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COVID-19 and Maternal and Child Health Services in Rajasthan : Challenges and Strategic Policy Adaptations

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Abstract

COVID-19 pandemic has posed serious challenges to the health and nutrition of women and children globally. It has also widened existing health and socioeconomic inequalities affecting women and children, the effects of which will have long term consequences. The functioning of maternal and child health services aimed at enhancing the health and nutritional status of women and children have been severely impacted, further pushing them into the trap of under-nutrition and food insecurity. This paper attempts to analyze the effect of the pandemic on maternal and child health services in Rajasthan. It argues that since women and children continue to bear a disproportionate burden of the pandemic-accelerated health and nutrition crisis; and with regular services particularly health, nutrition, and social protection schemes being adversely impacted, the pandemic is likely to add challenges in achieving long-term health and nutritional targets for women and children. However, despite the unprecedented challenges posed it is imperative to maintain, restore and rebuild essential health services, and strengthen primary health care while mitigating the impact of the pandemic on the most vulnerable groups i.e., women and children.

Keywords: COVID-19, maternal, child health, nutrition, food insecurity, mitigating

Introduction

COVID-19 pandemic is putting the health and well-being of all children and women at risk. It is exacerbating existing inequities, with reported disruptions in essential health interventions disproportionately impacting the most vulnerable women and children. Maintaining essential health services for women, children, and adolescents while mitigating the pandemic's impact represents an unprecedented challenge.

The disruption of health services coverage will have an adverse impact on achieving or maintaining the 2030 Agenda for Sustainable Development Goal (SDG) 3 targets which focuses

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on health (Ensure Healthy Lives and Promote Well-being for All at All Ages). The specific targets include – reducing maternal, neonatal, and under-5 mortality and guaranteeing universal access to sexual and reproductive health services. The pandemic and its response make it challenging to reach or sustain these targets. It has caused significant loss of lives, disturbed livelihoods and undermined well-being throughout the world (WHO, 2020). Global response to the COVID-19 pandemic has exposed inherent weaknesses in preparedness and response. The health systems have been grossly overwhelmed (Kshetrapal and Bhatia, 2020). The need for quality and operational health system is continuous, and not time dependent or of short duration. Any disruption in access to quality service delivery is not only detrimental to human health but can also be responsible for loss of life and substantial economic losses.

The COVID-19 pandemic has shifted priorities of the health systems and it finds itself dealing, with restricted capacity to provide services it has been hitherto extending to communities. Logistics and supplies are disrupted especially of material and equipment adversely affecting the services.

The increasing demand on health care and social workers, is not only overstretching health and social support systems, but also limiting provision and access to other/ essential healthcare services. Shut down in travel and trade, have impacted supply chains, and access to drugs, products, and protective equipment. Health and social support systems, both in developed and developing nations have been affected and overwhelmed.

The initial phases of the pandemic in India led to a significant disruption in provision of healthcare and other essential services. Several studies have reported the challenges faced by field level workers (FLWs) in delivering healthcare and nutrition support services to women and children. A recent study highlighted that with the onset of COVID-19, FLWs' revised/additional responsibilities included screening for COVID-19, contact tracing, communication of preventative measures to local communities, adapting nutrition-related programmes, and doorstep delivery of maternal and child health services. Even prior to the pandemic, FLWs reported feeling overburdened. The study found that work increased by an additional three hours every day for 83 per cent of FLWs (CPR, 2021). Another study undertaken in five states, including Rajasthan in May-June 2020, indicated the suspension of outreach health and nutrition care services for women and children. FLWs were engaged in COVID-19 related responsibilities, compromising their ability to provide care to women and children. At the facility level, while services were available, fear of COVID-19, kept communities from accessing Government facilities (DS, 2020).

This paper is based on a study carried out by the authors in January to March 2021 to analyze the health and nutritional challenges faced by women and children in the context of the COVID-19 pandemic in Rajasthan (DS/IDS, 2021). It argues that as COVID-19 related risks are severe for

children and women it is imperative to maintain essential services to mitigate the impact of the pandemic on the most vulnerable groups i.e., women and children.

The paper is divided into three sections. Following the introduction, Section-I presents the health and nutritional status of women and children in India and Rajasthan. Section-II presents the key findings emerging from the study. Section-III puts forth evidence-based strategic recommendations to mitigate the effect of Covid-19 on maternal and child health services in the State of Rajasthan. It also provides actionable recommendations for timely systemic preparedness to face the next wave of Covid-19.

Section-I: Health and Nutrition Status of Women and Children in India and Rajasthan

Rajasthan, the largest state in India, in-terms of geographic area, bears a significant burden of anemia and malnutrition. As per NFHS- 5 some change is discernable. There has been an improvement in adult sex ratio which has increased from 973 (NFHS-4) to 1009 (NFHS-5). But the sex ratio of children at birth continues to be a critical concern.

Nutrition is one of the major determinants of health as malnourishment is high in India despite various government interventions (Ghai et al. 2016-17). According to NFHS -5, 54.4 % women in the 15-49 years of age are anemic. There has been an overall increase in the prevalence of anemia in women since NFHS -4 when it was 46.8%, making it an area of concern. While there has been a decline in IMR and U5MR, anemia among children in the 6-59 months age continues to be high at 71.5.1%.

Table 1.1: Indicators of health and nutrition among women and children, NFHS-5 (2020- 2021)

Indicator	NFHS-5 (2020-2021)	
	India	Rajasthan
All women age 15-49 years who are anemic (%)	57	54.7
Children age 6-59 months who are anemic%	67.1	71.5
Non-breastfeeding children age 6-23 months receiving an adequate diet (%)	12.7	7.5
Children under 5 years who are stunted (height-for-age) (%)	35.5	31.8
Children under 5 years who are wasted (weight-for-height) (%)	19.3	16.8

A wide spectrum of national programmes and state sponsored schemes have focussed on improving nutrition outcomes, addressing both the immediate and the underlying determinants of under nutrition through nutrition specific and nutrition sensitive interventions. These programs seek to provide financial and nutrition supplementation, in addition to information to key beneficiary groups. They also seek to mobilize communities to change behaviors and act on issues of nutrition.

The next section presents the analysis emerging from the larger study to highlight the effect of the COVID-19 pandemic on maternal and child health services in Rajasthan.

Section-II: Effect of COVID-19 on Maternal and Child Health

The study was undertaken in four districts of Rajasthan namely Baran, Jhunjhunu, Jodhpur and Udaipur. The districts' selection was purposeful based on nutritional indicators, population groups, geography, topography, and agroecology. Two blocks were selected for data collection in each of the districts – one district headquarters (HQ) block and one far from the district headquarters. The study used mixed methods of data collection:

- Primary data was collected through qualitative interactions with – lactating women, heads of households, community members, front line workers, and officials of the Health and Women and Child development departments.

- Secondary data on key indicators was gathered from State Government data systems such as the Pregnancy Child tracking (PCT) and Health Services Management System, Management Information systems (MIS) and Monthly Progress reports (MPR) disaggregated at the district level. Data was also gathered from registers at the Anganwari centres (AWCs).

The secondary data was triangulated with primary insights to enable a comprehensive understanding of the study objectives.

A total of 64 interviews were conducted with lactating mothers, 32 with heads of the household, 40 with FLWs and 18 with health department and WCD personnel at district and block level and a total of 8 mini-group discussions with community members.

The focus was on understanding the effect of the COVID-19 pandemic on the functioning of health and nutrition programs for women and children and assessing the enhanced risk factors at a household level, owing to COVID-19. The study analyzed how COVID-19 impacted both the delivery and access to Government programs and food security, nutrition, and health behaviors.

The central as well as State governments issued several notifications and orders on the provision of health and nutrition services during and post the lockdown phase. In Rajasthan, on March 27, 2020, all social mobilization for immunization was cancelled. It was recommended that institutions where deliveries are undertaken and that are cold chain points – newborns be given birth doses of immunization before discharge. On April 23, 2020, in line with the MoHFW guidelines for provision of essential services during the COVID-19 outbreak, the state identified reproductive, maternal, newborn, child and adolescent health services as essential. The order issued to districts, directed them to ensure availability of these services 24x7 at health facilities (https://prsindia.org/covid-19/notifications).

(i) Effect on Maternal Health services

The study reveals that COVID-19 pandemic adversely impacted all maternal health services including Maternal Child Health and Nutrition (MCHN) day, Provision of Iron-Folic Acid (IFA) and Calcium supplementation to pregnant women, counselling for pregnant and lactating women, Institutional deliveries and postnatal and home-based newborn care.

Qualitative interactions with service providers and officials, in the four study districts indicate that provision of outreach health services was affected between April – June 2020 as per government orders. At the facility level, while services were available, people feared accessing the health facilities. Post the lockdown, however, MCHN days were increased in number from 2 to 3 days or even 4 days in a month.

Across districts MCHN day was suspended between March/April and June/July 2020. The periods of suspension, as reported by service providers, varied across districts (March – May 2020 in Baran; April – July in Jhunjhunu and April – May 2020 in Jodhpur and Udaipur). The data collected by Government of Rajasthan, Directorate of Medical Health and Family Welfare, also shows a decline in conduct of MCHN days/ meetings, against those planned, from April – June 2020, at the state level and across the study districts.

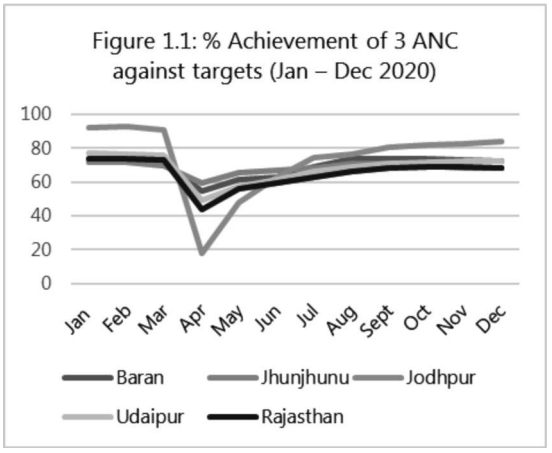
With the suspension of outreach services, FLWs were expected to follow up with beneficiaries at the village level to ensure access to services – at the doorstep wherever feasible or direct them to the nearest Government health facility. FLWs, however, were also allocated various COVID-19 related tasks and responsibilities, limiting their time availability for routine roles.

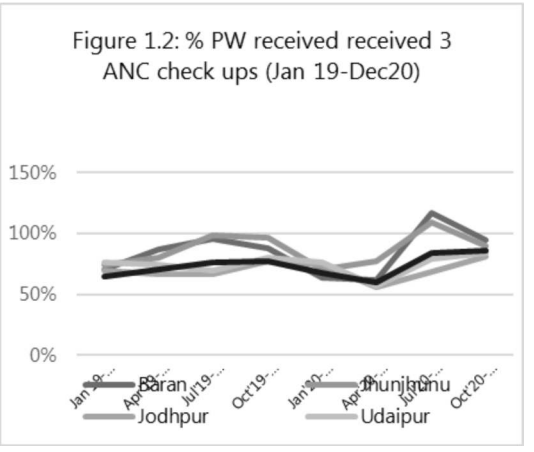
In the absence of the MCHN day, in Baran, Jodhpur and Udaipur, FLWs followed up with pregnant women during home visits for COVID-19 survey, or over the phone. In case of any discomfort, they asked women to go to the health facility. No physical ANC examinations or weight monitoring was done.

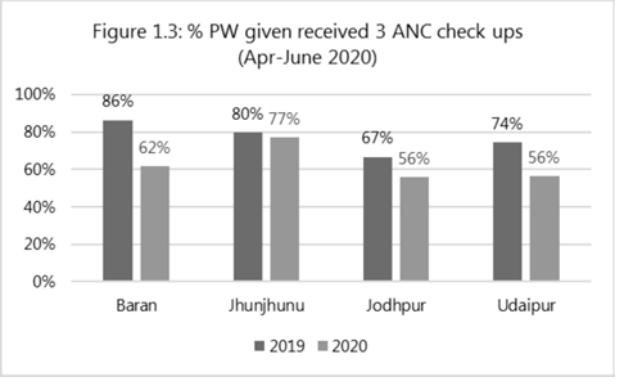
In Jhunjhunu, however, ANC examinations, were conducted on the 9th of each month by doctors at the PHCs, under the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA). The PMSMA, launched by the Ministry of Health and Family Welfare (MoHFW), Government of India aims to provide assured, comprehensive, and quality ANC, free of cost to all pregnant women on the 9th of every month. Women reported accessing ANC at the local Government hospital, prior to the COVID-19 lockdown as well. They preferred this since they were examined by a doctor (than an ANM on MCHN day).

Across districts, women who had private transportation or could afford to hire transport services, accessed ANC at Government or private hospitals. Others relied on the home visits and phone-based support provided by the FLWs; and accessed ANC once the MCHN day and outreach services were resumed.

Secondary data analysis indicates that while pregnant women were consistently registered, provision of ANC was affected between March – June 2020. With the suspension of MCHN days, a sharp decline in provision of 3 ANC, against targets was noted in April 2020; with the sharpest decline being in Jodhpur (from 92% in January to 18% in April 2020). A revival in provision of ANC was seen from May-July 2020 (Figure 2.2). Similarly, pregnant women having received 3 ANCs, declined in April – June 2020, across the study districts and in the state. A sharp rise was seen in the next quarter (July – Sept 2020). In Baran and Jhunjhunu, 117% and 109% pregnant women (against those registered for ANC in the quarter) received 3 ANC checks, respectively, indicative of catch-up rounds of ANC that were undertaken to cover up for the services not provided in the April-June quarter.







Data source: Government of Rajasthan, Directorate of Medical Health and Family Welfare, accessed on 25/01/2021.

It was reported that FLWs provided IFA, Calcium, and zinc supplementation to women (and IFA to adolescents) throughout the lockdown, during home visits. Though supplies were a concern, in districts such as Jhunjhunu, FLWs took additional stocks from the PHC and also accessed

stocks available in schools, which were closed due to the pandemic. Across districts FLWs provided smaller quantities to each beneficiary, till supplies arrived, to ensure that no one was deprived of the supplements. Women across districts also corroborated to receiving IFA and Calcium supplementation from the FLWs.

The ASHAs and AWWs during home visits provided Counselling/ advice on aspects of pregnancy, breastfeeding, nutrition and diet, childcare, consumption of IFA and calcium tablets. They also counselled telephonically. Across districts, however, while some women reported to have received advice/ counselling, others did not. Women also reported varied issues on which advice and information was provided. This is indicative of inconsistent provision of counselling/ advice and information.

During the initial phase of the pandemic, between April – June 2020, FLWs were saddled with additional responsibilities and faced challenges in accessing women and households (community members were apprehensive of the FLWs and in several cases, did not allow them to enter their homes). To that extent, they were unable to effectively engage with women. However, on resumption of the MCHN days and with lesser apprehension in the community, they reported being able to interact with women and provide needed advice.

Institutional delivery services were available at Government health facilities, throughout the year, irrespective of the pandemic. At all facilities, safety protocols were established, to ensure uninterrupted provision of delivery services.

However, there was a fear among women and families to access the Government facilities. There was a perception that all COVID-19 cases were being treated at these facilities, making them unsafe. There was also a perception that quality of care was poor, given that health personnel were overburdened by COVID-19 care. Those who could afford to, chose to access private care for deliveries. A few instances of home deliveries with assistance from private doctors and *Dai's* were reported in Baran and Udaipur.

"My friend who went to the Government hospital for delivery was put alongside other COVID-19 patients. I felt very uncomfortable, so decided to go to a private hospital. I spoke to the AWW, she supported my decision." Lactating woman, Udaipur.

FLWs corroborated the fear of accessing Government facilities among communities. Some also said that the quality-of-service provision at the facilities had suffered due to the COVID-19 case load.

"Ambulance services were hampered, and patients were not being checked properly by the doctors. Hence several women preferred private facilities." ASHA, Udaipur.

"Due to several COVID-19 cases, Government hospitals were unable to ensure proper care for institutional deliveries and hence many women went to private hospitals." ASHA, Baran

FLWs also reported that those who could not afford private care or had fewer apprehensions about COVID-19, continued to access Government hospitals for deliveries. Some said that an increased number of deliveries took place at PHCs as women and families preferred smaller and less crowded hospitals. ANMs undertook significant effort to ensure that there are no home deliveries.

The secondary data indicates a nearly similar proportion of institutional deliveries, in public institutions across the four districts in 2020, as compared to 2019. However, in 2020, a marginal decline in deliveries is noted between April -June, with a sharp increase in the next quarter.

ASHAs reported that they provided postnatal (PNC) and home-based newborn care (HBNC) services throughout the year, even during the April-June 2020 period, when other services were suspended. They also provided the services during home visits undertaken for COVID-19 surveys, to the extent persons were comfortable. In several cases, where families were not comfortable with them coming into the homes or meeting the lactating women, advice was provided to the older women in the household.

Overall, the state and the districts performed nearly the same in 2020, as compared to 2019, indicative of catch-up rounds of service provision in the months following the lockdown. Jhunjhunu and Baran appear to have performed better on maternal health indicators, as compared to Udaipur, Jodhpur, and the state average. In Jhunjhunu, performance on key maternal health indicators improved in 2020, as compared to 2019. The poor provision of IFA tablets is a cause of concern in Baran. In Jodhpur, except for the provision of IFA tablets, most other indicators fare below the state average.

(ii) Child Health Services

There were several months of disruption in immunization services. They were not available between March to May 2020, following which, they were resumed. In Baran, FLWs reported an increased frequency of MCHN day once resumed to catch up on loss of service provision. In other districts, catch up rounds of immunization were done during MCHN day. This was corroborated by lactating women, who reported immunization services to have resumed from June-July 2020.

"Workers compiled a list of pregnant women and carried out more campaigns for ANC check-ups. Efforts were made to make up for the loss of service delivery during lockdown." - BCMO, Baran.

In the four districts, it was reported that Vitamin A supplementation was provided twice a year. Interactions with FLWs indicate that in about half the AWCs, the supplementation was provided

to more than 80% eligible children at two time points in 2020. In others, it was provided only once in 2020, owing to the pandemic.

However, quarterly data available from the Directorate of Medical Health and Family Welfare indicates, a decline in provision of Vitamin A in the state between April-June 2020, with a steep rise in following months far exceeding the provision in the previous year (2019).

Where growth monitoring and identification of malnourished children[2] is concerned, during the initial phase of the lockdown (April – June 2020), no growth monitoring or weighing of children was feasible, AWCs were not functional and MCHN days were not conducted. The FLWs observed and enquired about children health during COVID-19 survey visits to households. However, they reported that observing children was also not always easy. Sometimes parents did not let them come inside the house or near the child, owing to the fear of pandemic. In such instances, they only spoke to the mother and family and enquired about the wellbeing of the child and asked if the child looked weak or unhealthy. They also highlighted that they were given no special orders, or guidelines, or safety protective equipment – sanitizers, gloves, masks etc. to undertake growth monitoring at the household level. Thus, identification of malnourished children was done based on visual observation and enquiry, to the extent feasible.

CDPOs felt that fewer malnourished children were identified more so during the April – June 2020 period. Only those who looked visibly malnourished or unwell, were referred.

Even though the weight of children was not measured, some of the AWWs reported consistently filling up the registers with the previous weight of the child. Similarly, few AWWs reported filling up data on SAM, MAM children identified, based on previous data, or any known case of a malnourished child. On resumption of MCHN days, growth monitoring was also resumed. AWWs reported actively following up to ensure that children came to the AWCs for growth monitoring.

Most services, thus, were disrupted in the first phase of the pandemic between April – June 2020. Officials, service providers and women alike, reported services to have resumed between July-August 2020, across locations and districts.

(iii) Effect of the COVID-19 on Supplementary Nutrition services

The focus of the supplementary nutrition services during the pandemic was to ensure adequate nutrition support and that no one was left hungry. Pregnant and lactating women were provided uninterrupted Take Home Rations (THR) through 2020. THR was also given to children, in the 3-6 years age group, who received Hot Cooked Meals (HCM) at the AWCs. However, with the closure of the AWCs, preschool learning, provision of hot meals and community events such as

[2]While AWWs are expected to conduct regular growth monitoring for children at the AWCs or during MHCN days; all three FLWs (ASHA, ANM and AWW) are expected to use available opportunities – home visits, facility consultations etc. to identify malnourished children.

Godhbharai and *Annaprashan* were affected. These services were yet to be completely resumed at the time of the study (Jan – March 21).

Efforts were made, at the state and district levels, and at the level of the AWWs to ensure access to rations to all eligible beneficiaries. AWWs delivered THR at the doorstep of the beneficiaries, between April –June 2020, following which they were called in smaller batches to collect ration. In some households' members felt that, when they were provided HCM at the AWCs, they were assured of at-least one wholesome meal. In the case of THR, it was consumed by all at home.

According to some of the CDPOs, during March-April 2020, to ensure food supplies, *Matr Samitis* were told to buy and distribute the dry rations; they were informed that the payment would be reimbursed. However, there was a delay in supplies from the food and civil supplies department, so in April, rations that were stored in schools were distributed. However, when the supply was restored, it was not consistent. The FLWs were directed to take ration from the panchayats which had received supply. They tried to ensure that beneficiaries in every area got supply of rations and no one was left out.

Women and community members across districts reported to have received THR at the AWCs, nearly each month during 2020. However, a significant variation in the quantity of THR was reported across respondents and districts since people received food grains from multiple sources – THR, PDS, panchayats etc. Hence, they could not recall accurately. Hence, a lack of clarity on quantity received from different sources was noted.

An Order dated May 12, 2020, issued by the Department of Women and Child Development, Government of Rajasthan, directed officials and service providers to ensure provision of wheat and chana dal to beneficiaries at the AWCs, for 25 days in a month (300 days in a year) instead of the repackaged dry mix rations (that were prepared by SHGs).

The change in the provision of THR was preferred by nearly all women and communities (across districts), compared to the dry mix provided earlier. The food grains could be prepared as desired and shared and eaten with all family members. Several women reported not liking the taste of the earlier dry mix provided and perceived it to be stale; it was often fed to the cattle.

"Everybody shares and eats the food grains that are provided. This is more helpful to us." -Head of the household, Udaipur

AWWs reported an increased number of beneficiaries who were now coming to collect the ration. In two districts, Lady Supervisors highlighted that the earlier dry mix provided to pregnant women was more nutritious, since supplements were added to it. However, it was pointed out that most women did not like the taste of the mix, and often threw it away. Therefore, the provision of food grains had higher acceptance and consumption.

iv) Access to PMMVY scheme

The study also analysed women's access to the Pradhan Mantri Matri Vandana Yojana (PMMVY) scheme[3]. The study revealed that nearly all the women respondents were aware of PMMVY and had registered for it. While cash transfers were received, delays were reported to be routine. One woman who had recently delivered a child in Jhunjhunu, said that she was yet to receive any instalment for PMMVY, even though the documents were submitted nearly 8 months ago.

"It has been more than 8 months since I submitted my documents. I have even had my child, but yet to get even the first PMMVY payment. Once I get it, I will decide what I can do with it." - Woman, Jhunjhunu.

While the PMMVY cash transfers are expected to provide partial compensation for wage loss and incentivize improved health and nutrition behaviours among women, no clear purpose or use of the PMMVY money was reported by women. Some women said that the payments were delayed, so by the time they received the same, the pregnancy period was over and that they had already spent money. Majority said that the money is kept in the bank account and used as and when needed – on food or other expenses.

Among those who had received payments, majority reported to have received the first instalment INR 1000. Some also reported to have received INR 2000[4].

No major disruptions in the PMMVY payments were reported as a result of COVID-19. CDPOs across districts mentioned that in the initial few weeks of the lockdown, there were delays in documentation; and given lack of transportation, documents from beneficiaries were not able to reach district offices. Besides, at district offices, staff were not available to complete the data formalities and further process payments. However, after the first month, routine processes were functional. Hence, access to PMMVY was not significantly affected during the lockdown, systemic delays in receipt of payments by beneficiaries were a challenge.

(v) Impact of COVID-19 at the Household Level

The key impact of COVID -19 was on livelihood and income. This was more so for daily wage earners and those in informal occupations. Households dependent on agriculture were affected severely. The salaried persons did not receive their salaries or did not receive the full payments. Also, many who had migrated to other locations for work had returned[5].

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[3] Pradhan Mantri Matru Vandana Yojana, previously known as the Indira Gandhi Matritva Sahyog Yojana, is a maternity benefit program run by the Government of India. It was originally launched in 2010 and renamed in 2017. The scheme is implemented by the Ministry of Women and Child Development

[4] Some respondents reported that they had got INR 2000 in total thus far. This could be indicative of lack of awareness on the instalments, or on the amount received in the bank.

[5] The media, had highlighted the return of the migrant labor and the challenges they faced. A survey by the Azim Premji University indicated these aspects in Rajasthan See https://cse.azimpremjiuniversity.edu.in/wp-content/uploads/2020/06/State-Pamphlet-Rajasthan-English-final.pdf

The distress was nearly the same across the four districts. The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was also not operational due to the pandemic. In other words, the community members had no alternate means of earning wages or income due to the lockdown. It was reported that household expenses had increased owing to greater number of family members being at home during the lock down period. Given the cash distress many had to resort to using their savings, borrowing from relatives and friends, or purchasing on credit to make ends meet. There was a concern that people would eventually stop lending and that money borrowed would have to be returned. The need for employment was highlighted.

Several other adverse effects were also reported. These included:

- Restrictions on mobility in the initial phases of the lockdown were challenging for communities and service providers. The lack of public transport meant that they could not step out even if needed or in an emergency. The cost of transportation was high due to limited transport facilities. The transportation challenge affected access to health services, more so for pregnant women. For frontline workers, the lack of public transportation was a challenge. In June 2020, when they had to access field locations for service provision, they found it difficult. An increased police presence also restricted mobility as the police only allowed access to health facilities in an emergency.

- In the absence of schools, education and engagement of children was affected. With schools shut, they were unable to interact with their friends. The online classes were not accessible to many students, and even those who could access them did not seem keen on online classes. Parents feared that the children would forget what was taught to them earlier. Communities shared a common concern over the digital divide, both for children and others. They reported that those with access to mobile phones and the internet were at an advantage during the pandemic.

- The presence of children and non-working adults within the home added to women's burden. They had to manage the children, cook, and provide for all household members. Some women respondents reported feeling depressed/sad due to loss of household income or loss of family members' jobs.

- Fruits and vegetables had become expensive during and post lockdown. There was also a short supply of vegetables and fruits as most of the shops were either closed or the back-end supply was affected. However, pregnant, and lactating women were assured these foods in many households. Efforts were also made to ensure food for children. Many took loans, borrowed food, or bought on credit, accessed PDS to ensure adequate food at home. The young pregnant and lactating mothers in several households had limited agency and decision-making roles within households. Most were unaware of the households' challenges in ensuring their needs.

Despite increasing expenses, most households, tried to ensure that pregnant and lactating women and children were given adequate food and nutrition. However, it was reported that women from poorer households skipped meals or reduced the frequency of eating.

(vi) Challenges in Service Delivery

In addition to their routine roles and responsibilities, FLWs were engaged in community-based response to COVID-19. They faced several challenges in undertaking both roles. There was resistance and hostility from the community, lack of safety and protective equipment, lack of adequate transportation services, they had increased workload and role management; had to balance management of household responsibilities and faced fear and stress.

Supervisors and officials also faced challenges in coordination and management of field based and other activities. There was a heavy reliance and sudden adaptation to use phone/ technology for remote monitoring and updates.

Section-III: Conclusion and Recommendations

The health and nutrition systems in the state adapted to enable service provision during the pandemic. Communities and households too coped with the challenges that emerged due to COVID-19. They tried to ensure that the nutritional needs, more so of pregnant and lactating women and children, were met. The government's support, both state level and local level, support from NGOs, and leveraging the social capital enabled the adaptation.

It is evident that while communities do leverage social capital or other support, there is a significant reliance on government support. In pandemic times, such as the COVID-19, while the Government systems are invariably geared to address the immediate challenges, there is a tradeoff. It is likely that the attention shifts from the long-term program activities. With the pandemic continuing to spread in waves, the effort should be to strengthen Government systems, that are robust and functional during critical times, while not losing the long-term program focus. It is also important to build community resilience, so that they can manage without significant disruptions. This is especially important for the poorer households, who are more dependent on government support.

Strengthening Maternal and Child Health Services

In view of the current pandemic situation and anticipation of a third wave, the government needs to explore alternatives for in-person outreach health services like ANC, growth monitoring of children, Home Based New-born Care (HBNC), identification of SAM children as resistance and hostility towards the FLWs from the families was reported. Use of mHealth, tele counselling and telemedicine can prove to be useful in such a scenario. Telemedicine approach like E-*Sanjeevani* under *Aayushman Bharat* can be expanded, information and capacity building of the beneficiaries and FLWs should be increased to utilise these services. These services may especially prove to be useful in the case of High Risk Pregnant (HRP) women. In case a need

arises in future to suspend MHCN days, ANC services under PMSMA can be expanded to more private hospitals.

However, while technology is important, the context also needs to be considered. Simple phone calls can be made instead of video calls. Medical consultations for minor health issues which do not require physical examination can also be done through phone calls. During pandemics or lockdowns when people are usually in a dilemma whether to visit a hospital due to restricted mobility or fear of contracting infections, such consultations can prove beneficial and help patients make an informed decision. This would also reduce chances of self-medication or resorting to treatment by unqualified practitioners which could be extremely unsafe. Mental health counseling is yet another service which can easily be delivered through a simple phone call and can be very effective as well.

Use of Mother Mid Upper Arm Circumference (MUAC) approach to identify Severely Acute Malnutrition in Children

The Family MUAC approach, also known as Mother MUAC, is an established strategy to increase screening coverage and promote early detection of wasting and/or deterioration. Training of caregivers can be organised to assess MUAC and check for oedema at home. In the context of COVID-19, caregivers should also conduct these assessments during home visits by ASHAs, thereby eliminating the need for FLWs to touch a child.

Meeting Health and Nutritional needs of Mothers and Children during distress through Conditional Cash Transfer (CCT) schemes

Despite ration supply and support provided by the Government and civil society organizations, many households still felt the need for cash for household, transportation, and medical expenses. Since, outreach services like MCHN days were suspended in such scenarios, those who could afford, accessed government or private hospital services, but there was an increased transport cost.

There was also a fear among pregnant women to get deliveries at a government facility due to spread of COVID-19. Hence, those who could afford preferred private health facilities. In such scenario Conditional cash transfer (CCT) schemes are an option for protecting maternal health from distress. Maternity benefits of at least Rs. 6,000 per child are a legal right of all Indian women under the National Food Security Act, 2013. The Government of India's PMMVY, which provides financial relief to first-time pregnant women, is also a step in this direction.

However, this research shows that delay in paperwork and lack of an automated system has created challenges for beneficiaries in receiving the benefits of such schemes, especially when they need it the most. In case of delayed payments, pregnant and nursing women might not be able to buy nutritious foods during the crucial 1,000 days of a child's life. Schemes like the *Jan Dhan Yojna,* and PMMVY could be made paperless and seamless to ensure easy access. It is also recommended that pending dues be cleared. Cash made available through the schemes could

be used by households for nutritional and health needs of pregnant women, lactating mothers and children or any other related expenses.

Addressing Challenges Faced by Front Line Workers

Support and guidance to FLWs is required to ensure continuum of care. Tele-counseling, during health emergencies can be facilitated by training FLWs and giving them hand holding support. This will equip them to continue giving maternal health services through tele counselling even during the pandemic. Adequate supply of protective equipment and materials to FLWs must be ensured. In addition, ongoing information, and guidance to FLWs on Covid-19, its symptoms and management; and ensuring safety protocols during care is necessary. There is also a need to support and provide guidance to FLWs to ensure effective role and workload management. Timely release of payments and incentives for FLWs must be ensured.

AWW workers also face the challenge of arranging transportation to pick up ration from distribution centers. Hence, transport facilities can be arranged for picking up supplies from storage/warehouses. Distribution of ration from Anganwadi to Anganwadi can be organized till there is restricted movement during lockdowns. Pre-packed ration can be given to the Anganwadi worker, instead of them packaging the ration.

Ensuring Food Availability

To ensure food availability during the pandemic, communities accessed Government support programs, food support provided by panchayats, NGOs, and influential persons from the community. Some started kitchen gardens: others cultivated vegetables in their farmlands. Such initiatives help tide over the crises. Local food security hence needs to be enabled through encouraging kitchen gardens, cultivation of vegetables, and foods for cooking. The feasibility of encouraging home-based ownership of livestock or poultry for meat should also be considered. Increased support and guidance to AWWs to establish and manage *Poshan Vatikas* should be provided.

Using Village Health, Sanitation and Nutrition committees (VHSNC) to Mitigate the effect of COVID-19

VHSNCs are village level committees constituted by the members from the village community itself. The Committee has the mandate to create health, hygiene and nutrition awareness in the community, identify community health needs, draw village health plans and work towards strengthening health and nutrition services in the village. However, VHSNCs in most parts of the country including Rajasthan have mostly remained inactive for various reasons. Provision of regular orientation and handholding support to VHSNCs can be instrumental in promoting community participation around health issues. The second wave of COVID-19 has focused on the need to decentralize health care planning and engaging communities in these processes. The challenges specific to COVID-19 at the grassroots such as lack of awareness around the pandemic, myths and misconceptions that prevail in the communities, people's reluctance to

get tested for COVID due to fear of being isolated in wards away from their families, the extreme vaccine hesitancy etc., call for solutions which are locally conceptualized, context specific and which align with people's beliefs and perceptions around health and health care. These solutions can thus only be evolved at the local levels and by the local communities. VHSNCs if active can play a crucial role in addressing many of these challenges and ensuring effective management of pandemic through local response.

Conclusion

The provision and utilization of maternal and child healthcare services were impacted extensively during both the first and second wave of the pandemic, pushing back the progress made on crucial health and nutrition indicators. Maternal and child health services delivered through outreach mechanisms are crucial to ensure continuum of care to help prevent maternal and child morbidities and mortalities. COVID-19 has highlighted that the effect of the pandemic and its prevalence was not even across the states, or districts within the states, or even villages within the districts. It is therefore pertinent that essential services are not suspended universally unless there is no other way out, as this can severely hinder access and have drastic consequences in both the short and long term. Equally critical is the need to restore and rebuild essential health services and strengthen the primary health care strategy while mitigating the impact of the pandemic on the most vulnerable groups of women and children.

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