ORIGINAL ARTICLE

Assessment of Preparedness Activities and Beneficiary Satisfaction of Dastak Abhiyan

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ABSTRACT

Background and Objectives: The Dastak Abhiyan is an Initiative of Government of Madhya Pradesh which was pilot tested in November 2016 and showed promising outcomes. This campaign deals with active case finding house to house for Diarrhea, Pneumonia, Severe Acute Malnutrition, Severe Anemia and their treatment and referral by the Dastak Team comprising of Auxiliary Nurse Midwife, Accredited Social Health Activist, and Anganwadi Worker. In this study, we attempted to assess the availability of the drugs and necessary commodities, before the commencement of Abhiyan to frontline health workers and beneficiaries' response towards this initiative in 4 districts of Madhya Pradesh viz. Jhabua, Sheopur, Raisen, and Bhopal.

Methods: The study used modified WHO's 30 cluster sampling technique and 7 households in each village were selected for assessment of beneficiary satisfaction and officials at District, Block and Auxiliary Nurse Midwives were interviewed to assess the preparedness of the campaign.

Results: The Preparedness activities at the state and district level were in full swing and with immense enthusiasm but that zeal was found to be missing in the frontline health workers. In our study, we also found out few gaps such as FLWs missed on carrying out few activities Blood Test, MUAC measurement, failure to demonstrate ORS and Handwashing as per the beneficiaries' responses. The beneficiaries were satisfied at this initiative of Government of Madhya Pradesh and their responses were welcoming towards the Dastak Abhiyan.

Interpretation & conclusions: Our study found the need to strengthen training modules, communication gaps in conveying the training schedules, to customize micro plan in consultation with the ANM of that village. Our study also highlighted the need for supportive supervision, implementation of post-training questionnaires for FLWs to assess the knowledge gained by them during the training session. On our recommendation, the officials at state took corrective measure for WHO color scales having indistinct color shades as complained by the FLWs.

Keywords: Preparedness Assessment, Beneficiary Satisfaction, Dastak Abhiyan

INTRODUCTION

Madhya Pradesh (Central Province) is a state situated in the geographic heart of the country with a population of under-five children (at 13% of the total population) around 1,02,07,969.

WHO says that the leading cause of death in under-five children can be attributed to preterm birth complications, pneumonia, birth asphyxia, diarrhea, and malaria. About 45% of all child deaths are linked to malnutrition [1].

As per NFHS 4 (2015-2016), the factsheet for the state of Madhya Pradesh says that the under-five mortality rate is 65 per 1000 live births. 9.2% children are suffering from Severe Acute Malnutrition (SAM) in the State, the prevalence of Diarrhea is 9.5%, 68.5% of under-five children are Anemic; the prevalence of Acute Respiratory Illness is 2.1% [2].

One of the study, says that malnutrition affects child development through various mediators such as child morbidity, motor development, and growth [3]. Another study says that malnutrition in children makes them more susceptible to infectious diseases and also hinders their cognitive development [4]. This implies that improvement in nutritional status of children will lead to healthier and more productive future generation and in turn be an asset for national economic development [5]. Nutritional status of children and adequate growth of children can be assured by implementing infant and young child feeding practices ranging from exclusive breastfeeding to age-appropriate complementary feeding, especially

diet diversity and its promotion at community level [6].

Also, it is seen that Vitamin A supplementation is a factor that plays role in reduction in childhood mortality, especially in mortality due to diarrhea and measles in children age 6 months to 5 years [7].

Thus the state took the initiative to address the root cause of poor health indicators in under-five children of Madhya Pradesh, which was backed by evidence.

Dastak Abhiyan is pioneer program of the state of Madhya Pradesh to give "DASTAK" (its literal translation being knocking at the doors of the houses with children of age less than 5 years) hence the name of the Abhiyan- "Dastak Abhiyan", which was launched to improve the health status and for reduction in mortality of Under 5 children of the state.

The uniqueness of Dastak Abhiyan is that it involves active screening of under-five children with the help of integrated human resource of Department of Health and ICDS.

The program was pilot tested between 16th to 30th November 2016 in 168 blocks of the State that had poor full immunization coverage. As the pilot testing turned out to be a huge success for the state, Dastak Abhiyan was upscaled in the entire state. It is a one-month program beginning from 15 June 2017 and is going to be carried out bi-annually in the month of June (childhood Diarrhea, SAM & Malaria predominant season) and in December (Childhood Pneumonia predominant season) every year.

The core interventions [8] of the Abhiyan are 1) Active case finding of SAM and referral of medically complicated cases to NRC's; 2) Screening of childhood anemia and referral of severe anemia cases; 3) Vitamin A supplementation to all children 9month-59month; 4) Early identification and management of childhood Pneumonia in the community and need-based referral to the facility; 5) Raising community awareness on prevention of childhood Diarrhoea; 6) Extension of IYCF messages under MAA program to the community doorstep; 7) Follow-up of SNCU and NRC discharged children; 8) Identification of children with visible congenital defects; 9) Testing of iodine adequacy in household salt in NIDDCP 14 Endemic districts; and 10) Identification and basic treatment of all sick U5 children.

A study by D.L. Pelletier reports that 3/4th of the mortality due to malnutrition is attributed to mild and moderate malnutrition as opposed to severe malnutrition. This calls for a need for equal focus on mild and moderate malnutrition as that on severe malnutrition [9].

These interventions are to be carried out by home-to-home visits with the help of Dastak Team comprising of Auxiliary Nurse Midwife (ANM) or Multi-purpose Health Worker (MPW), Accredited Social Health Activist (ASHA) and Anganwadi worker (AWW).

Three reiterative training was given to the health workers to improve the core skills of the field level service providers to carry out the interventions efficiently in the month of April, May and June 2017. Effective training videos were developed as a training pedagogy/ tool.

METHODS

Sample and study setting: Sample population for beneficiary satisfaction assessment is the households with Under-5 children in 30 villages of 4 districts of Madhya Pradesh viz. Jhabua, Sheopur, Raisen, and Bhopal.

Study and Research Design: The study design used is a mixed method. The quantitative data were analyzed to measure the extent of coverage of the program. Modified WHO's 30 cluster sampling technique [10] was used as it was practically not possible to do a purely Simple Random selection of villages. However, Random selection of villages was done based on their micro plan in consultation with the block team in the above-mentioned four districts and 7 households in each of the 30 villages interviewed with the help of a structured questionnaire. Purposive sampling was used to select 7 households within those 30 villages visited.

A structured questionnaire, which was used to interview the District Program Manager to evaluate the preparedness activities at the district level, had questions regarding training and training pedagogies, receipt of Dastak Kit Bags, drugs, commodities, and regarding IEC. The questionnaire for Block Program Managers or Block Medical Officers of the blocks visited, included parameters regarding training content, strategies for referral and follow-up, micro plan and strategies for reporting and monitoring. 37 Auxiliary Nurse Midwives were interviewed regarding training attendance, training quality, community awareness and involvement of local community, their strategy for Hard-to-reach areas and also assessed their post-training knowledge during their training/meeting at the block as well as during the visit at the village.

The questionnaire designed to assess the beneficiary satisfaction had questions about the visit at their home, regarding activities performed and behavior of Dastak team during the visit.

The sample size for Beneficiary Satisfaction Assessment was 213 responses.

All the subjects who gave verbal consent were included in the study.

RESULTS

Preparedness Assessment

Enthusiasm was seen amongst the stakeholders of the Dastak Abhiyan when it came to assessing the preparedness activities.

Preparedness at state level:

The Preparedness activities that were performed at the State level for Dastak Abhiyan were the preparation of various guidelines for training, logistics, preparation and distribution of micro plan. State also observed the development of IEC materials. In the current phase of the program, Cue Cards were prepared and were to be distributed to FLWs which had a pictorial representation of the messages to be imparted by the health workers to the beneficiaries. In order to provide the health workers with all the commodities on time, the logistic gaps were addressed. In addition, a software was designed for Real-Time monitoring of the activities to immediately address the gaps and take corrective actions.

Preparedness at district level:

As part of assessment of Preparedness activities at the District level, District Program Managers of all the four districts were interviewed and it was seen that all the three training that was to be given to health workers i.e. first training between 3rd to 10th April, second refresher training between 15th to 30th May and the third refresher training between 1st to 10th June (just before the commencement of the Abhiyan) were imparted as per the schedule.

Training material that was prepared for the purpose such as training videos were displayed during the training and also hands-on training was given to ANMs for the use of WHO color scale for correct identification of Hemoglobin which is suggestive of decent quality of training.

During the pilot testing it was observed that the ANM did not carry all the commodities (MUAC or WHO Color scale or any other) needed to perform all the activities. Thus, the concept of Dastak Kit Bag came into effect. The Kit had different compartments for carrying drugs, Cue cards, and other commodities so that all the activities can be performed swiftly. When asked regarding the receipt of the Dastak Kitbag, two districts of the four did not receive the kit bag on time, which was sponsored by UNICEF. However, they all received the drugs and commodities on time. Hence, the non-receipt of the kit bag was not an obstacle in the working of the Abhiyan. Health-workers on field received the name based micro plan for the villages before 15th June 2017.

All the four districts used media in one or the other form to raise community awareness regarding the services offered in the Abhiyan. Non- budgetary strategies such as Mikings and writing slogans at various places in the village, which are found to be effective in the places where mass media cannot make an impact, were also used.

Preparedness at block level:

Training for ANMs was held at Community Health Centre of the Blocks. ASHAs were oriented regarding the activities to be performed by them during the Abhiyan in the monthly meetings. The health workers were sensitized regarding the importance of this campaign during the training sessions.

While speaking to Block Program Managers/ Block Medical Officers regarding the training activities, the responses were that they had oriented ANMs for Identification of Severe Acute Malnourished (SAM) children with the help of MUAC tapes which measures Mid Upper Arm Circumference (MUAC), identification of Anemic children with the help of WHO color scale for rapid diagnosis of hemoglobin at the door-step. They were also oriented for identification of pneumonia and its management in the community, training was also given for creating awareness regarding IYCF as very low percentage of early initiation of breastfeeding (34.5%) and exclusive breastfeeding (58.2%) [2] was seen in the state. Also, training for identification of congenital defect was imparted.

These sessions were supposed to improve the core skills of FLWs. All the blocks had their strategies for controlling diarrheal cases, strategies for positively identified children and their follow-up after discharge. All the Blocks made it sure that the health workers received their micro plan well on time. Block level officers also had their strategies prepared for the areas where no ANMs were appointed. They appointed Multipurpose Health-worker (MPW) as an alternate for ANM in Dastak Team and in few areas, they deployed the ANM from the region where there were two ANMs.

Special teams were also made to cover the regions with a migrant population such as children of brick kiln laborers. These strategies made sure that no child of the state was missed out from the active screening during the Dastak Abhiyan.

Preparedness at village level:

Training Attendance:

While assessing the Preparedness at village level with the help of questionnaire designed to interview ANMs, it was very pleasing to know that all the ANMs knew about the Dastak Abhiyan and its core activities. However, there was much less percentage of ANMs who attended the first training held for the Abhiyan between 3rd to 10th April 2017.

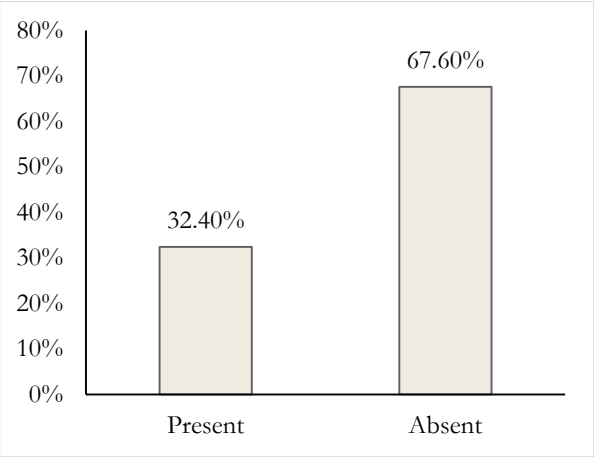

Figure 1: Percentage of attendance during first training

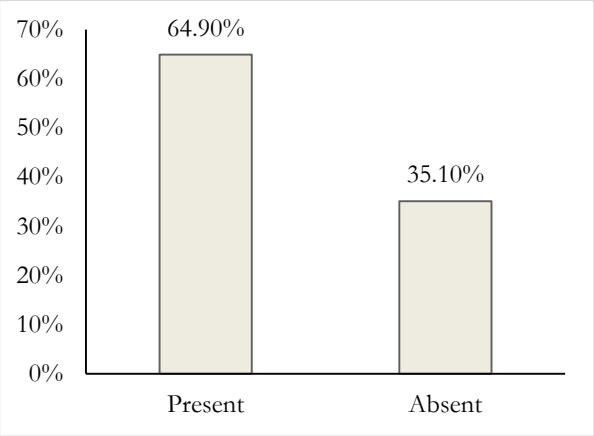

Figure 2: Percentage of attendance during second training

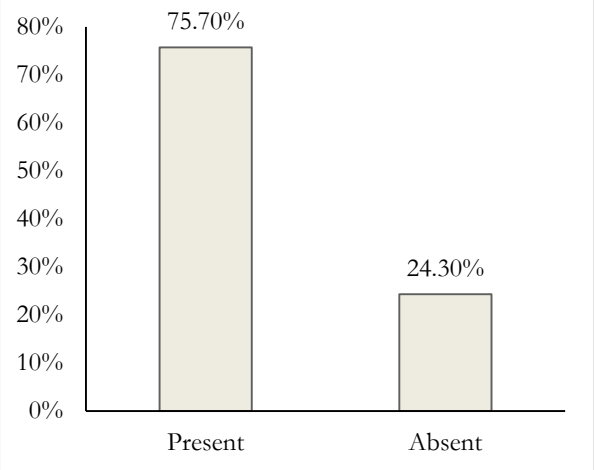

Figure 3: Percentage of attendance during third training

However, the percentage of absence was reduced during the second refresher training held between 15th to 30th May 2017. The percentage of absence further decreased in the third refresher training held between 1st to 10th June 2017. Overall, there was a very small percentage of ANMs approx.11% who did not attend any of the three training but on the brighter side majority, i.e. 89% of them attended at least one of the three reiterative training organized.

Training Quality: As per the responses received from the ANMs, around 92% of them found the training was beneficial for them. Only 8% of them did not feel so as they believed these were their routine task. Also, around 65% of the ANMs confirmed that they had received the Dastak Kit Bag before the Abhiyan began and only 35% of the ANMs did not receive it. However, they all had received the all the drugs and commodities beforehand. The government of Madhya Pradesh adopted an innovative approach of using Cue Cards that had a pictorial representation of the program activities to amplify the effectiveness of the behavioral change messages. However, this unique idea could not be implemented as desired as it was not delivered in two of the four districts. All the ANMs confirmed the receipt of the name-based micro plan from the blocks before 15th June 2017.

Community Awareness and Involvement of Local Representatives: When questioned about whether Dastak Team had created awareness in the community about the Abhiyan, more than half of them (54%) had taken efforts to do so. The various methods used by those ANMs who created awareness were the home to home visits by ASHA, they discussed with the women about the Abhiyan by conducting meetings and also slogans were written in various places in the village with the help of ASHAs. 46% health workers took the efforts to take the involvement of the local representatives/ "Jan Pratinidhis" to enhance the effectiveness of the program.

Strategy for Hard-to-Reach areas: When asked about their plans to approach hard-to-reach areas, 89% of ANMs did not have such areas under them and the rest 11% had planned to make their visits in such areas before the onset of monsoon.

Post Training Knowledge Assessment: While assessing the knowledge of the ANM by asking them about the approximate time that will be needed for visit in a single household, it came out to be that 57% of them knew the exact duration.

Beneficiary Satisfaction Assessment:

Interview of nearly 213 beneficiaries from 30 villages was taken to receive their feedback towards the initiative of the government of Madhya Pradesh.

In spite of the efforts taken at the district level and by the health workers to create awareness regarding the Abhiyan amongst the villagers, none of them had prior information about screening activities under

Dastak campaign by the health workers at their home.

On questioning, regarding the visit by the Dastak team (ANM, ASHA, and Anganwadi Worker) it came to notice that in the majority of the households the visits were made as desired which would mark the success of the Abhiyan. However, few of the FLWs performed the activities at places other than home and few of our beneficiaries responded that neither such visits were made by FLWs at their home nor they were asked to come at a common place.

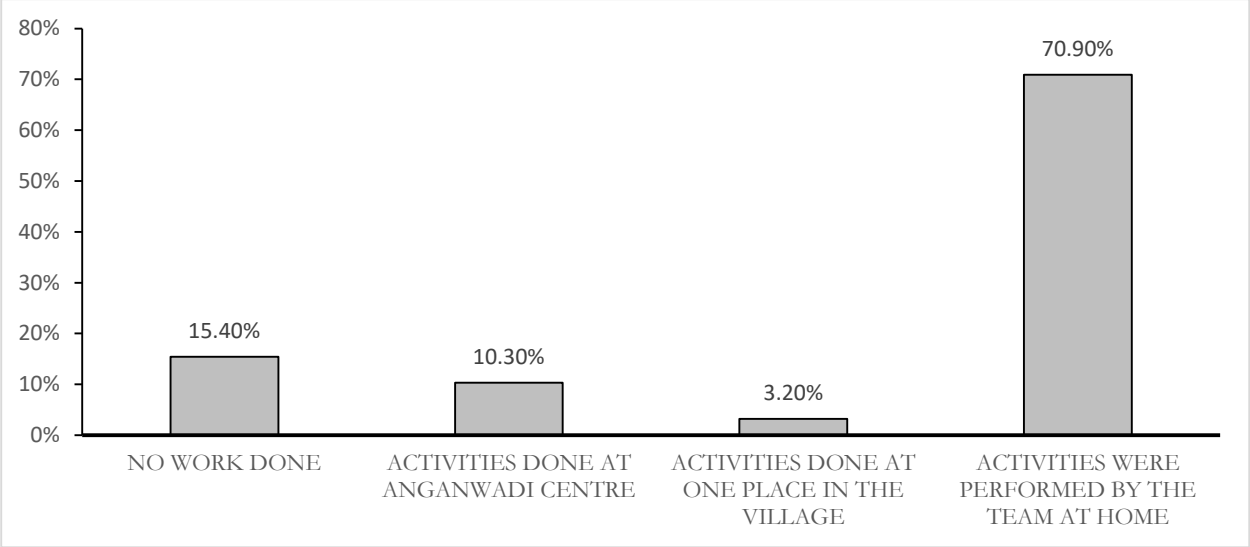

Figure 4: Locations where the activities were performed

The beneficiaries were interviewed by home-to-home visits in absence of health workers to obtain unadulterated and authentic feedback.

The findings elaborated further are calculated from the 71% of households where activities were performed by the Dastak Team at the door-step of the beneficiaries excluding the 29% of houses where either no work was done during the visit or activities were carried out at different places such as in Anganwadi Centre and gathering villagers at one place.

When the beneficiaries were asked about the activities that were performed by the health workers during the visit at their home 61% of them confirmed the measurement of Mid Upper Arm Circumference by the Anganwadi Worker. 48% confirmed that blood test was done. A huge percentage of beneficiaries i.e. 89% agreed upon the Vitamin A supplementation given to the child and in 79% of the houses, the information about the benefits of Iron Folic Acid supplementation was communicated.

However, all the ANMs informed the parents about the health status of their children after performing the activities. They also mobilized the parents of Severe Acute Malnourished children to visit Nutrition Rehabilitation Centre (NRC). They also guided the parents of children positively screened for moderate malnourishment regarding the attention that needs to be paid on the food habits and hygiene maintenance.

A major gap that became evident was that 97% of the frontline health workers did not demonstrate the preparation of ORS solution in each house. Regarding demonstration of hand washing, 99% of the health workers did not demonstrate six steps of hand washing.

Moreover, when interviewed about how often did they get their child weighed, only 41% of the villagers took their children of less than five years every month to Anganwadi center to monitor the growth. 45% of them made an occasional visit to the Anganwadi center, approx. 11% of them did not get their children weighed and 3% of them responded that they made their visit to Anganwadi center when an Anganwadi worker comes to notify regarding the visit.

When beneficiaries were asked regarding the behavior of the team during the visit 99% of them responded that it was good. They all were very familiar with the ANM, ASHA and Anganwadi worker, which shows the faith and rapport that has been built by the health workers with the villagers.

Only 6% of the beneficiaries reported having been given sufficient time that was around 25 minutes in each house.

When asked if they received satisfactory answers to their questions or doubts from the frontline health workers, 95% of them had no such questions or

doubts and the rest 5% who had concerns obtained satisfactory responses.

In addition, when the villagers were asked if they want such visits to happen routinely, 99% of them agreed and were in favor of such a campaign.

DISCUSSION AND RECOMMENDATIONS

Overall, the program was implemented to extend preventive and promotive services at the doorstep of the people of Madhya Pradesh with the aim of reducing the under-five mortality and improve the poor health indicators whose major contributor is underlying malnutrition. This pioneer program possibly seems to mark a great success with such welcoming responses from the beneficiaries.

While assessing the preparedness activities at various levels, it has been seen that at State Level, District Level and at Block Level the preparedness was found to be satisfactory and well on time except for the delay in distribution of Dastak Kit Bag (sponsored by UNICEF) and Cue Cards. This can be taken care of during the next phase of the Dastak Abhiyan.

However, the Preparedness at Village Level did not seem to be that promising. Majority of the ANM did not attend the 1st training which was held in April. When probing into depth to know the reason of absence, many of them said they were unaware of the training being held which signifies the communication gap between the officials at the block and the frontline health workers that need to be strengthened. The information about the training schedule should be circulated through the messages and reminder messages should also be sent. The messages should also be communicated through the Supervisors during their visit to villages. Hence, the network barrier will not limit the spread of information to FLWs.

There were 4 ANMs out of the 37 interviewed who did not attend any of the three training organized. They should be asked to justify their failure to attend the training as it would have an indirect impact on the outcome of the Abhiyan.

Also, only 54% of FLWs could involve local representatives and create community awareness. The rest of them who failed to do so reasoned that they were engaged with Mission Indradhanush that was in action between 7th to 14th June 2017. So, the FLWs should be given considerable time for their preparatory activities before the inception of the Abhiyan. Moreover, few of the FLWs reported that the local representatives were either out of station or living in different villages as the reason for not being able to involve them in the Abhiyan.

As we found in our study that in approx. 10% of the cases the activities were performed at Anganwadi Centre. The probable reason of performing the activities at one place in the village or at Anganwadi center could be that the houses were spread apart in few tribal areas which possibly made it difficult for the health workers to achieve their target of screening the children within the given time period as reaching far situated hamlets in a single village would take up majority of the time. However, they put their efforts of performing all the activities.

Speaking about the training quality except for a few ANM all found it to be beneficial. Contrary to this finding, there were only 48% of the households where blood test was performed, in 61% MUAC was measured. This may result in failure to identify Severe Acute Malnourished as well as Anemic children. In one of the village visited where no MUAC was measured it came to notice that Anganwadi worker was not cooperative and did not participate in the Abhiyan. However, ANMs during their block level training was oriented for the use of MUAC tape. This gap observed may be due to lack of skills of frontline health workers in the estimation of Hemoglobin and use of MUAC. This calls the need to improvise the training pedagogies further with more emphasis on imparting hands-on-training.

During the interview, some of the ANMs admitted that they were facing the problem in hemoglobin estimation with the use of WHO color scale as the color shades was not noticeably distinct and did not match the color of the blood. This concern has been discussed between the State officials' and the manufacturers the moment it came to their notice and corrective actions were initiated in this regard.

One more feedback received from the ANM was that they have been given set targets for each day to render their services in the village, but difficulties are faced to achieve them in areas with distantly situated hamlets where most of the time is spent in commuting. One such example is Village Dungra in District Jhabua. Hence, one size fits all approach should not be used and the micro plan for villages with hard-to-reach areas should consider customization.

It was observed that the activities were sincerely carried out in tribal districts and it failed to be so in high priority district and the capital district. Also, it was observed that in 15% of the houses no activities were carried out. This could possibly be due to lack of co-operation by the villagers or the health workers were not sensitized enough and did not realize the necessity and importance to carry out this campaign responsibly. This is also suggestive of lacunae on the part of Supervisors. There is a need for supportive supervision on the field to make sure that frontline health workers carry out their job responsibly and perform all the core activities without fail. Checklist

of the core intervention can be given to the Dastak Team which after performing the activities at the houses should mark the activities done by them and stick it outside the houses.

Even after attending the training session, 43% of ANMs did not know the time duration of visit in one house. Post-training questionnaire should be given to the ANMs to assess their knowledge gained during the session. It would also help to lay emphasis during the reiterative session on the areas where knowledge was found to be lacking.

Another observation was 97% of ANM did not demonstrate the preparation of ORS. However, they did explain the method of preparation such as to mix entire one packet of ORS powder in one-liter clean water or 5 glasses of clean water and to give it to the child suffering from diarrhea and vomiting, and to discard the solution after 24 hours verbally. They also conveyed the benefits of ORS solution. Few of the health workers demonstrated the preparation of ORS at Anganwadi Centre. 99% of FLWs did not demonstrate handwashing. It was also seen that there was a scarcity of water in the villages which could be the reason for this gap. Demonstration of ORS preparation and hand-washing should be done in groups to reduce the wastage of water. Also, videos for these activities can be shown to the beneficiaries during the home visit with the help of gadgets provided to FLWs.

Also in our study, we found that only 41% of the villagers took their children of less than five years every month to Anganwadi center to monitor the growth. This could be attributed to the different level of awareness amongst the beneficiaries as well as due to the quality of services provided at the Anganwadi center and the attitude of Anganwadi workers towards the beneficiaries. This is suggestive of the poor coverage in monitoring the growth of the child as it is very important to treat the malnutrition early in under- five children to prevent them from its grave outcomes. This signifies the gap on both the demand as well as the supply side as the health workers also failed to raise the awareness about the importance of monthly growth monitoring.

The Preparedness activities at the state and district level for this pioneering campaign were in full swing and with immense enthusiasm but that zeal was found to be missing in the frontline health workers. Frontline health workers are the major players of the health system, so they should be motivated internally to change the scenario of the poor health status in our country.

The major success of this campaign lies in the fact that beneficiaries acknowledged the initiative taken by the Government of Madhya Pradesh. They found the visit by the Dastak Team in the interest of their children and their welfare.

However, this initiative of Government of Madhya Pradesh and the hard work of officials to bring this initiative in action need to be applauded.

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