed on every Tuesday when most of the children come to AWC.

Table 3.5: Cooked Food items provided at AWCs and the frequency of giving them during Pre-pandemic (2019-20), by place, Sagar

Particulars	Rural	Urban	Combined
Rice item/Cereal			
Never given	4.0	0.0	3.4
One day	4.0	0.0	3.4
Two days	40.0	100.0	48.3
Three days	40.0	0.0	34.5
Four days	8.0	0.0	6.9
Five days	4.0	0.0	3.4
Sprout/Pulse			
Never given	4.0	0.0	3.4
One day	4.0	0.0	3.4
Two days	40.0	25.0	37.9
Three days	16.0	50.0	20.7
Four days	20.0	25.0	20.7
Five days	12.0	0.0	10.3
Six days	4.0	0.0	3.4
Groundnut/sweet			
Never given	80.0	75.0	79.3
One day	12.0	25.0	13.8
Two days	8.0	0.0	6.9
Other sweet of Jaggery			
Never given	64.0	25.0	58.6
One day	16.0	0.0	13.8
Two days	20.0	25.0	20.7
Three days	0.0	50.0	6.9
Milk			
Never given	20.0	25.0	20.7
One day	12.0	50.0	17.2
Two days	12.0	0.0	10.3
Three days	40.0	25.0	37.9
Four days	4.0	0.0	3.4
Five days	12.0	0.0	10.3
Six days	0.0	0.0	0.0
Egg			
Never given	100.0	100.0	100.0
Other Items			
One day	8.0	50.0	13.8
Two days	8.0	0.0	6.9
Three days	0.0	25.0	3.4
Four days	8.0	0.0	6.9
Five days	12.0	0.0	10.3
Six days	8.0	0.0	6.9
Total	25	4	29

In THR, for children, pre-mixed Halua, Balahar and Khichadi was provided. AWCs were instructed to distribute THR weekly and some of the AWCs reported that due to pandemic situation in the village, THR was distributed for whole month for some duration.

Box 2

Types of SNP	6 months to 3 years (items in detail)	3 years to 6 years (items in detail)	P & L Mothers (Items in detail)
THR	Soya Barfi, Besan laddu, Halua, Bal Ahar, Khichdi	Sabji-Roti, Kheer-Puri, Dal-Roti, Dal-Rice, Poshtik Khichdi, Daliya (Sweet / Namkeen) Lapsi (Sweet / Namkeen)	Soya Barfi, Besan laddu, Halua, Bal Ahar, Khichdi
Hot Cooked Meal	Hot cooked food is being provided to only malnourished children.	Sabji-Roti, Kheer-Puri, Dal-Roti, Dal-Rice, Poshtik Khichdi, Daliya (Sweet / Namkeen) Lapsi (Sweet / Namkeen)	--



Khichadi pre-mix – This is given as THR for all groups of children age 6 months to 5 years. This contains – Rice, Moong Dal, de-fatted Soya Grit, edible vegetable oil, spices, iodine salt and condiments for added flavour. Each child is provided one pack of 625 gms per week for 6 servings.

	
Halua Pre-mix – This given as THR for children age 6 month to 5 years. This contains – Roasted wheat flour, Sugar, Roasted de-fatted soya flour, edible vegetable oil, Whole milk powder, Roasted Gram Flour. Each child is provided a pack of 600 grams per week for 6 servings	Bal Ahar – This given as THR for children age 6 month to 5 years. This contains – Roasted wheat flour, Sugar, Roasted de-fatted soya flour, edible vegetable oil, Whole milk powder, Each child is provided a pack of 600 grams per week for 6 servings

The comparison of distribution of cooked food and THR indicates that while there has been sustained effort for distribution of pre-cooked meals and THR during pre-pandemic period, supplementary nutrition programme was somewhat affected during Covid pandemic. Madhya Pradesh has still not adopted grocery distribution and designed its own SNP menu as per the state needs. However, providing THR in the form of pre-mix items has not been very streamlined. Even provisioning of pre-cooked meals through SHGs has also some bottlenecks in terms of budget provisioning, quality and quantity of supplied food. Regularity in supply of meals and THR is also an issue raised by AWWs during the study.

3.6 Availability of equipments, frequency of health checkups and place of referrals

Availability of basic equipments and frequency of health checkups conducted at the AWCs was analyzed further (Table 3.6). Out of 29 AWCs barring 2 AWCs (Kisanpura and Noniya) all other AWCs had a functional baby weighing scale and except AWC Dehchuli all had height measuring scale with them. All of them were asked about the frequency of health checkup conducted by them and it is observed that on an average they organize health checkups once in 1.7 months, slightly higher duration in urban areas (2.5 months) compared to rural areas (1.6 months). In general, 65 percent of them organized health checkups once in a month, (68 percent in rural areas against 50 percent in urban AWCs). Another 14 percent of the AWCs had organized health check-ups once in 2 months and 8 percent of them held health checkups once in 3 months. As far as place of referring morbid or

malnourished children is concerned, it is usually a PHC as mentioned by 83 percent of the AWWs (80 percent in rural areas and all AWCs in urban areas). Proportion referring to higher level health facilities like CHC, SDH or DH is only 8 percent, all of them were rural AWCs.

Table 3.6: Availability of basic equipments, frequency of Health checkups and place of referral by place, Sagar			
Particulars	Rural	Urban	Combined
Proportion of AWC having Baby weighing scale	92.0	100.0	93.1
Proportion having Functional Height measuring scale	96.0	100.0	96.6
Frequency of Health check ups			
Never	4.0	0.0	3.4
Once in a month	68.0	50.0	65.5
Once in two months	12.0	25.0	13.8
Once in 3 months	4.0	0.0	3.4
Once in 4 months	8.0	0.0	6.9
Once in 6 months	4.0	25.0	6.9
<i>Mean</i>	<i>1.6</i>	<i>2.5</i>	<i>1.7</i>
Place of referring morbid or malnourished children			
ANM during her visit	4.0	0.0	3.4
SHC	4.0	0.0	3.4
PHC	80.0	100.0	82.8
CHC/SDH/DH	12.0	0.0	10.3
Total	25	4	29

3.7 Growth monitoring, Immunization camps and Referrals during Pre-Pandemic and Pandemic period

As mentioned earlier, all AWCs are supposed to maintain weight for age growth chart for all the children and organize immunization camps at their AWCs. Table 3.7 shows that slightly more than half of AWCs, much higher in urban than in rural areas, had maintained growth monitoring chart for all the children during Pre pandemic period which has decreased to 31 percent during the pandemic period, (32 percent in rural areas and 25 percent in urban areas). This clearly says that maintenance of growth chart has been affected in both rural and urban areas, more so in urban areas due to the pandemic. It was observed that practice of preparing of growth chart for weight for age has been replaced with colour scaled growth monitoring chart. This new chart combined all the three measurements i.e. weight for age, weight for height and height for age. A child is categorized as per the measurement of age, height and weight in severely / moderately malnourished or normal as per the red, yellow and green colour.

Regarding organization of immunization camps, majority AWCs (76 percent in rural areas and 100 percent in urban areas) had organized 10 to 12 immunization camps during pre-pandemic period and only 10 percent AWCs had never organized any immunization sessions at the AWCs, reason being, presence of sub-health centre in the village itself.

Table 3.7: Growth Monitoring, Immunization camps organized, Referrals made and contact with beneficiaries during Prepandemic and Pandemic period by place, Sagar

Particulars	Prepandemic (2019-20)			During pandemic (2020-21)		
	Rural	Urban	Combined	Rural	Urban	Combined
Maintain Weight for Age Growth chart						
All children	52.0	75.0	55.2	32.0	25.0	31.0
Most of the children	36.0	25.0	34.5	48.0	50.0	48.3
Very few children	12.0	0.0	10.3	20.0	25.0	20.7
Immunization sessions organized						
None	12.0	0.0	10.3	20.0	0.0	17.2
1-3	0.0	0.0	0.0	4.0	0.0	3.4
4-6	4.0	0.0	3.4	16.0	0.0	13.8
7-9	4.0	0.0	3.4	16.0	25.0	17.2
10-12	76.0	100.0	79.3	40.0	75.0	44.8
More than 12	4.0	0.0	3.4	4.0	0.0	3.4
Mean	11.6	12	11.6	8.8	11.3	9.1
Number of referrals made						
None	44.0	50.0	44.8	84.0	50.0	79.3
1	12.0	25.0	13.8	8.0	0.0	6.9
2	24.0	0.0	20.7	4.0	25.0	6.9
3	12.0	25.0	13.8	4.0	0.0	3.4
5	4.0	0.0	3.4	0.0	25.0	3.4
6	4.0	0.0	3.4	0.0	0.0	0.0
Mean	1.5	1.3	1.4	0.3	1.8	0.5
Number of Mothers received incentives						
None	52.0	75.0	55.2	92.0	75.0	89.6
1	12.0	0.0	10.3	4.0	0.0	3.4
2	28.0	0.0	24.1	4.0	0.0	3.4
4	4.0	25.0	6.9	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	25.0	3.4
6	4.0	0.0	3.4	0.0	0.0	0.0
Mean	1.2	1	1.2	0.1	1.3	0.3
Frequency of use of mobiles for communication with beneficiaries						
Often	36.0	25.0	34.5	60.0	25.0	55.2
Sometimes	16.0	25.0	17.2	24.0	25.0	24.1
Rarely/never	48.0	50.0	48.3	16.0	50.0	20.7
Total	25	4	29	25	4	29

During pandemic, 45 percent (Rural 40 percent; Urban 75 percent) AWCs had organized 10-12 immunization sessions. AWCs not organized any immunization session increased to 17 percent during pandemic. Overall, these AWCs had organized 11.6

immunization camps during the year 2019-20 which decreased to 9.1 camps during 2020-21.

Further, AWCs are supposed to refer the complicated cases for treatment. As observed in the Table, during pre-pandemic period, 45 percent of the AWCs did not refer any children for further treatment which increased to 79 percent during the pandemic period. On an average, 1.2 children were referred during 2019-20 which decreased to 0.3 children during 2020-21. At about 59 percent of the AWCs during pre-pandemic and 90 percent of the AWCs during pandemic period, no mother received any incentives after the referrals. It is to mention that AWCs mainly referring malnourished children to NRCs. Some of the AWWs mentioned that every month ANM comes to the AWC for immunization and there health check-up of all the children is also done. To understand the contact or communication made with the beneficiaries, all AWWs were asked how often usually they used mobile phones for communication with beneficiaries. Around 35 percent of AWWs mentioned it as 'often' during pre-pandemic whereas 55 percent of the AWWs mentioned they used mobile calls 'often' to contact mothers during pandemic. Nearly half of the AWWs rarely or never contacted beneficiaries through mobile during pre-pandemic period which has gone down to 21 percent during Covid pandemic.

This clearly indicates that maintenance of growth chart, organization of immunization camps and number of children referred to higher facilities and contact with beneficiaries affected during pandemic period, more so in rural areas than in urban areas.

3.8 Convergence with health providers

To understand the convergence of AWWs with health providers, all AWWs were asked about the frequency of coordination and self-rating of the coordination with ASHAs and ANMs of their area and their responses are presented in Table 3.8. Usually, 65 percent of the AWWs organized VHND meetings every month and 7 percent of them mentioned that they organized 3 or more VHND meetings per month. Regarding visits of an ANM to AWCs, it is one visit every month for 90 percent of the. Around 86 percent of AWWs felt that coordination with ANM occurs frequently, higher in rural areas (92 percent) than in urban areas (50 percent). None of the AWWs mentioned absence of coordination with ANM. Further, 90 percent of AWWs rated their coordination with ANM as good and remaining 10 percent rated it as average.

Table 3.8: Convergence with Health providers by place, Sagar			
Particulars	Rural	Urban	Combined
VHND meetings organized/month			
0	24.0	25.0	24.1
1	64.0	75.0	65.5
2	4.0	0.0	3.4
3+	8.0	0.0	6.9
Number of ANM visits/Month			
0	4.0	0.0	3.4
1	88.0	100.0	89.7
4	4.0	0.0	3.4
8	4.0	0.0	3.4
Frequency of coordination with ANM			
Always	92.0	50.0	86.2
Most of the time	8.0	50.0	13.8
Rarely/never	0.0	0.0	0.0
Frequency of coordination with ASHA			
Always	72.0	0.0	62.1
Most of the time	16.0	25.0	17.2
Rarely/never	4.0	25.0	6.9
No ASHA in the area	8.0	50.0	13.8
Self-rating of coordination with ANM			
Good	88.0	100.0	89.7
Average	12.0	0.0	10.3
Poor	0.0	0.0	0.0
Self-rating of coordination with ASHA			
Good	76.0	25.0	69.0
Average	12.0	0.0	10.3
Poor	4.0	25.0	6.9
No ASHA in the area	8.0	50.0	13.5
Total	25	4	29

As far as coordination with ASHAs is concerned, overall 62 percent (72 percent in rural areas and none in urban areas) mentioned it as 'always'. Seventeen percent of AWWs (16 percent in rural areas and 25 percent in urban areas) expressed to have co-ordination with ASHAs most of the time. did not have ASHAs in their area. Again, 14 percent (8 percent rural and 50 percent urban) of AWWs informed that there is no ASHA present in their area. Further, 69 percent AWWs rated their coordination with ASHAs as good, 10 percent as average and 6.9 percent as poor.

It indicates that there is a frequent coordination between AWWs, ASHAs and ANMs in Sagar district and AWWs are satisfied with their coordination with ANMs and ASHAs.

3.9 Changes made in the functioning of AWCs due to COVID-19 pandemic

All the AWWs were asked about the changes made in the functioning of AWCs, distribution of supplementary food, organization of immunization sessions, growth monitoring sessions, health check-up camps and referrals due to COVID-19 and the responses are presented in Table 3.9.

Overall 76 percent of the AWWs mentioned that though AWCs were closed but they functioned following the COVID-19 protocols whereas 24 percent of them had closed completely due to lockdown. Around nearly half of AWCs distributed supplementary food either at door step or at AWC following Covid protocol and social distancing. All AWCs in urban areas distributed food through door to door supply. Further, 76 percent of AWCs provided immunization sessions during the pandemic period at AWCs and 17 percent did not provide any immunization services at AWCs during pandemic.

Table 3.9: Changes made in the functioning of AWC during COVID-19 Pandemic by place, Sagar			
Particulars	Rural	Urban	Combined
Changes made in functioning of AWC			
Closed due to lockdown	20.0	50.0	24.1
Was closed but functioning following Covid protocols	80.0	50.0	75.9
Changes made in distribution of supplementary food			
Door to door supply	40.0	100.0	48.3
Provided at AWC	56.0	0.0	48.3
Not provided	4.0	0.0	3.4
Changes made in organizing Immunization sessions			
Door to door supply	8.0	0.0	6.9
Provided at AWC	76.0	75.0	75.9
Not provided	16.0	25.0	17.2
Changes made in growth monitoring sessions			
Not organized at AWC	4.0	25.0	6.9
Door to Door monitoring following protocols	48.0	0.0	41.4
Maintain roster of children	44.0	75.0	48.3
Unable to monitor	4.0	0.0	3.4
Changes made in health checkups			
Door to door services	16.0	0.0	13.8
Separate sessions at AWC	52.0	25.0	48.3
Not organized	32.0	75.0	37.9
Changes made in referrals			
Referrals increased	0.0	0.0	0.0
Referrals decreased	16.0	25.0	20.7
No referrals	84.0	50.0	79.3
Total	25	4	29

Around two-fifths of the mentioned that that growth monitoring sessions were organized through door-to-door monitoring and 48 percent did so at AWC by maintaining roster of children. Seven percent of the AWCs did not organize any growth monitoring session due to pandemic. Nearly half of AWCs did organize separate sessions of health check-ups at AWCs while 38 percent had not organized any health check-up camps during pandemic. Three-fifths of AWWs mentioned that they did not make any referrals due to COVID-19 and another 21 percent opined that number of referrals decreased during the pandemic period.

Hence, Supplementary nutrition programme did not get affected much; immunization camps and growth monitoring got affected to some extent and referral services got affected much due to the non-functioning of AWWs during Pandemic.

3.10 Additional duties performed by AWWs during Pre Pandemic and Pandemic period

As far as additional duties performed by the AWWs apart from regular duties is concerned, 21 percent of the AWWs had no additional duties during pre-pandemic period (Table 3.10). For others it is mostly election, BLO or voter list duty – 59 percent, pulse polio duty – 41 percent, survey for different schemes – 31 percent.

Table 3.10: Additional duties performed apart from the regular duties during Pre-Pandemic and Pandemic period, Sagar

Type of additional duties	Number	Percent
During Pre pandemic		
No additional work	6	20.7
Election/Voter list duty/BLO	17	58.6
Panchayat related work	6	20.7
Health department work	8	27.6
Survey for different schemes	9	31.0
Pulse Polio Duty	12	41.4
Registering beneficiary for social scheme	3	10.3
Providing information about village	3	10.3
Accompany delivery cases	1	3.4
SHG Meeting	1	3.4
During Pandemic		
No additional work	1	3.4
Creating awareness on COVID-19	12	41.4
Involving in COVID survey/Temperature screening	29	100.0
Involving in COVID vaccination survey/camps	5	17.2
Duty at Covid quarantine centre	10	34.5
Covid Medicine distribution	12	41.4
Booth Level Officer	1	3.4
PMMVY / Ladli Laxmi Yojana Registration	1	3.4
Total number of AWW	29	100

Table 3.10a: Perception of AWWs on whether additional duties affected their normal life, Sagar

Particulars	Rural	Urban	Combined
Affected the normal routine work			
Yes	92.0	100.0	93.1
No	8.0	0.0	6.9
Total	25	4	29

On the other hand, except for 3.4 percent AWWs, all other AWWs mentioned that they had to do additional duties during pandemic. All of them were involved in Covid survey, Covid Screening, followed by 41 percent each were assigned work of creating awareness on COVID-19 and medicine distribution during Covid. Other tasks include duty at covid quarantine centre – 34 percent and involvement in Covid vaccination – 17 percent. In all 93 percent of AWWs mentioned that pandemic has affected their routine work. All the urban AWWs expressed that their additional duties during pandemic period affected their normal routine work 92 percent of AWWs in rural areas also endorsed the same feeling.

3.11 Adequacy of Fund, suggestions to improve fund availability and difficulties faced while getting incentives

All the AWWs were asked whether the fund they receive is adequate or not. For that, cent percent workers both in rural as well as in urban areas, expressed that funds they are getting is not adequate (Table 3.11). It is noteworthy that, majority AWWs were not adequately aware about funds provided to the AWCs. Some of the AWWs informed that a meagre Rs.150 per month is provided for organizing Mangal Diwas – which is organized on every Tuesday to celebrate the birthday of children, baby shower ceremony for pregnant women etc. Some of the AWWs informed that they get funds to pay rent of the building and funds for white-wash every 2-3 years.

Table 3.11: Perception of AWWs on adequacy of fund, Sagar

Particulars	Rural	Urban	Combined
Adequate fund availability			
Yes	0.0	0.0	0.0
No	100.0	100.0	100.0
Total	25	4	29

As far as suggestions to improve the fund availability is concerned, 69 percent of them requested for provisioning of separate fund for AWCs which can be utilized as per the requirements of AWCs, 24 percent of them felt the funds should be released in time or on regular basis, 10 percent of them also suggested that separate fund for infrastructure should be provided to AWCs.

Table 3.11a: Suggestions to improve the fund availability and difficulties faced while getting incentives, Sagar		
Particulars	Number	Percent
Suggestions to improve the fund availability*		
No suggestions	10	34.5
Increase the fund amount	7	24.1
Regular/In time release of fund	3	10.3
Separate fund for AWC needed	20	69.0
Fund for infrastructure needed	3	10.3
Difficulties faced in getting incentives		
No difficulties	22	75.9
Not getting incentives	1	3.4
Delay in payment	6	20.7
Total number of AWW	29	100
Multiple Responses		

Regarding difficulties in getting incentives, 76 percent of the AWWs had not faced any difficulty in getting the incentives, 21 percent of them mentioned there is a delay in getting the payments by 1-2 months and remaining 3.4 percent mentioned that they have not got any incentives.

3.12 Perceived Reasons for existing malnutrition among children and suggestions to improve it through ICDS

When it was asked what are the reasons for existing malnutrition among children in their area, 93 percent of them mentioned that it is the lack of care for kids by parents and family members that is leading cause of malnutrition (Table 3.12). AWWs mentioned that due to poverty majority mothers also go for work, leaving their children at home with other elder siblings and with their grandparents. Kids usually don't get adequate attention regarding their age appropriate diet and same food is served to children and other family members. It was also mentioned that due poor quality of food and THR few parents don't send their children at AWCs. It was noted that 69 percent of the AWWs complained that malnutrition is due to improper diet given to children at home. Nearly half of the AWWs

apprehend that it the lack of awareness about the child nutrition in general among families. Nearly one-quarter of AWWs expressed that there is still exist some form of gender bias and mostly girls are neglected as far as the diet and nutrition is concerned. Most of the parents don't prefer to send their girls to the AWCs for supplementary nutrition. Nearly one-fourths of the AWWs felt that it is due to unhygienic practice that is being followed at home which causes malnutrition among children, 17 percent also feel that malnutrition is due to poverty and few AWWs also expressed that health condition of mother and children, quality and quantity issues in THR could be the reason for existing malnutrition.

Table 3.12: Perceived reasons of AWWs for existing malnutrition among children in their area and suggestions to improve it through ICDS, Sagar

Particulars	Number	Percent
Perceived reasons for malnutrition among children their area*		
Lack of Awareness about child nutrition	15	51.7
Lack of health care for kids	2	6.9
Poverty	5	17.2
Improper diet at home for kids	20	69.0
Son preference / Neglect of Girls	7	24.1
Less care by mothers/Parents	27	93.1
Less THR / Food Quality issue	3	10.3
Genetic/LBW/Anemic mothers	3	10.3
Unhygienic practices	7	24.1
Suggestions to improve the nutritional status of children through ICDS*		
No Suggestion	2	6.9
Increase the quantity of food	3	10.3
Menu of THR and Food should be changed	20	69.0
Awareness creation among parents	8	27.6
Health and Hygiene of kids / Mother should improve	8	27.6
AWC should have school like facility	9	31.0
Monitoring of SHG for quantity / quality of food	17	58.6
Other	6	20.7
Total number of AWW	29	

As far as suggestions to improve the nutritional status of children through ICDS, 69 percent of AWWs felt that menu of THR and cooked food need to be changed which may include fruits and dry nutritious biscuits, groundnut *Chikki* etc., 59 percent of them mentioned that monitoring of SHGs for quality and quantity of food should be improved. Nearly one-thirds of AWWs mentioned that AWCs should have school like facility so that children are attracted and their stay at AWC is improved. This is also prompt parents to send their children to AWCs. In fact during the survey, it was noted that parents in few of the

AWCs situated near to city or town has a tendency of sending children to kindergarten school instead of AWCs as soon as children attain age of 3 years. About one-third of AWWs mentioned about awareness creation among parents and improving health and hygiene of kids and mothers.

4. Perspectives of mothers on performance and utilization of AWCs

As mentioned earlier, 174 mothers of selected children were interviewed to understand their perspectives on performance and utilization of AWCs related to supplementary nutrition, Pre School Education, immunization, health checkup and referral services.

4.1 Background Characteristics of Children, Households, Mother and Father of children

Table 4.1 provides background characteristics of children, household, mother and father by place of residence.

Table 4.1: Background characteristics of child, Household, Mother and Father by place of residence, Sagar			
Background characteristics	Rural	Urban	Total
Sex of the child			
Boys	52.6	54.5	52.9
Girls	47.4	45.5	47.1
Age of the child			
3 Years	34.9	27.3	33.9
4 years	27.6	50.0	30.5
5 years	28.9	13.6	27.0
6 years	8.6	9.1	8.6
<i>Mean</i>	<i>4.1</i>	<i>4.0</i>	<i>4.1</i>
Nutritional status of the child as per AWC record			
Normal child	89.5	90.9	89.7
Moderately malnourished	9.9	4.5	9.2
Severely malnourished	0.7	4.5	1.1
Religion of Household			
Hindu	95.4	90.9	94.8
Muslim	2.6	0.0	2.3
Christian	0.7	0.0	0.6
Jain	1.3	9.1	2.3
Caste of the Household			
Scheduled caste	24.3	31.8	25.3
Scheduled tribe	10.5	0.0	9.2
Other backward class	55.9	40.9	54.0
General/forward	9.2	27.3	11.5
Type of Family			
Nuclear	32.2	36.4	32.8
Extended	0.7	4.5	1.1
Joint	67.1	59.1	66.1

Background characteristics	Rural	Urban	Total
Number of Living children (including reference child)			
1	11.8	22.7	13.2
2	46.7	72.7	50.0
3	29.6	4.5	26.4
4+	11.8	0.0	10.3
Mean	2.5	1.8	2.5
Household belong to BPL/APL			
BPL	53.9	36.4	51.7
APL	46.1	63.6	48.3
Age of mother			
20-24	27.6	31.8	28.2
25-29	48	40.9	47.1
30-34	17.8	18.2	17.8
35 and above	6.6	9.1	6.9
Mean	27.1	27.5	27.2
Education of mother			
Never Gone to school	11.2	0	9.8
1 to 7	19.7	4.5	17.8
8 to 10	57.3	50	56.3
Above 10	11.8	45.5	16.1
Mean	7.6	10.9	8.0
Occupation of mother			
Cultivation	10.5	0.0	9.2
Agricultural/non agricultural labourer	11.2	0.0	9.8
Business related	0.7	4.5	1.1
Salaried employment	2.0	0.0	1.7
Household work	75.7	90.9	77.6
Marital status of mother			
Currently married	100.0	95.5	99.4
Widowed	0.0	4.5	0.6
Total	152	22	174
Education of Father			
Never Gone to school	5.8	0.0	5.2
1 to 7	17.8	4.8	16.2
8 to 10	55.3	52.4	54.9
Above 10	21.1	42.8	23.7
Mean	8.9	10.6	9.2
Occupation of Father			
Cultivation	44.7	9.5	40.5
Agricultural/non agricultural labourer	34.2	9.5	31.2
Business related	9.9	47.6	14.5
Salaried employment	11.2	33.3	13.9
Total	152	21	173

Out of 174 selected children, 53 percent of the children were boys and remaining 47 percent were girls. Proportion of boys is comparatively higher in both rural and urban areas. The children were in the age group of 3-6 years, with average age of 4.1 years. Nearly

one-third of children were 3 and 4 years old and 9 percent children were of 6 years old since the sample was drawn among the children between age 3 to 6 years and who have attended AWCs during the year 2020-21. Of all the children, 90 percent of the children were in the category of normal nutritional status and 9 percent were moderately malnourished, higher in the rural areas (9 percent) compared to urban areas (5 percent). Only 1 percent of the total children were in the category of severely malnourished. Majority children belonged to Hindu religion households. Further, half of the households of the children were from other backward caste, 25 percent scheduled caste and about 10 percent each scheduled tribe and other caste. Comparatively children belonging to scheduled caste households are more in urban areas and OBC households are more in rural areas.

Two-thirds of them (66 percent) belonged to a joint family and 33 percent were from a nuclear family. Nuclear family households are slightly more in urban areas. There are on average 1.8 living children to urban mothers compared to 2.5 living children to rural mothers. About half of the mothers had 2 living children and 10 percent of the mothers had 4 or more living children. Proportion of mothers having 3 or more children is more in rural areas compared to urban areas. Over all nearly equal proportion of children belonged to BPL and APL category households.

With regard to background characteristics of mothers, mean age of the mothers is found to be 27.2 years. Nearly two-fifths of mothers were in the age group of 24-29 in rural areas and 41 percent mothers in urban areas were in the same age group. Regarding education of mother, 10 percent of them (all in rural areas) had never gone to school. More than half of the mothers in both rural and urban areas had schooling for 8 to 10 years. On average rural mothers had schooling of 7.6 years compared to 10.6 years of urban mothers. Majority (77 percent) mothers were engaged in household work (Rural-75 percent, Urban-90 percent). Nearly 10 percent of mothers (all in rural areas) engaged in each of the cultivation and labourer occupation category. Except one respondent mother in urban area all were currently married. Educational and occupational characteristics of fathers were asked for all the currently married women. Average schooling was found to be higher for fathers of children compared to mothers. Fathers had schooling of 9.2 years (Rural-8.9 years, Urban 10.6 years). Nearly one-fourth of the fathers attended above 10th schooling (Rural-21 percent, Urban-43 percent). Two-fifths of the fathers were engaged in cultivation

and one-third employed as labourer. In urban areas more than half of the fathers were engaged in business or salaried employment whereas in rural areas about three-fourths of fathers were cultivators or agricultural / non-agricultural labourers.

4.2 Knowledge of mothers on services being provided at AWCs

All 174 mothers were asked about the services that are being provided at the AWCs to understand their knowledge and are presented in the Table 4.2 by place of residence.

Table 4.2: Knowledge of Mothers on services being provided at the AWC, by place of residence, Sagar			
Knowledge on services provided	Rural	Urban	Total
Supplementary Nutrition to children	94.7	95.5	94.8
Supplementary Nutrition to Pregnant/Lactating mothers	75.5	59.1	73.4
Pre-School Education	67.5	31.8	63.0
Immunization	81.5	77.3	80.9
Growth Monitoring of children	49.7	18.2	45.7
Screening children 3-6 years for common ailments	37.1	9.1	33.5
Deworming	47.7	22.7	44.5
Vitamin A supplementation	41.7	36.4	41.0
Anaemia management	13.2	4.5	12.1
ARI management	0.0	0.0	0.0
Diarrhoea management	24.5	4.5	22.0
Health education	12.6	4.5	11.6
Health check-up for pregnant women	44.4	13.6	40.5
Referral services	2.0	0.0	1.7
Other	0.0	13.6	1.7
Total	151	22	173

Almost all mothers, both in rural and urban areas, were aware of supplementary nutrition that is being provided at the AWCs; 73 percent of the mothers mentioned about the supplementary nutrition to pregnant or lactating mothers; 81 percent were aware of immunization activities and 63 percent of them mentioned about pre-school education and; 22-46 percent of the mothers mentioned about growth monitoring, screening of children for common ailments, deworming and Vitamin A supplementation. Growth monitoring is mentioned by comparatively more number of mothers in rural areas (50 percent) than in urban areas (18 percent). Vitamin A supplementation is also mentioned comparatively by more women in rural areas. Around one-fifth of the mothers comparatively higher in rural areas (25 percent), were aware of the role of AWCs in diarrhoea management. None of the respondent were aware of AWCs services about ARI management. Awareness about

services related to health education was found among 12 percent mothers. Around 14 percent of mothers mentioned about other services - conducting VHNDs, registration of girl child for Ladli Laxmi Yojana, PMMVY, services related to voter ID, pulse polio etc.

4.3 AWC attendance, receiving and consumption of food during pandemic and pre-pandemic period

All the respondents were asked whether their children attended AWCs during the year 2019-20, pre-pandemic and 2020-21, pandemic period.

Table 4.3: Proportion of children attending AWC, receiving and consuming food, reasons for not attending and receiving food, during Prepandemic and Pandemic Period, by place of residence, Sagar

Particulars	Pre Pandemic (2019-20)			Pandemic (2020-21)		
	Rural	Urban	Total	Rural	Urban	Total
Proportion attending AWC						
Proportion attended /ing AWC	65.1	54.5	63.8	53.3	59.1	54.0
Not attended/ing	34.9	45.5	36.2	46.7	40.9	46.0
Total	152	22	174	152	22	174
Reasons for not attending AWC						
AWC is far off	7.4	10.0	7.9	4.2	0.0	3.8
AWC often remains closed	5.6	0.0	4.8	75.0	55.6	72.5
Quality of services not up to the mark	0.0	0.0	0.0	0.0	11.1	1.3
Did not feel the need	1.9	10.0	3.2	0.0	11.1	1.3
No body to accompany	3.7	10.0	4.8	16.7	11.1	16.3
Child was small (<3 yrs.)	87.0	80.0	87.3	0.0	0.0	0.0
Child does not want to go	1.9	0.0	1.6	1.4	0.0	1.3
Fear of Covid Infection	1.1	0	0.7	41.7	55.6	43.8
Other	1.1	0	0.7	6.9	0.0	6.3
Number of children not attended/ing	54	10	64	71	9	80
Proportion received/ing food from AWC						
Proportion received/ing food from AWC	97.0	91.7	96.4	86.4	69.2	84.0
Not received/ing	3.0	8.3	3.6	13.6	30.8	16.0
Number of children attended/ing AWC	99	12	111	81	13	94
Proportion consumed/ing food given						
Proportion consumed/ing food given	93.8	81.8	92.5	92.9	88.9	92.4
Not consumed/ing	6.3	18.2	7.5	7.1	11.1	7.6
Number of children received/ing food	96	11	107	70	9	79

Nearly three-fifths of mother mentioned that their children attended to AWCs during the year 2019-20 but 54 percent mothers reported about their children attending AWC in 2020-21. During pre-pandemic period 73 percent mothers cited closure of AWCs for most of the time during pandemic as a reason for their children not attending AWCs. Nearly two-fifths of mother also said that due fear of Covid infection they did not allow children to attend AWC during pandemic. Four-fifths of mothers informed that

their child was less than 3 years of age and hence they did not send their child to the AWC during pre-pandemic period. 'Other' reasons cited by 6.3 percent of mothers includes 'Nobody to take care of children at AWC', mother stayed at her parent's home, 'no formal education given at AWC' etc. Among those who were attending AWCs, 84 percent mentioned that they have received food from AWCs and 16 percent of the children during 2020-21 and 3.6 percent during 2019-20 did not receive the food from AWCs. Further, 92 percent of the children found to consume the food given by AWCs during both the years. Hence, children attending AWC and most of the children received food and THR during Pre-pandemic and pandemic period. Most of the children consume the food received by them at AWCs. In few cases, mothers expressed cooked meals were not distributed properly and quantity is also very less. Quality of food is also not of acceptable. Cooked food and THR should be less spicy and should taste according to the liking of the children.

4.4 Perception of Mothers on quantity and quality of Food received from AWC

Further, all the mothers were asked whether the food received by AWC was beneficial to their children and their opinion on quantity and quality of ration received from AWW. The opinion of mothers is presented by place of residence in Table 4.4.

Table 4.4: Perception of mothers on whether food received at AWC was beneficial to the child and opinion on quantity and quality of ration received from AWW, by place of residence, Sagar			
Particulars	Rural	Urban	Total
Perception on supplementary nutrition provided at AWC was beneficial to the child			
Strongly disagree	1.0	0.0	0.9
Disagree	11.5	0.0	10.3
Undecided	16.7	18.2	16.8
Agree	70.8	72.7	71.0
Strongly agree	0.0	9.1	0.9
Number of children received food during 2019-20	96	11	107
Opinion on quantity of ration received			
More	10.0	11.1	10.1
Appropriate	70.0	88.9	72.2
Less	20.0	0.0	17.7
Opinion on quality of ration received			
Very good	0.0	0.0	0.0
Good	50.0	66.7	51.9
Average	44.3	33.3	43.0
Poor	5.7	0.0	5.1
Very poor	0.0	0.0	0.0
Number of children received ration during 2020-21	70	9	79

Overall, 71 percent mothers whose children have received cooked food from AWCs 'agree' that the supplementary nutrition was beneficial to their child, another 17 percent of the mothers expressed it as 'undecided' that the food provided at AWC was beneficial to their children. In very smaller proportion of mothers were 'strongly agree' and 'strongly disagree' about the benefits of food given at AWC to their children. Among mothers that 'strongly agree' that food provide at AWC is beneficial were all belong to urban areas.

Regarding opinion on quantity of ration given during the pandemic period, 72 percent, higher in urban areas (89 percent) felt that the THR provided are appropriate in quantity, around 18 percent (all from rural areas) considered quantity of THR as less than requirement and 10 percent of the mothers, equally in rural and urban areas, felt that the quantity of THR given is more.

As far as opinion on quality of THR is concerned, 52 percent felt quality-wise it is 'good' and another 43 percent felt the ration was of 'average' quality and only 5 percent felt it as 'poor'. As such, not much variation is observed between rural and urban mothers' opinion on the quality of ration received.

Hence mothers have the opinion that supplementary food provided at the AWC is beneficial to their children and they are satisfied with the quantity and quality of ration they have received.

4.5 Type and frequency of food received at AWC during Pre pandemic period

During 2019-20, AWCs were open and have distributed the cooked food items to the children. Hence, all the mothers of children who attended AWCs during 2019-20 were asked what type of food items their child got and frequency of getting that food by place of residence and are presented in Table 4.5.

Table 4.5: Type of cooked food item received and frequency of getting at AWC during 2019-20 by place of residence, Sagar			
Type of food and frequency of getting	Rural	Urban	Total
Rice/Cereal item			
Never received	26.0	18.2	25.2
1 Day in a week	29.2	36.4	29.9
2 Days in a week	31.3	36.4	31.8
3 Days in a week	13.5	9.1	13.1
Sprout/Pulse item			
Never received	28.1	18.2	27.1
1 Day in a week	18.8	36.4	20.6
2 Days in a week	40.6	27.3	39.3

Type of food and frequency of getting	Rural	Urban	Total
3 Days in a week	9.4	9.1	9.3
4 Days in a week	1.0	9.1	1.9
5 Days in a week	1.0	0.0	0.9
6 Days in a week	1.0	0.0	0.9
Groundnut			
Never received	92.7	90.9	92.5
1 Day in a week	6.3	9.1	6.5
3 Days in a week	1.0	0.0	0.9
Sweet made of Jaggery			
Never received	88.5	81.8	87.9
1 Day in a week	11.5	9.1	11.2
2 Days in a week	0.0	9.1	0.9
Milk			
Never received	90.6	63.6	87.9
1 Day in a week	6.3	36.4	9.3
2 Days in a week	1.0	0.0	0.9
3 Days in a week	1.0	0.0	0.9
4 Days in a week	1.0	0.0	0.9
Egg			
Never received	100.0	100.0	100.0
Other-Khichadi			
Never received	60.4	36.4	57.9
1 Day in a week	32.3	54.5	34.6
2 Days in a week	2.1	9.1	2.8
3 Days in a week	1.0	0.0	0.9
4 Days in a week	1.0	0.0	0.9
5 Days in a week	2.1	0.0	1.9
6 Days in a week	1.0	0.0	0.9
Other-Balahar			
Never received	60.5	42.9	57.8
1 Day in a week	36.8	42.9	37.8
2 Days in a week	0.0	14.3	2.2
5 Days in a week	2.6	0.0	2.2
Other-Haluva			
Never received	46.7	75.0	52.6
1 Day in a week	33.3	25.0	31.6
2 Days in a week	20.0	0.0	15.8
Number of children received food	152	22	174

Most of the mothers, (75 percent) mentioned that their children used to get rice item or an item made up of any cereal, thrice a week; 73 percent of the mothers mentioned their children used to get sprouts or food made up of pulses for upto 3 days in a week and it is comparatively higher in urban areas (88 percent) than in rural areas (72 percent). About 80 percent of mothers reported that their children never got groundnut, sweet made of jaggery and milk in the 2019-20. In Madhya Pradesh, Khichadi, Balahar and Haluva is served in AWCs.

4.6 Type of ration received from AWW and its frequency during Pandemic period

Out of the 79 children nearly one-fourth got Rice or Dal items at the AWCs.

Table 4.6: Type of ration/groceries received and frequency of getting them during 2020-21 by place of residence, Sagar

Type of grocery received and frequency of getting	Rural	Urban	Total
Rice			
Never received	64.3	77.8	65.8
Weekly once	25.0	2.0	27.0
Once in 2 months	1.0	0.0	1.0
Semolina			
Never received	100.0	100.0	100.0
Groundnut			
Never received	100.0	100.0	100.0
Green gram/Dal			
Never received	72.9	77.8	73.4
Weekly once	27.1	22.2	26.6
Red gram			
Never received	100.0	100.0	100.0
Jaggery			
Never received	98.6	100.0	98.7
Weekly once	1.4	0.0	1.3
Sugar			
Never received	100.0	100.0	100.0
Oil			
Never received	100.0	100.0	100.0
Egg			
Never received	100.0	100.0	100.0
Milk powder			
Never received	100.0	100.0	100.0
Salt			
Never received	100.0	100.0	100.0
Masala Powder			
Never received	100.0	100.0	100.0
Khichadi			
Never received	43.2	22.2	40.3
Weekly once	45.7	66.7	48.1
Twice in a month	7.1	11.1	7.6
Once in a month	4.0	0.0	4.0
Balahar			
Never received	61.3	22.2	43.5
Weekly once	30.0	66.7	34.2
Twice in a month	5.7	11.1	6.3
Once in a month	3.0	0.0	3.0
Haluva			
Never received	87.2	55.6	83.5
Weekly once	10.0	33.3	12.7
Twice in a month	1.4	11.1	2.5
Once in a month	1.4	0.0	1.3
No. of Children	70	9	79

These are the children who were enrolled in the AWC during pandemic period. It was revealed that most of the items in the form of grocery were never received by children during pandemic period (Table 4.6).

Around 60 percent of the children were provided with pre-mixed Khichdi and Balahar (66 percent in urban areas). Most of the children were distributed this pre-mixed supplementary meal weekly.

It was found that compared to pre-pandemic period, ready to cook pre-mixed meals such as Khichdi, Balahar and Haluwa were mainly distributed instead of cooked food during pandemic period by the AWCs.

4.7 Role of AWCs in organizing Immunization camps and management of AEFI

Apart from supplementary nutrition, AWCs also play a major role in organizing immunization camps for children as well as facilitating the children and parents for getting treatment for any side effects experienced after the immunization. Hence, all the mothers were asked whether their child has got different types of vaccinations and if yes, the place of vaccination. Responses of the mothers are given in Table 4.7.

Table 4.7: Proportion of children vaccinated and place of vaccination by place of residence, Sagar

Type of vaccine and place of vaccination	Rural	Urban	Total
BCG			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	42.1	27.3	40.2
Public hospital	52.0	72.7	54.6
Private hospital/clinic/nursing home	5.3	0.0	4.6
Home	0.7	0.0	0.6
Polio-0			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	44.7	27.3	42.5
Public hospital	50.7	72.7	53.4
Private hospital/clinic/nursing home	3.9	0.0	3.4
Home	0.7	0.0	0.6
Hepatitis B0			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	50.0	27.3	47.1
Public hospital	48.7	72.7	51.7
Private hospital/clinic/nursing home	1.3	0.0	1.1
Pentavalent 1			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6

Type of vaccine and place of vaccination	Rural	Urban	Total
Pentavalent 2			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Pentavalent 3			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Measles & Rubella			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Rotavirus 1			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Rotavirus 2			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Rotavirus 3			
Not vaccinated	0.0	0.0	0.0
Anganawadi/ICDS centre	90.8	90.9	90.8
Public hospital	8.6	9.1	8.6
Private hospital/clinic/nursing home	0.7	0.0	0.6
Vitamin A - First dose			
Not vaccinated	5.9	0.0	5.2
Anganawadi/ICDS centre	87.5	90.9	87.9
Public hospital	6.6	9.1	6.9
DPT 1 Booster			
Not vaccinated	73.0	45.5	69.5
Anganawadi/ICDS centre	19.1	45.5	22.4
Public hospital	7.9	9.1	8.0
Vitamin A - last dose			
Not vaccinated /Not eligible	94.1	95.5	94.3
Anganawadi/ICDS centre	4.6	4.5	4.6
Public hospital	1.3	0.0	1.1
No. of Children	152	22	174

Here place of vaccination is broadly categorized as AWC, public hospital and private hospital. Mostly the children had birth doses of vaccination at the place of delivery within 48 hours of birth. It was found that children got BCG vaccination from public hospital (55 percent) followed by private hospital (4.6 percent). This phenomenon is observed both in

urban and rural areas. Similarly, other 2 birth doses, Polio-0 and Hepatitis B0 are also availed at the public hospitals (53 percent and 52 percent respectively) and from Private hospitals (3 and 1 percent respectively). Proportion of children getting BCG, Polio-0 and Hepatitis-0 is 40, 43 and 47 percent respectively. Further, in rural area 40-50 percent children got their birth doses (BCG, Polio and Hepatitis) at AWCs compared to 27 percent in urban areas. This clearly indicates that mostly the birth doses of vaccination are availed at the place of birth in urban areas and ICDS centres are crucial in providing birth vaccination in rural areas. For subsequent doses like Pentavalent-1, Pentavalent-2 and Pentavalent-3, 91 percent children each approached AWCs respectively in both rural and urban areas. Further, 88 percent of the children (Urban 91 percent) got vaccinated for Vitamin-A first dose at AWCs and only 4.5 percent for Vitamin-A last dose at AWC. Around 90 percent of the children were not yet eligible for last dose of Vitamin 'A'. This clearly indicates that subsequent doses of vaccinations are mostly availed at AWCs both in rural and urban areas.

The above analysis clearly indicates that both in rural and urban areas usually birth doses are availed at the place of birth whereas subsequent doses of child immunization are availed at AWCs if the child is enrolled to AWC.

Except for 9 percent mothers in rural areas and 27 percent in urban areas, all received help from AWCs in vaccination of children. It was reported that AWW or AWH called to mother on the day of vaccination and provided information about vaccination.

Table 4.8: Type of help received from the AWW while getting vaccination and during side effects after vaccination to the child, by place of residence, Sagar

Particulars	Rural	Urban	Total
Getting help from AWW for vaccination			
Not received any help while getting vaccination	8.6	27.3	10.9
Received help while getting vaccination	91.4	77.3	89.1
Provided information*	19.7	27.3	23.2
Called on the day of vaccination*	71.1	50.0	76.8
Other	0.7	0.0	0.6
Experience of side effects after the vaccination (AEFI)			
Child experienced side effects after the vaccination (fever and cold)	21.1	18.2	20.7
Child not experienced side effects after the vaccination	78.9	81.8	79.3
Total number of children	152	22	174
Getting help from AWW for side effects after the vaccination			
AWW did not help for side effects	12.5	0.0	11.1
AWW helped for the side effects	87.5	100.0	88.9
Number of children experienced side effects after the vaccination	30	6	36

* Multiple Response, total exceeds 100 percent

Out of 174 children, 21 percent (18 percent in urban and 21 percent in rural areas) experienced side effects like fever and cold after the vaccination. Among these 36 children, for 89 percent, AWW helped them for treatment of side effects, mainly by providing the medication. Hence usually AWW helps mothers while getting immunization for their children and to get treatment during side effects after the immunization.

4.8 Health checkups and referral services by AWCs

Further all the AWCs are supposed to organize the health checkups at least once in a month and conduct anthropometric measurements of children like weight, height and mid arm circumference. All the mothers were asked about the details of health checkup done and type of anthropometric measurements done at AWCs during 2019-20 and 2020-21 to assess the difference between pre-pandemic and pandemic period. As observed in Table 4.9, almost half the children (49 percent) got their health checkup done during pre-pandemic period which is decreased to less than one-third (31 percent) during pandemic period. There was larger decline in proportion of children getting health check-up done in rural areas 20 percentage points compared to 8 percentage point decrease in urban areas. Overall, 7 percent children had not gone for check-up in the pre-pandemic period and comparatively very less (0.6 percent) children had not gone for health check-up in pandemic.

Among children who got their health check-up done, during pandemic average 4 health check-ups were done (Urban 4.6 check-up) compared to much higher 6.6 health check-up done (Rural – 6.7 check-up and Urban – 6.2 check-up) during pre-pandemic period.

Regarding number of health checkups done, 25 percent of the mothers expressed that there were 12 health checkups in the year 2019-20 whereas only 11 percent of mothers expressed that their children got health checkup 12 times in a year during pandemic period. Usually, 1-4 health checkups are done in the year 2020-21. This clearly indicated the frequency of doing health checkups decreased during the pandemic period.

Regarding anthropometric measurements done, 29 percent of mothers (27 percent in rural and 42 percent in urban) mentioned that their children used to get weight measured once in a month. During the year 2020-21, only 17 percent of the mothers expressed that these weight of the child was measured at AWC once in a month. For height measurement at AWC, 27 percent mothers affirmed height measurement during pre-pandemic compared to 11 percent during pandemic. Nearly two-thirds of mothers expressed that height and

weight of children were measured sometimes during 2019-20. In comparison to this, around 80 percent mothers reported that height and weight measurement was done occasionally during pandemic period. Measurement of mid-arm circumference was done every month for 13 percent of children during pre-pandemic and for only 4 percent children during pandemic. Nearly half of the mothers reported that mid-arm circumference measurement was not taken during both the periods. This indicates that frequency of health checkup and anthropometric measurements done got affected during the pandemic period at AWCs.

Table 4.9: Health check-up done, Number of health checkup, type of Anthropometric measurements done at AWC during Pre pandemic and Pandemic, by place of residence, Sagar

Particulars	Pre Pandemic (2019-20)			Pandemic (2020-21)		
	Rural	Urban	Total	Rural	Urban	Total
Health check-up done						
Health check-up done	48.0	54.5	48.9	28.3	45.5	30.5
Health check-up not done	45.4	36.4	44.3	71.7	50.0	69.0
Had not gone to AWC	6.6	9.1	6.9	0.0	4.5	0.6
Number of Health checkups done						
1	8.2	8.3	8.2	9.3	20.0	11.3
2	12.3	0.0	10.6	20.9	20.0	20.8
3	13.7	33.3	16.5	25.6	10.0	22.6
4	12.3	8.3	11.8	16.3	10.0	15.1
5	2.7	8.3	3.5	2.3	10.0	3.8
6	1.4	0.0	1.2	0.0	0.0	0.0
7	1.4	0.0	1.2	4.7	0.0	3.8
8	4.1	8.3	4.7	0.0	0.0	0.0
10	1.4	0.0	1.2	0.0	0.0	0.0
12	23.3	33.3	24.7	9.3	20.0	11.3
Don't know	19.2	0.0	16.5	11.6	10.0	11.3
Number of children attended AWC	73	12	85	43	10	53
Weight measured						
Monthly	27.4	41.7	29.4	16.3	20.0	17.0
Sometime	64.4	58.3	63.5	83.7	70.0	81.1
Never	8.2	0.0	7.1	0.0	10.0	1.9
Height measured						
Monthly	27.4	25.0	27.1	11.6	10.0	11.3
Sometime	60.3	66.7	61.2	81.4	70.0	79.2
Never	12.3	8.3	11.8	7.0	20.0	9.4
Mid Arm Cir. measured						
Monthly	12.3	16.7	12.9	2.3	10.0	3.8
Sometime	34.2	58.3	37.6	53.5	20.0	47.2
Never	53.4	25.0	49.4	44.2	70.0	49.1
Number of children received health check-up	73	12	85	43	10	53

Further, all the children are supposed to receive IFA syrup, deworming tablets and help through referring to the health facilities during health problems from AWCs. As observed in Table 4.10, out of 174 children covered, 49 percent of the children ever got IFA syrup from AWC and among those who received IFA syrup from AWC, 42 percent mentioned it as once in a month.

Table 4.10: Proportion of children received IFA syrup and deworming tablets from AWW and type of help received from AWW during health problems, Sagar			
Particulars	Rural	Urban	Total
Ever got IFA syrup from AWC	48.0	54.5	48.9
Ever got Deworming tablets from AWC	61.2	68.2	62.1
Proportion Suffered from any health problems during 2020-21	3.9	4.5	4.0
Number of children	152	22	174
Frequency of IFA syrup received			
Once in a month	45.2	25.0	42.4
Once in 2 months	8.2	8.3	8.2
Once in 3 months	8.2	0.0	7.1
Once in 4 months	11.0	0.0	9.4
Once in 6 months	8.2	33.3	11.8
Once in 8 months	13.7	8.3	12.9
Once in 9 months	5.5	25.0	8.2
Number of children received IFA from AWC	73	12	85
Frequency of Deworming tablets received			
Once in 1 month	25.8	13.3	24.1
Once in 2 months	5.4	6.7	5.6
Once in 3 months	4.3	6.7	4.6
Once in 4 months	11.8	0.0	10.2
Once in 6 months	35.5	33.3	35.2
Once in 8 months	12.9	20.0	13.9
Once in 9 months	4.3	20.0	6.5
Number of children received deworming tablets	93	15	108
Proportion for whom AWW helped by referring to health facilities	16.7	0.0	14.3
Number of children suffered from health problems	6	1	7

About 24 percent of mothers (25 percent in rural and 13 percent in urban areas) mentioned that they have received deworming tablets for their children from the AWCs once a month. Nearly one third mothers informed that AWCs provided deworming tablets twice a years or 6 months apart as precautionary measure. Deworming tablets locally known as '*Chiuna ki Dawa*' are kept at AWC or with ASHA. Mothers informed that AWW and ASHA provided deworming tablets as and when required. Some of the mothers also reported that due to very high sugar consumption in the households, children take high sugar food such as candy, sweets and tea and tend to get affected by disease caused by worm – usually itching

and therefore, deworming tablets are required more frequently. This clearly indicates that as AWCs play a crucial role of distribution of IFA syrup and deworming tablets for children.

It was found that 4 percent of the children (all from rural areas) suffered from one or the other health problems during 2020-21 like, fever, vomiting, diarrhea, cough and cold. Only 14 percent of the children who suffered health problems during 2020-21 got help from AWW as she referred to the higher health facilities mostly to an ANM. None of the children have received any incentive after the referral.

4.9 Attitude of mothers towards AWW and AWC

All the mothers were asked about their overall perspectives towards behavior of AWW with the child and their opinion on whether ICDS benefitted their children and whether they are satisfied with the overall services provided by the AWC.

As seen in Table 4.11, 84 percent of the mothers opined that behavior of AWW with their child is friendly. It is slightly higher in rural areas (84 percent) compared to urban areas (82percent). Thirteen percent of mothers expressed that behavior of AWW is not known or they don't want to comment on that. Three-fourths of mothers strongly agreed that ICDS benefitted their children. However, 11 and 14 percent of mothers expressed that they are undecided and disagree that ICDS has benefited their children.

Table 4.11: Overall attitude of mothers towards AWW and AWC by place of residence, Sagar			
Particulars	Rural	Urban	Total
Behaviour of the AWW with the child			
Friendly	84.2	81.8	83.9
Not friendly	2.0	4.5	2.3
Not known	7.2	0.0	6.3
No comments	6.6	13.6	7.5
ICDS benefitted the child			
Strongly disagree	0.7	0.0	0.6
Disagree	14.5	9.1	13.8
Undecided	9.2	22.7	10.9
Agree	75.7	68.2	74.7
Satisfaction to the overall services provided by the AWC			
Very dissatisfied	0.7	0.0	0.6
Dissatisfied	15.1	9.1	14.4
Neutral	20.4	36.4	22.4
Satisfied	63.8	54.5	62.6
Number of children	152	22	174

Overall, 63 percent of the mothers were found to be 'satisfied' with the overall services provided by AWCs. Perspectives of mothers are that ICDS benefitted their children and they are found to be satisfied with the services provided by AWCs is more among rural mothers compared to urban mothers.

5. Summary and Conclusion

Recent surveys such as NFHS and CNNS have also revealed that India is facing a malnutrition challenge among children including anaemia. It has sparked off debate on the probable reasons for prevalence of disturbing levels of malnutrition among children in spite of the programmes being implemented to improve the nutrition levels.

To deal with the problem of malnutrition among children, adolescents and pregnant and lactating mothers, India has launched a unique programme called Integrated Child Development Services (ICDS) programme as early as in 1975 with an aim to curb malnutrition levels. It has brought a transition in the health and nutrition levels of young children during its journey over the past four decades of its existence.

ICDS services comprise of supplementary nutrition, immunisation, health check-up, referral services to children below six years of age and expectant and nursing mothers, non-formal pre-school education to children of the age group 3-6 years and health and nutrition education to women in the age group 15-45 years, the programme includes the coverage of the nutrition and health care needs of the most vulnerable young children in particular in India. Anganwadi Centres form the platform of service delivery and one AWC per 1000 population is the basic norm in a rural/urban project and one for population of 700 in a tribal project.

The National Nutrition Strategy with the Vision - "Kuposhan Mukh Bharat" is committed to ensuring that every child, adolescent girl and woman attains optimal nutritional status- especially those from the most vulnerable communities. Programmes are being continuously placed for improving the nutrition levels of children, the latest being the POSHAN Abhiyaan launched in March 2017. It aims at improving the nutritional status of children from 0-6 years, Adolescent Girls, Pregnant Women and Lactating Mothers. Initially it was rolled out in 315 districts in 36 States/UTs. By 2021, the programme has been implemented in almost all the districts.

Covid-19 pandemic has affected every sphere of life and so is with the ICDS services. Preschool activities were suspended across all Anganwadis following the Government order. As an alternative strategy, digitization of IEC was initiated and in many states digital educational materials was envisaged to maintain continuity of services. Also Government support for AWWs and helpers have been made as they played a good role in sustaining the primary functions through alternative strategies and also mitigating the Covid-19 crisis in rural communities.

This study has attempted to assess the performance of ICDS scheme through Anganawadi centres and its impact on health and nutrition of young children.

Provider's Perspective

- A significantly large number of AWWs have received trainings such as pre-school education, growth monitoring and early childhood education.
- Nearly 80 percent of the AWWs provide services such as supplementary nutrition to children, pregnant and lactating mothers, growth monitoring of children, Vitamin A supplementation, Preschool education and health checkup for pregnant women on the designated day of visit of ANM at the AWCs.
- In 2019-20 AWCs provided pre-decided menu which include *Roti-Sabji, Dal-Rice, Kheer-Puri etc.* as supplementary nutrition to children attending AWCs. In addition pre-mix *Khichadi, Balahar and Haluva* are also distributed as take home ration. During 2020-21, mostly pre-mixed THR was distributed instead of cooked food at AWCs.
- The comparison of distribution of cooked food and THR during pre-pandemic and pandemic periods indicates that while there has been sustained effort for distribution of pre-cooked meals and THR during pre-pandemic period, supplementary nutrition programme was somewhat affected during Covid pandemic. Madhya Pradesh has still not adopted grocery distribution and designed its own SNP menu as per the state needs.
- Provisioning of supplementary nutrition in the form of cooked food is done through SHGs which is not very streamlined. The THR distribution also not very regular. There have been some bottlenecks in terms of budget provisioning, quality and quantity of

supplied food, regularity in supply of meals and THR which prominently raised by AWWs.

- AWCs lack basic infrastructure, necessary equipments and financial support to carry-out day-to-day activities. AWWs are required to purchase printed reporting registers and necessary utensils for AWCs at their own expanses.
- Pandemic also affected growth monitoring activities, immunization and other ancillary services provided by the AWCs. Almost all AWWs informed that they were engaged in Covid related services such as contact tracing, distribution of medicines, community awareness for covid appropriate health behaviour, distribution of THR, door-to-door monitoring of covid patients etc.
- AWWs have expressed that there has been frequent coordination ASHAs and ANMs and expressed satisfaction with their coordination with ANMs and ASHAs.
- Majority AWWs perceived that in Madhya Pradesh, menu of ICDS nutrition programme should be improved by inclusion of fruits, fresh vegetables ad items of liking of children. AWWs also of the opinion that effective monitoring of cooked food and supply of THR is required in order to improve the nutritional levels of the children.

Beneficiary Perspective

- Most of the mothers were aware of supplementary nutrition provided at AWCs, however, they lack basic information and awareness about role and services of AWCs in the community.
- Nearly 40 percent of the mothers did not send their children to AWCs during pre-pandemic period and during pandemic even more mothers did not allow children to attend the AWCs. Main reason cited were children being too young or fear of covid.
- Though mothers affirmed that supplementary food provided at the AWC is beneficial to their children but they were concerned about quantity and quality of food they have received. Some of the mothers also suggested changes in the menu.
- Majority mothers reported that THR and cooked food were provided only once a week, irrespective of pre-pandemic or pandemic period.

- Both in rural and urban areas, usually birth doses are availed at the place of birth whereas subsequent doses of child immunization are availed at AWCs.
- Usually AWW helps mothers while getting immunization for their children and to get treatment during side effects after the immunization.
- The frequency of doing health checkups which was once in a month earlier decreased to once in 2-4 months during the pandemic period. Hence frequency of health checkup and doing anthropometric measurements got affected during the pandemic period.
- As such AWCs do not play major role in the distribution of IFA syrup, however they play a significant role in the distribution of deworming tablets to the young children.
- Perspectives of mothers are that ICDS benefitted their children and they are found to be satisfied with the services provided by AWCs, in both rural and urban areas.

Conclusion

Beneficiary recognize the importance of AWC services, however, regular monitoring and addition and changes are required in supplementary nutrition services. Beneficiary also stressed on improving quality and quantity of food. Most of the AWCs were functioning in sub-optimal settings, lack necessary infrastructure, and irregularity in provisioning of services. AWWs have limited trainings, lack motivation and necessary support from the government. AWWs opined that provisioning of supplementary nutrition to children and mothers should be given to AWCs due to irregular supply and quality issues about ready to serve food and THR provided by SHGs.

Study has clearly highlighted the scenario of ICDS services which has many areas of accolade and possibilities of further improvement. AWCs are the only functional institution at grassroots level across the socio-cultural settings which caters to vulnerable population groups including children under age 6, pregnant mothers and adolescents. Especially nutritional needs and health care need can be easily addressed through ICDS AWCs.

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Photographs of Visited AWCs in Sagar District during 09.02.2022 to 10.03.2022







