



Evaluation Of Kilkari & Mobile Academy Project



Knowledge Management Division,
National Health Systems Resource Centre (NHSRC)
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Executive Summary

The m-health initiatives launched by the Government of India prioritize enhancing access to care; make healthcare services cost-effective and systems more robust. Health technology continues to push the boundaries of how healthcare is delivered and has the power to create breakthroughs in our understanding of our health conditions. Towards prevention, health awareness campaign's use of technology has proved to be an effective measure to reach a wider population more effectively and efficiently. While healthcare services are made available at public health centres, their uptake by beneficiaries depends on their awareness about those services for them. Kilkari & Mobile Academy programs launched in 2016, were part of the Government's Digital India program. The overall objective of these initiatives was to bring resources closer to people who need them the most. The IEC activities done by ASHA in spreading health-related service availability information are valuable and irreplaceable for behavior change communication in the community. Many health programs and schemes with targeted action are operational to address the disparities in terms of Affordability, Accessibility, Awareness, and Availability of healthcare services to the beneficiaries. Kilkari and Mobile Academy are efforts to improve their implementation.

Kilkari

Program design

Kilkari delivers free, weekly, time-appropriate 72 audio messages about pregnancy, childbirth, and childcare directly to families' mobile phones from the second trimester of pregnancy until the child is one year old and was launched in Jharkhand, Odisha, Uttar Pradesh, Uttarakhand, and High Priority Districts (HPDs) of Madhya Pradesh and Rajasthan during the first phase of its implementation in a phase-wise manner. Kilkari Program was later expanded to 13 States/UT and further to 17 States/UTs in 2021.

Rationale for the study

National Health Systems Resource Centre (NHSRC) was mandated by MoHFW to undertake a third-party evaluation, to assess the quality of services provided during 2019-2021 and to understand its reach and acceptance in the community and provide suggestions for improvement, if any.

Study methods

This Implementation research used a mixed-method study design to assess the quality of the program through multi-stage cluster sampling. The study sample was drawn from the states of Haryana, Uttar Pradesh, Jharkhand, and Odisha in consultation with the Mission Mode

Project Cell (MMP Cell). The criteria for selection were two good-performing (Uttar Pradesh and Odisha) and two low-performing states (Haryana and Jharkhand) to understand the enablers and barriers in the program. Within these states, the first and last implemented districts were chosen in consultation with the state government, to know the range of services provided by Kilkari and its reach to the beneficiaries.

The state and district health officials were interviewed to understand the technical and administrative aspects of Kilkari project. The beneficiaries were approached directly to assess the quality of services delivered through a tested questionnaire.

Findings

a. State/district official's perspectives and suggestions

Interaction with various stakeholders shed a light on the functioning and challenges faced during the implementation of the program. Dissemination of health-related information in remote areas, according to a few stakeholders, has been greatly aided by Kilkari. According to implementers, if messages are effectively imbibed, they can serve to close the information gap left by the ASHAs and help in improving MCH indicators. Throughout our interaction, a range of suggestions was recorded. Most of them had to do with enhancing the implementation and monitoring processes, which included adopting best practices from districts that were operating well and conducting regular monitoring and follow-up with the recipients.

Additionally, the program required thorough planning, with emphasis on the beneficiaries' unique needs at the district level. Since there were little or no records with block and district-level officials, the program's implementation may have been even less extensive than what was reported. According to our observations, there was insufficient program monitoring at the state and district levels, as well as no monthly or annual reports, were submitted by the districts to their respective states. Additionally, implementing agency for Kilkari did not have any officials in place at districts to monitor the program-related activities. While few stakeholders found it crucial in spreading knowledge about health in remote areas, results from the primary data show that some of the states such as Jharkhand and U.P have lower uptake of Kilkari services, due to limited access to mobile phones as well as language barriers. Beneficiaries also found it difficult to hear the audio messages due to low or non-existent accessibility of mobile phones, in which case ASHAs' numbers were registered as beneficiaries for receiving the audio messages resulting in messages not being delivered to the beneficiaries. State and district officials deliberated upon improving the network connectivity along with proper monitoring and evaluation of the program with the submission of monthly and

annual reports highlighted for the betterment of the program along with uptake by the beneficiaries.

b. Utilization by beneficiaries and suggestions

A total of 1874 beneficiary women (ANC registration done) across the selected states as respondents for this study were interviewed. The mean age was 26 years and a majority of them were economically dependent on their spouses.

Awareness: In total, 77.75% of the respondents were not aware of Kilkari, which included 90.31% of the respondents from Uttar Pradesh. Of those who were aware of Kilkari, 91.1% received Kilkari messages. All such respondents in Haryana and 96% of those in Odisha received Kilkari messages. Out of these respondents, 99.5% attended Kilkari messages and the remaining 0.5% who did not attend the messages cited the reasons for not attending Kilkari messages as listed below :

- They could not follow the messages.
- The messages came during their work hours.
- They faced a language barrier.
- Their phone was not working or accessible to them.

Messages: 77.3% of the respondents discussed the messages with their families. Almost all the respondents found the content of Kilkari to be informative, the tone of the message to be pleasant, and the messages convincing and useful in their daily routines. Around 68.1% of the beneficiaries at the national level responded that they received information about financial schemes by the government from Kilkari.

Practice: 99.5% of the beneficiaries out of those who attended the Kilkari messages, said that they made behavioural changes after Kilkari, with 100% of the respondents in Uttar Pradesh responding the same. Almost all beneficiaries had put into practice advice from Kilkari on maternal health indicators, particularly that of taking 2 Tetanus Toxoid (TT) Vaccine Doses and Iron Folic Acid (IFA) Supplements. All the respondents had made visits to receive check-ups during their pregnancy. Meanwhile, 89.9% of the beneficiaries had not done their Post-Natal Care visits. Only 9.2% of the beneficiaries in total had made up to 4 PNC visits. 33.3% of the respondents in Uttar Pradesh had made up to 4 PNC visits, followed by 12.9% of the respondents in Haryana.

The new-born care practices that beneficiaries followed included:

- Breastfeeding within 2 hours of delivery and timely breastfeeding after that. (77%)
- Maintaining hygiene and sanitation and ensuring immunization of the infant.

It is thus evident that beneficiaries were able to translate most of what they had learned through Kilkari into practice, indicating that the Kilkari program positively impacted the practice of maternal and child healthcare.

Concerns: 98.9% of the respondents had no complaints about Kilkari. Those that did, were concerning language barriers and network connectivity. On an average only 49.6% of beneficiaries preferred receiving messages in the afternoon.

Suggestions: Beneficiaries felt that additional information on blood pressure and other pregnancy-related complications, COVID, and other infectious diseases, and illness in children such as cold, dengue, malaria, jaundice, and epilepsy should also be provided. Beneficiaries suggested that those who have missed calls be called back to deliver the messages. Beneficiaries also suggested that the scope of Kilkari be broadened beyond just delivering automated messages by including mechanisms for beneficiaries to interact and speak regarding the messages they receive.

c. Analysis of reports submitted by the agency

The data on the program performance has been purely handled by the ARMMAN agency, reporting to the ministry through an IT platform linked with a Management Information System. For this evaluation, the reports/data submitted by the agency to the ministry during the period of 2019-2021 were sought from the MMP cell.

During this evaluation, it was found that follow-up of the program was near to inconsequential due to a lack of priority for the Kilkari Program, poor monitoring and evaluation, and poor governance at the state and below level. When we look at the data of these 6 states over the last 3 years, U.P has the highest number of subscriptions as compared to the other states over the last three years which is 23.09, 32.22, and 45.56 percent in FY 2019-20, 2020-21 & 2021-22, respectively. Jharkhand recorded the lowest percentage of subscriptions over the last three FY which is 3.25, 4.30, and 3.33 percent respectively i.e., it never crossed even a 5% subscription rate. In terms of overall listenership, Odisha had the highest listenership of 75-90%.

Benefits of the program

1. Audio messages are informative and cover all the aspects of pre-and post-natal care
2. During COVID, beneficiaries were given information about ante-natal care and post-natal care which proved to be beneficial
3. They provide timely and relevant messages according to the gestational period and

childcare

4. Audio messages supporting ASHAs in their activities by providing additional information on pre-and post-natal care

Limitations of the program

1. Poor network connectivity issues related to Kilhari- there were frequently reported cases of call drop due to network issues as well as beneficiaries receiving fewer to no call was reported
2. Beneficiaries change their number without informing ASHAs or give someone else's number (ASHA or family member) for registration on RCH portal leading to possible deactivation of services
3. Some of the officials had noted concerns that the Kilhari audio messages sound akin to telemarketing calls, potentially resulting in low listenership.
4. No feedback mechanism at the beneficiary level

Recommendations

1. Systematic and consistent monitoring of the program through a nodal officer at each state to review the performance along with the state officials
2. Yearly content updating of the audio messages along with some video content to make them more engaging for the beneficiaries
3. Robust IEC activities through mass media communications should also be added to the program
4. Set up a mechanism for resolution of queries related to programs as well as a feedback mechanism for the beneficiaries
5. Making the database available to district officials for decision making and policy planning

Mobile Academy

Program design

Mobile Academy is a free audio training course designed to expand and refresh the knowledge base of Accredited Social Health Activists (ASHAs) and improve their communication skills. Mobile Academy is presently operational in 16 states.

Rationale for the study

National Health Systems Resource Centre (NHSRC) had been mandated to undertake a third-party evaluation, to assess the quality of services provided during 2019-2021 and to understand its reach and acceptance in the community and provide suggestions for improvement, if any.

Study methods

This Implementation research used a mixed-method study design to assess the quality of the program through multi-stage cluster sampling. The study samples were drawn from Haryana, Rajasthan, Uttar Pradesh, and Madhya Pradesh based on their performances in the preceding years, which was provided by MMP Cell. The selection criteria of these were based on proportion to the performance of listenership. Two good-performing (Rajasthan and Haryana) and two low-performing states (Madhya Pradesh and Uttar Pradesh) were selected. In selected states, two districts were chosen based on their performance, i.e., the best and least performing districts to understand the range of services provided by Mobile Academy. Under each district, all the ASHAs under the maximum catchment population Primary Health Centre (PHC)/HWC PHC were selected.

We have interviewed state and district health officials to understand the technical and administrative parts of the Mobile Academy project. We directly approached the beneficiaries, ASHAs to assess the quality of service delivered with a focus group discussion.

Findingsa. State/district official perspectives and suggestions

Mobile Academy was found useful in terms of content and helped improve ASHAs' knowledge of the routine services they provide in the community. According to the officials, the implementation and initial training for the Mobile Academy course implementation done in 2015-2016, and nil activity or training for the past two years, and also the topics or the contents were valid but need to be updated. They also mentioned that the Mobile Academy training had played a significant part to encourage ASHAs to function well in the community. While some officials have mentioned the ASHAs who have done this course during 2016-17 and recently enrolled ASHAs were unable to access the course even after registration in portal. The provision of mobile number edit was unavailable in the RCH/MCTS/PCTS portal which was identified as a common challenge in all the states.

They also delivered their concerns about the changing priorities in the health system. Regularity in program functioning, reporting, and monitoring will be happening only if the program is on priority. They also suggested the need for refresher training as many officers have shifted or joined newly to the system.

Suggestions: For the proper functioning of the program, systematic and regular monitoring of the program should be done along with monthly or annual performance reviews. Making the database accessible to the districts and ensuring regular monitoring is one way to keep a check on the performance of the districts as well as creating a feedback mechanism for the stakeholders which will provide a domain to improve upon the functioning of Mobile Academy.

b. Perspectives of ASHAs and suggestions

In the 41 FGDs conducted across all four selected states, around 372 ASHAs participated in the FGDs. During the FGD, most of them showed their keenness and their acceptance toward the Mobile Academy course. The majority of the ASHAs who attended the FGDs were well knowledgeable about their focus area and especially the ASHAs who attended this course were able to recall the chapters, quizzes, and process. ASHAs also claimed that the Mobile Academy needs a topic update as many new initiatives in the health care system has launched in the last three years and are highly demanded by the community as well. ASHAs reinforced their acceptance of the Mobile Academy by stating that they would like to listen to course chapters again even after their completion. ASHA facilitators or MO were supporting them in case of any queries related to topics. The affect component of MA training course was pleasant for everyone and was easily understandable and clear. The mechanism of 'e-certificate' boosts the confidence level of the ASHAs who have undertaken the course.

c. Analysis of reports submitted by the agency

The data on the program performance has been purely handled by the ARMMAN agency, reporting to the ministry through an IT platform linked with a Management Information System. For this evaluation, the reports/ data submitted by the agency to the ministry during the period of 2019-2021 were sought from MMP cell.

As per their report, out of the four states namely Rajasthan, Uttar Pradesh, Madhya Pradesh & Haryana where the evaluation study was undertaken, the percentage of ASHA completing the Mobile Academy training was registered highest by Haryana (93.66%) in FY 2019-20, by Rajasthan (35.17%) in FY 2020-21 and again by Haryana (82.84%) in FY 2021-22 whereas the lowest was registered in Madhya Pradesh in all three years i.e., FY 2019-20 (20.90%), FY 2020-21 (16.41%) & FY 2021-22 (12.33%).

Benefits of the program

The training was easy to access and time friendly. ASHAs could listen to content comfortably and get re-oriented to the subject. The affect component was found to be good and ASHAs were able to explain well to beneficiaries. The Mobile Academy Certificates gave a sense of achievement and confidence to the ASHAs.

Limitations of the program

However, there were some limitations to the program that were collectively resonated by the officials related to the implementation of the program which was found to be lower in many districts of the respective states. Some of the officials raised concerns about ASHAs not receiving the certificates on course completion. The program was found to be limited to only those who could manage to register their mobile number on the ASHA portal while others who could not remain deprived of availing the training under Mobile Academy. No defined communication channel was observed with state and district officials for query resolution related to Mobile Academy.

Recommendations

1. Provision for regular monitoring of the program such as Monthly or bi-annual reporting of activities to be done in districts
2. There should be incentives for ASHAs to undertake training in Mobile Academy through PIP
3. The content of training program should be revised as and when there is any change in provision of healthcare services related to ASHA and their beneficiaries
4. A proper tracking of MOTECH data and real-time upgradation should be ensured through Standard Operating Procedures of reporting format
5. Provision for self-updation of registered mobile number by ASHAs on the portal for better access to the course content

Part A Evaluation of Kilkari Project

Chapter 1: Introduction

1.1. Kilkari

Women and Children form the priority group in any community as they comprise approximately 49.6% percent of the population globally and 48% nationally¹. With the objective of 'leaving no one behind' and 'Health for All' in Sustainable Development Goals and National Health Policy 2017 the Maternal and Child Health remains the focus area. One of the thrust areas in public health services is the bundle of services targeting the needs of women in reproductive age group called Maternal and Child Health (MCH) under Reproductive, Maternal, Neonatal, Child health and Adolescents (RMNCH+A). These services mainly address the needs of a pregnant woman before, during and after pregnancy as well as the health of the new-born up to five years.

The elementary MCH services such as antenatal Care Coverage, Institutional Birth and infant immunization remains at 70%, 61.9% and 76.4% respectively. The targets established by the National Health Policy 2017 and the corresponding Sustainable Development Goal Targets are far from being met by all these indicators. Likewise, while the overall maternal mortality rate (103), infant mortality rate (28) and still birth rate (3) in the country seemed to have improved over the past few decades, the improvement is quite slow for neonatal mortality rate (22) which remains higher than the National Health Policy Target of 16 that is to be achieved by 2025. Thus, despite significant progress in the reduction of maternal mortality ratio and infant mortality rate, there is still a notable hurdle in meeting the goals set for these indicators under the Sustainable Development Goals (SDGs) - the reduction of maternal mortality ratio to less than 70 per 1000 live births and infant mortality rate to 25 per 1000 live births by 2030. The Key Maternal and Child Health Indicators are given in Table 1.1. This may be associated with number of factors such as under-utilization of MCH services, among the rural poor and urban slum dwellers due to lack of awareness and access.

Many health programs and schemes with targeted actions are operational to address the disparities in terms of Affordability, Accessibility, Awareness and Availability of healthcare services to the beneficiaries. However institutional interventions are often limited in their reach when it comes to practice. They must be complemented with knowledge and awareness about healthy practices, best delivered through consistent and timely prompts, especially throughout the period of pregnancy, parturition and post-partum included in the 1000-day window of opportunity for maternal and child health.

¹Total Female Population in the World and in India. Retrieved from <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS>

Table 1.1 Indicators of Maternal and Child Health

S. No	Indicator	SDG ² Target	NHP ² Target	India
1.	Maternal Mortality Ratio (MMR)³	SDG Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Reduce Maternal Mortality Ratio (MMR) from current levels to 100 by 2020	103
2.	Infant Mortality Rate (IMR)⁴	SDG Target 3.2: By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	Reduce Infant Mortality Rate (IMR) to 28 by 2019	28
3.	Neo-Natal Mortality Rate (NNMR)⁵		Reduce Neo-Natal Mortality Rate (NNMR) to 16 by 2025	22
4.	Still Birth Rates⁵		Reduce Still Birth Rate to “Single digit” by 2025	3

²Sustainable Development Goals. Available from <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

³National Health Policy. Retrieved from https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf

⁴SRS Special Bulletin on Maternal Mortality in India 2017-19. Retrieved from <https://censusindia.gov.in/nada/index.php/catalog/40525>

⁵Sample Registration System (SRS)-Bulletin 2020 Volume 55-I. Retrieved from <https://censusindia.gov.in/nada/index.php/catalog/42687>

5.	Mothers who had an antenatal check-up in the first trimester (%)⁶	SDG Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	Antenatal care (ANC) coverage to be sustained above 90% by 2025	70
6.	Institutional births in public facility (%)⁷		Increase utilization of public health facilities by 50% from current levels by 2025	61.9
7.	Children aged 12-23 months fully vaccinated based on information from either vaccination card or mother's recall (%)⁸	SDG Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all	More than 90% of the newborn are fully immunized by one year of age by 2025	76.4

The kind of sustained engagement for this type of behavioural change require more manpower. the digital health intervention has been successful in sustaining and improving engagement. Such technological interventions have not only made processes of maintaining records and disseminating information easily but have also been able to capture the attention of audiences. Other low- and middle-income countries have transitioned from paper to digital systems, the health programs can also be benefitted during any unprecedented event. Recognising such potential of technology, the health sector has also forayed into healthcare technologies. Many healthcare technology initiatives addressing Reproductive, and Child Health have been implemented under the ambit of NHM at various points in time such as mentioned in Table 1.2. Many of the health technologies can be utilised through smart phones

⁶Sample Registration System Statistical Report 2019. Retrieved from <https://censusindia.gov.in/census.website/data/SRSSTAT>

⁷National Family Health Survey – 5, 2019-21, India Fact Sheet. Retrieved from http://rchiips.org/nfhs/NFHS-5_FCTS/India.pdf

⁸Sample Registration System Statistical Report 2019. Retrieved from <https://censusindia.gov.in/census.website/data/SRSSTAT>

or even normal button mobiles. The use of these mHealth applications is multifold, ranging from record maintenance and tracking beneficiaries to capacity building. Various studies have found that Frontline workers like ASHA, ANM and other Community Health Workers benefit from HCT initiatives like ANM-Online, Kilkari, Mobile Academy training, Mobile Kunji, ImTeCHO⁹. Such job aids and applications result in timely resolution to queries, on job support, and improved coverage in the community, which in turn increase the quality of services being delivered thus improving the Maternal and Child Health Indicators and strengthening the health system.

Table 1.2 RCH Related Technology Based Initiatives under National Health Mission¹⁰

S No.	Scheme	Salient Features	Roll Out Status	Mobile App & Dashboard
1.	Reproductive and Child Health	<ul style="list-style-type: none"> • Identification and tracking of each recipient throughout their reproductive lives • Tracking the services availed under the various RMNCH programmes and schemes 	<ul style="list-style-type: none"> • 34 States using RCH • Rajasthan & Tamil Nadu using State Specific App 	Dashboard Available
2.	ANM-Online (ANMOL)	<ul style="list-style-type: none"> • Ensure timely delivery of full competent of antenatal, postnatal & delivery services, • Tracking of children for complete immunization services and promoting family planning methods 	<ul style="list-style-type: none"> • 10 States 	Both Mobile app and Dashboard are available
3.	Rashtriya Bal Suraksha Karyakram (RBSK)	<ul style="list-style-type: none"> • Screening conducted by Mobile Health teams deployed under RBSK • Indicators related to the incidence and prevalence of health conditions in children up to 18 years 	<ul style="list-style-type: none"> • All States (except Delhi, Lakshadweep & Andaman & Nicobar Islands) 	Dashboard Available

⁹Modi, D., Dholakia, N., Gopalan, R., Venkatraman, S., Dave, K., Shah, S., & Shah, P. (2019). mHealth intervention "ImTeCHO" to improve delivery of maternal, neonatal, and childcare services – A cluster-randomized trial in tribal areas of Gujarat, India. PLoS medicine, 16(10), e1002939

¹⁰IT Initiatives of National Health Mission, MoHFW. Retrieved from <https://nhm.gov.in/uhc-day/Session%202/eBooklet%20on%20IT%20Initiatives%20of%20NHM.pdf>

All these initiatives like mHealth services are able to reach the beneficiary directly with equitable and quality health care services especially the underserved populations that are difficult to reach. With the increased access to mobile phones (68%) of the households, there is a good opportunity to realign healthcare delivery through mHealth technologies by, better quality of care, reduced delay, increasing patient engagement and reducing cost of care. Good examples of mHealth initiatives specific to Reproductive and Child Health are presented in Figure 1.1.^{12,13,14} JSY Helpline, mSakhi, Kilkari, Mobile Academy, Mobile Kunji are few of the other mHealth initiatives undertaken over the years in India for Reproductive and Child Health.

Leveraging the dissemination of health care services through mobile phones to the margins of the society, the Government of India had launched the Kilkari Project in 2012, scaled up in 2016 to cover 13 States, namely Assam, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, Uttar Pradesh, and West Bengal.



¹¹People Research on India's Consumer Economy – ICE 360° Survey 2021 (Wave 3). Retrieved from <https://www.ice360.in/app/uploads/2021/06/ICE-360-Proposal.pdf>

¹²m-Health, National Health Portal of India. Retrieved from <https://www.nhp.gov.in/miscellaneous/m-health>

¹³mSehat, Retrieved from <http://www.sifpsa.org/msehat.php>

¹⁴mMitra Retrieved from <https://armman.org/mmitra/>

Figure 1.1 Mobile Health (mHealth) Initiatives specific to RCH

HealthPhone Poshan	mMitra	mSehat
<ul style="list-style-type: none">• This app has a series of 41 videos in 18 Indian languages that highlight the plight of children suffering from various problems due to previous malnutrition.• It has to be downloaded from the playstore by the beneficiary.	<ul style="list-style-type: none">• It is a free mobile voice call service that sends timed and targeted information to enrolled women during the time and language of their preference.• The beneficiaries are enrolled directly by the Sakhis (Community Health Workers).• It has been implemented in 9 states.	<ul style="list-style-type: none">• It is a multimedia enabled m health platform that has been implemented in 5 of the high priority districts of Uttar Pradesh.• This app replicates the physical registers the Frontline workers are required to carry.• It helps provide on demand training and information, acts as a multimedia job aid that helps in recording, tracking and referring beneficiaries.

Chapter 2: Program Design

2.1. Kilkari

There has been a gradual shift in focus towards wellness i.e., promotion of health, prevention, and self-management and early diagnosis and detection of risks in Maternal and Child Health. It is a planned shift to optimize the usage of all levels of health system including primordial, primary, and secondary prevention measures. It allows to strengthen the health system and empowering the beneficiaries to make them a part of the health system, which in turn increase the community participation. Following this strategy, the BBC Media Action conceptualized, created, and piloted 'Ananya' program in 2012 in Bihar with an aim to create awareness about MCH related health practices, from the second trimester of pregnancy till the time the child is a year old. Given the success of these services, in 2016, the Government of India launched Kilkari program and expanded to 13 more states in phase wise manner¹⁵. Later, it was further expanded to four States/UTs where it was implemented in Hindi language in Chandigarh, Jammu & Kashmir, and Andaman & Nicobar Island and in Bengali language in Tripura. Till date (2022), the Kilkari program is implemented in four languages: Hindi, Odiya, Assamese, and Bengali.



Figure 2.1 Sample Message by Dr. Anita and Toll-Free Number for Kilkari

Kilkari (a baby's gurgle), a mobile health awareness service that offered weekly, timely, accessible, accurate, and pertinent audio messages about reproductive, maternal, neonatal, and child health to expectant women, new mothers, and their families. It attempts to increase families' awareness of and adoption of potentially lifesaving preventive healthcare measures. Kilkari program uses IVR technology to make audio content available to any mobile phone across India. At the national level, Kilkari

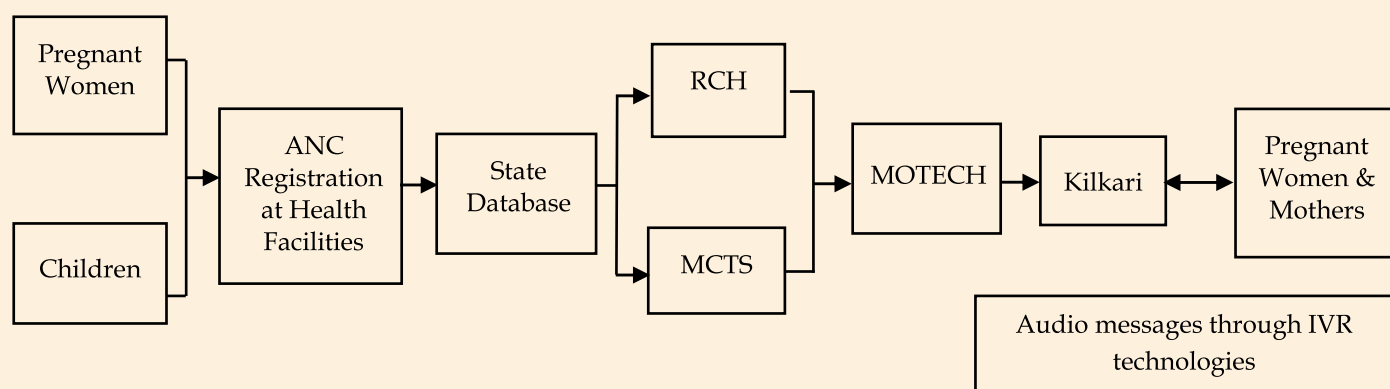
¹⁵ Assam, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand, & West Bengal

program has been integrated with government's Maternal and Child Health Tracking System (MCTS, now as RCH app in many states).

This Interactive Voice Response (IVR) technology, wherein one pre-recorded, timed, and targeted message is delivered through a female character named Dr. Anita per week from the 2nd Trimester of pregnancy, till the child is one year old. The content, which was initially available only in Hindi, is now available in 4 other languages namely Bihari, Oriya, Assamese, and Bengali. At the beginning, Kilkari was primarily marketed to fathers, cognisant of the gender dynamics that make it highly unlikely for women in the household to own a mobile phone and have direct access to it. Over time, the other family members were also addressed in addition to the women Kilkari was intended for. The mobile numbers of users registered under the MCTS portal/RCH portal during ANC registration, gets fed on MOTECH platform of Kilkari program for delivering the audio messages. The MCTS or RCH Portal receives the data from local health centres so pregnant women and mothers are automatically registered for Kilkari audio message services. The beneficiaries get weekly calls with a message from Dr. Anita on a range of topics such as registration at Aanganwadi centres, planning for a safe delivery, recognising the signs of labour, breastfeeding, and other nutritional requirements of the newborn baby, etc with respect to the respective stage of pregnancy.

The consolidation, maintenance, and practical use of data available with the government becomes the crux on which Kilkari operates to extend its coverage and disseminate information to as many pregnant women and mothers as possible.

Figure 2.2 Data Flow and Working of Kilkari



2.2. Rationale for Evaluation

The focus of the government on maternal and child health has led to framing of various projects addressing issues concerning the improvement of maternal and child health across the country. While there has been considerable duration after its implementation, the programs need to be evaluated to check upon the status of its implementation and address concurrent challenges and barriers to make appropriate modifications.

National Health Systems Resource Centre (NHSRC) had been mandated to undertake a third-party evaluation, to evaluate the implementation of the Kilkari project. Kilkari aimed to create greater awareness about healthy practices during pregnancy and care of infants, with the expectation that this awareness would have practical manifestation in the form of behavioural changes. The rationale behind this study thus, is to assess the quality of services provided during 2019-2021 and to understand its reach and acceptance in the community and provide suggestions for improvement, if any.

Chapter 3: Evaluation of the Project

3.1. Study Design

This implementation research designed as a mixed method study focussed on the exposure to the Kilkari Project and its quality, in order to evaluate the impact of the project. This study sought to specifically evaluate the quality of services of the Kilkari Project through secondary data in the form of existing records and reports at its data centre platform as well as the primary data collected from the end users of the Kilkari Project i.e., pregnant women and mothers of infants during the years 2019-2021 along with the interviews with District and State level officials involved in the implementation of the project. The study durations were 6 months.

3.2. State and District Selection

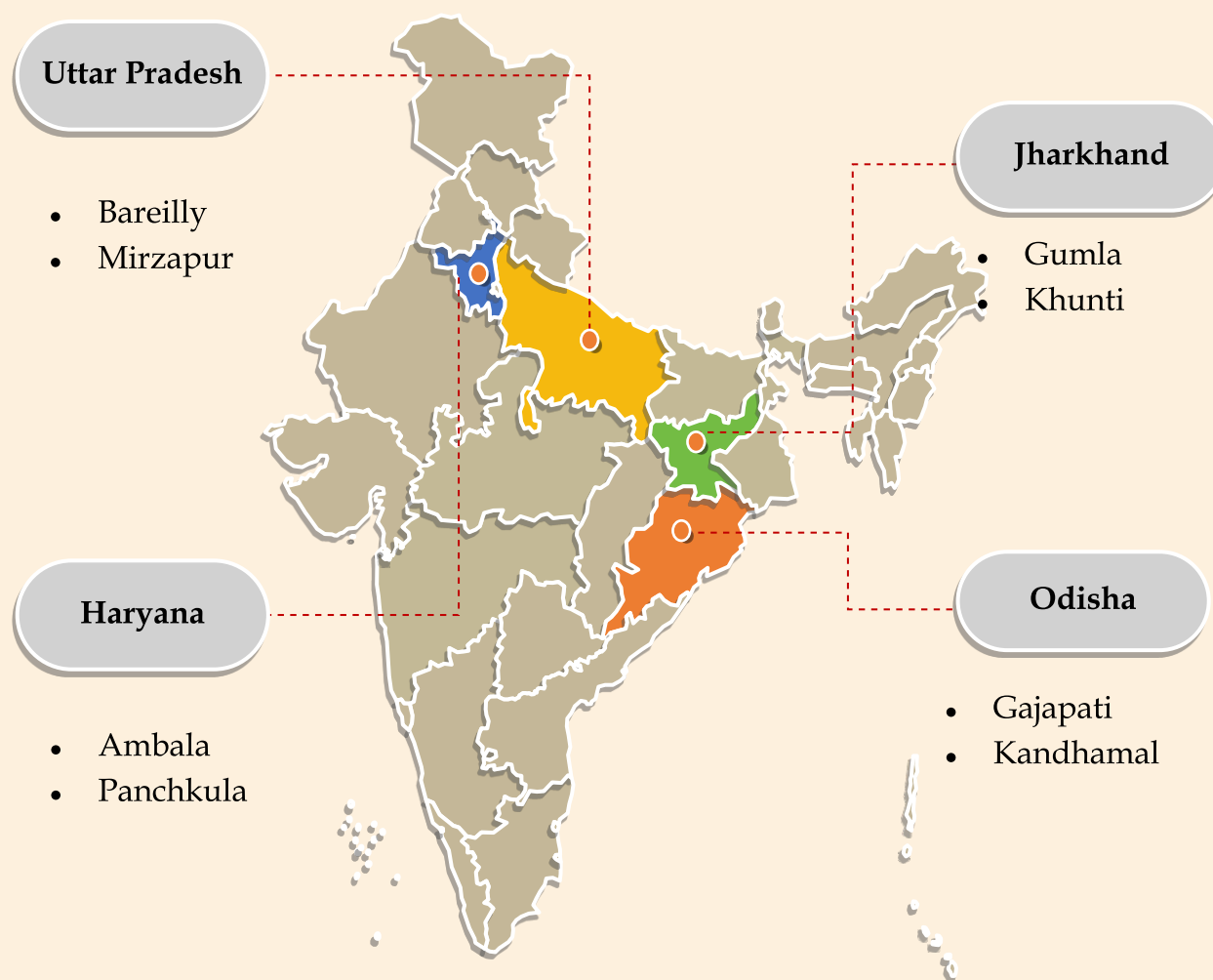


Figure 3.1 States and Districts covered during the assessment

Kilkari has been implemented in a total of 13 states. The study sample was drawn from the states of Haryana, Uttar Pradesh, Jharkhand, and Odisha in consultation with the Mission Mode Project Cell (MMP Cell). The criteria for selection were two good performing (Uttar Pradesh and Odisha) and two low performing states (Haryana and Jharkhand) to understand the enablers and barriers in the program. Within these states, first and last implemented districts were chosen in consultation with state government, to know the range of services provided by Kilkari and its reach to the beneficiaries.

3.3. Sampling Method for Proper Representation

Multistage Cluster Sampling (MSCS) was the sampling method used for this study. After the selection of the State and District; the Public Health Centre (PHC) or Health and Wellness Centre (HWC) that served the maximum catchment population was chosen so that the maximum number of potential beneficiaries could be covered.

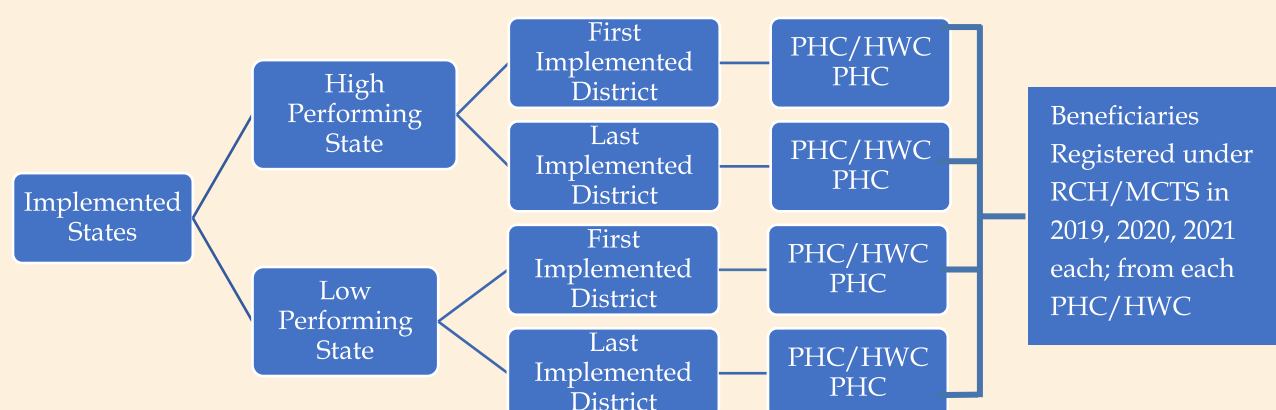


Figure 3.2 Multistage Cluster Sampling for Kilkari Project

All the registered users of Kilkari - pregnant women and mothers of infants - under the ambit of a PHC/HWC, with minimum of 70 respondents each who registered in the years 2019, 2020, 2021 were picked based on their year of registration. This brings the sample size to 210 per district and 420 per state; with four states adding up to the total sample size of 1680 respondents.

At the stakeholder level: Representatives from both State and district level officials were interviewed for the better understanding of the program at the administrative level and also to assess the monitoring mechanism.

3.4. *Data Collection Method

The Data Collections tool and target respondents are described below in Table 3.1.

Table 3.1 Details of Data Collection		
Data Collection Methods	Type of Information Collected	Respondent Category
In-depth Interview (IDI)	Qualitative	District and State Level Health Officials
Structured Interview (SI)	Quantitative	Pregnant women and mothers of children aged up to 1 year who registered for ANC in their respective PHCs in 2019-21

For primary data collection which was to be collected from the end users of Kilhari - pregnant women and mothers of infants who registered for ANC health services during 2019-21. A structured Interview was conducted. A quantitative tool in the form of a survey questionnaire was developed, spanning four sections which included General Information, Demographic Characteristics, Awareness and Practice as given in Table 3.2.

Table 3.2 Thematic Areas for Face-to-Face Interviews with the Beneficiaries	
A. General Information	<ul style="list-style-type: none"> Name, address and contact details of the respondents Their beneficiary registration and entailing details Availability of the Mother Child Protection (MCP) card Educational and Occupational Status Availability of and access to mobile phones
B. Demographic Details	<ul style="list-style-type: none"> Number of pregnancies and deliveries Types of delivery and access to institutional delivery Childcare and Vaccination
C. Awareness	<ul style="list-style-type: none"> Questions related to Dr. Anita's messages Awareness about health issues faced by pregnant women, ANC, PNC Visits, IYCF Practices, Preparation for Delivery, Financial Benefits etc Reception of Kilhari by family members Behaviour changes in daily routine following Kilhari Number, duration, and tone of calls Quality of information from Kilhari Support from ASHA/Health care worker
D. Practice	<ul style="list-style-type: none"> Perception and Responsiveness towards the Kilhari Query redressal Feedback and suggestions

To understand the quality of services provided under Kilkari, the focus of data collection was probable users registered for ANC health services in 2019-2021. Thus, pregnant women and mothers of infants who registered for ANC in their respective PHCs in 2019-21 constitute the target respondents of this study, representing the larger target population that the Kilkari Project is aimed for. The inclusion and exclusion criteria for target respondents based on this is illustrated in Table 3.3

Table 3.3 Inclusion and Exclusion Criteria for Target Respondents

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> States and Districts where Kilkari was implemented 	<ul style="list-style-type: none"> Those who are unavailable for the first three visits
<ul style="list-style-type: none"> All pregnant women in the second and third trimester of pregnancy, registered in the local health centre 	<ul style="list-style-type: none"> Those who had early termination of pregnancy, stillbirth, or infant death
<ul style="list-style-type: none"> Beneficiaries with registered mobile numbers on MCTS/RCH 	<ul style="list-style-type: none"> Non-residents of the area

In-depth Interviews (IDIs) were also conducted with State and District Level Health Officials to understand the various facets of planning and implementation of Kilkari project, and the ensuing barriers and challenges faced.



3.5. Quality Monitoring Steps

To ensure the quality and accuracy of the data being collected the following steps were taken:

Table 3.4 Quality Monitoring Steps at different Phases of Data Collection

Before Data Collection	During Data Collection	After Data Collection
<ul style="list-style-type: none"> • Intensive Review and Pilot Testing of the Tool before finalization • 2 Days physical training at NHSRC premises for all the investigators involved including mock interviews • Doubt clearing sessions and detailed set of instructions provided to investigators • Prior Permissions appointments with functionaries obtained 	<ul style="list-style-type: none"> • During Data Collection • Supportive supervision by Core team of experts • Refresher sessions conducted as per requirement • Regular spot checks and back checks conducted to ensure completeness and consistency of interviews • Real time syncing of data and daily review by Core team of Experts • Daily monitoring of Investigators performance 	<ul style="list-style-type: none"> • Random selection of back check sample to ensure representation of each location and investigator • Rigorous Cleaning and Processing of Data • Tabulation plan made with Key Performance indicators, Themes and Sub themes identified from IDIs.

3.6. Ethical Considerations

Voluntary participation, Informed Consent, Anonymity was ensured throughout the study period. Only those who voluntarily agreed to be a part of data collection exercise were asked for further appointments. It was ensured that the data collection exercise was taken up at the convenience of the participants for which appointments were made well in advance. Before the interview participants were duly informed about the purpose of the exercise, the implications of participation and were asked to make the decision freely without any pressure or coercion.

Also, while conducting the interviews, particular care was taken to ensure confidentiality of information collected from the participants and to protect their respective identities. For the same, all information collected from the participants was duly de-identified in order to masquerade all personal information that can reveal the identity of participants. Efforts were made to gain trust and privacy from the beginning so that the participants could share their views freely. It was emphasized that under no circumstances, the field investigator would be allowed to share the personal information of the research subjects with any external or internal source.

Chapter 4: National Level Report

4.1. State and District Officials Perspectives

In-Depth Interviews with state and district officials illustrated various facets of planning and implementation of Kilkari project and the ensuing challenges, which prompted varied suggestions from the officials.

We could perform in-depth interviews with state and district representatives of all four selected states i.e., Uttar Pradesh, Jharkhand, Haryana, and Odisha. All the state representatives shared their experiences, views, and suggestions on Kilkari project. All of them were practicing public health for more than 5 years and had a clear perception of the uptake and implementation of Kilkari Project. The six main themes that emerged from the responses of the IDIs were Governance, Implementation, Utilization, Monitoring, Challenges, and Suggestions. (Table 4.1)

Table 4.1 Major Themes Identified from In-Depth Interviews	
a. Governance	b. Monitoring
c. Implementation	d. Challenges
e. Utilization	f. Suggestions

4.2. Major Themes

4.2.1 Governance

"Third party agency (ARMMAN) mujhe kahin dikha nahi field me. program should be implemented directly through NHM"

-State Official

"They're (ARMMAN) not reporting, they're somehow indirectly reporting to us, we ask them for monthly report, since January we are asking them to submit"

-State Official

When asked by the dashboard provided by the implementing agency (ARMMAN), one of the respondents replied that:

“No Log in Credentials / ID are available with SPMU to access dashboard”

- State official

When asked for accountability of the implementing agency (ARMMAN) to report to State/District level NHM officials, one of the respondent stated that

“We have communication gap largely, jaate to hai nahi kahin (ARMMAN) ...salary inki kahin aur se aati hai...NHM se salary hoti to kuch control hota... inka roster bhi kahin aur se banta hai aur ab us roster me kya included hai kya nahi vo mujhe pata hi nahi ...initially I tried to coordinate...1-2 bar in logon ne samjha uske baad se nahi hua kaam”

- State official

4.2.2 Monitoring

The overall monitoring activities were found unsatisfactory when interviewed with key stakeholders. As per the interview, neither the implementing agency (ARMMAN) nor the NHM officials had undertaken any such field visits to assess the implementation of the program and learned the implementational issues and perspectives of the beneficiaries. When asked about the coordination meeting of implementing agency (ARMMAN) with NHM officials at state or district level, the interviewer responded that:

“Nahi aisa koi coordination nahi hua, nothing happened in last 2 years”

- State Official

Accessing the data through Log In credentials was one of the major challenges to monitoring and to take timely mid-course corrections. The Log In access were provided at state level only to a few that too at a later stage of implementation. The interviewer learnt that:

“1.5 saal tak vo hame assurance dete rahe Log-in Access ke liye aur 1.5 saal tak hame nahi mila hamare mangane ke baad bhi taaki hum log in karke dashboard aur status dekh paye.... Ab jakar 1.5 saal baad unhone diya hai log in access”

- State official

“Hamare MD ko bhi sunna tha ki Kilkari program me kya messages bheje jaa rahe hai... hamne number register karne ki koshish ki par nahi hua aur na hi hame Kilkari program ka content mila... kafi dino baad content mila to ham sun paye messages ko... aap hi bataiye jab MD ko messages nahi mil rahe hai to field me kya hoga”

- State official

“Agar ye program jaise ministry baaki program chalati hai GoI ke through to bahut acha chalta lekin ye dependency dusare (ARMMAN) pe create karke koi fayda nahi hua, Definitely iska 10 times jyada effect hota agar GoI khud se implement karti to”

- State Official

4.2.3 Implementation

To support the implementation process at state and below level, it was found that no such support was extended to states. The officials responded that:

“Nahi sir, implementing agency (ARMMAN) ya centre se ya state se aisa koi bhi person nahi aya... aur koi coordination bhi aisa kuch nahi hua..koi meeting bhi nahi hui... sirf 1 training hui thi state level pe 2017-18 me bas”

- State Official

“Beech me ye program dead sa ho gaya thakyunki agar kisi kaam ko aap lagatar karte hai to uska momentum bana rehta hai... aur yaad rehta hai ki ab next kya karna hai”

- State Official

4.2.4 Challenges

“Kuch puchta hun to bata dete hai (ARMMAN) par khud se actively coordinate nahi karte ... mujhe pata hi nahi hota kunki kahin se information hi nahi ati ki kis district me kya chal raha hai, agar koi mujhe batayega tabhi to mein kuch administrative corrective measures le paunga ya kisi ko phone karke usse karwaunga”

- State official

4.2.5 Utilization

With limited positive response, Kilkari was found to encourage women to seek healthcare. A few stakeholders responded that it has played a pivotal role in disseminating health related information in far fledged locations. It was a notion among implementers that messages will help improve MCH indicators if properly imbibed and act to fill in the information gap by the ASHAs.

“Kilkari program ki wajah se ASHA se jo miss ho gaya vo cover ho jata hai....aur ASHA ka burden bhi thoda kam hua hai”

- State official

“Kilkari messages were helpful during the COVID pandemic, overall, the program has been reported to be impactful and beneficial to users”

- State Official

4.2.6 Suggestions

Varied degree of suggestions was recorded during the interview. Most of them were related to improving the implementation and monitoring activities where regular monitoring and follow-up with the beneficiaries and adoption of good practices from well performing

Table 4.2 Perspectives of Key Stakeholders Implementing Kilkari Project

State	Theme - Governance
Jharkhand	<ul style="list-style-type: none"> Both district and state officials expressed the need for proper transport facility to be made available for the beneficiaries HCT: Communities and CHWs that were initially apprehensive about technology have become comfortable with it post COVID. It has been suggested to be instrumental in reaching more beneficiaries through services like e-Sanjeevani and television programs Post-COVID State officials have shown interest in conducting community radio and Facebook programs and YouTube channels for health-related awareness programs similar to Kilkari for the beneficiaries
Uttar Pradesh	<ul style="list-style-type: none"> Integration of technology in health systems – teleconsulting and telemedicine e.g., eSanjeevani The program had been implemented in UP due to sizeable population, and expectations of the beneficiaries for proportionately more returns Most families have smartphones, so HCT enables faster reach, collection, and maintenance of data. It helps save manpower if supplemented by requirements such as network connectivity, awareness amongst beneficiaries Kilkari strives to stand by its objective to provide virtual counselling and medical advice to beneficiaries and to improve MCH indicators It also compliments ASHAs by providing health advice to pregnant women and mothers of infants
Haryana	<ul style="list-style-type: none"> Healthcare Technologies were beneficial to disseminate information and advice through phones They were also helpful to beneficiaries who could access service sitting at home, in their local language
Odisha	<ul style="list-style-type: none"> Support for the program has been provided by the GoI, state government and district officials Officials mentioned that Kilkari was started with the aim of guiding pregnant women for ensuring health for themselves and their children

Theme - Implementation	
Jharkhand	<ul style="list-style-type: none"> • First implemented in district in 2019 • Information for the program was received by the district program co-ordinator • Training: <ul style="list-style-type: none"> ○ State level training for district officials by master trainer was conducted who further carried out training at district and block level ○ State level training for data managers was conducted • ANM registered for ANC on paper > data fed by block data manager into MCTS • Phone numbers registered in MCTS before 2019 get a call from implementing agency with a message based on the stage of pregnancy • ANMs were provided with hard copy of data (CH register) to be entered into MCTS by Block data manager > District data manager > MIS Consultant
Uttar Pradesh	<ul style="list-style-type: none"> • The Program was first implemented around 2017 • Training was conducted at State > district > block levels > ASHAs > ANMs > Sangini • DCPM is in-charge of trainings at district level. At block level the charge for running the program lies with the BCPM • Proper intervention was carried out to deliver message again in case if their call got disconnected and this used to be carried out for up to 3 times and at 2- and 3-hour intervals respectively • During implementation instructions were provided to register beneficiaries' numbers for ANC instead of ASHAs and ANMs • State level orientation was carried out with RCH department. Co-ordination was implemented between SPMU, DPMU, DCPM, BCPM and BPM and specific arrangements were made to send IEC materials by the implementing agency

Haryana	<ul style="list-style-type: none"> • The program was launched in 2016-17 • Training was done through a state level orientation and workshop • ASHAs were cautioned against giving their own phone numbers for beneficiaries ANC registration • Focus was shifted to areas with low listenership of Kilkari
Odisha	<ul style="list-style-type: none"> • Information disseminated from District > block > grassroot level • State level orientation, repeated at block and district level • Training was done once at the beginning of the program • State and district level trainings were conducted for the ASHAs for Kilkari • Instructions have been given to encourage beneficiaries to share their own phone numbers for ANC registration • Priority for registration of Pregnant Women in areas with poor Maternal and Child Health indicators • State and district level beneficiaries were provided with accessibility to the program
Theme - Utilization	
Jharkhand	<ul style="list-style-type: none"> • Kilkari, amongst other services, has helped to improve MCH indicators by encouraging women to seek healthcare which can be interpreted through reduction in maternal deaths, as mentioned by the beneficiaries • It has played a pivotal role in disseminating health related information in far fledged locations
Uttar Pradesh	<ul style="list-style-type: none"> • The Program was reported to be very beneficial as pregnant women and mothers of infants received the information that they needed to take care of themselves and their child • Also, awareness through Kilkari has led to increase in institutional deliveries (from 20,000 institutional deliveries in 2008 to 2,00,000 at present), decrease in MMR and IMR • The messages will help improve MCH indicators if properly imbibed and act to fill in the information gap by the ASHAs

Haryana	<ul style="list-style-type: none"> • Time specific messages helped beneficiaries seek appropriate healthcare services timely • Kilkari messages help to clarify information that ASHAs might have missed out and reduced the burden on ASHAs • Kilkari messages were helpful during the COVID pandemic
Odisha	<ul style="list-style-type: none"> • The program has been reported to be impactful and beneficial to users
Theme - Monitoring	
Jharkhand	<ul style="list-style-type: none"> • Feedback is being taken by the officials on whether beneficiaries were receiving calls during monthly meetings with CHC • The data received is managed by MIS consultant
Uttar Pradesh	<ul style="list-style-type: none"> • Monitoring was carried out for the program when it was launched first, though it has been discussed regularly in cluster meetings. Follow up for Kilkari was reported to be somewhat less • Specific measures were taken for proper monitoring of the messages and beneficiaries were cross verified whether they received Dr. Anita's messages
Haryana	<ul style="list-style-type: none"> • Monthly, Quarterly reports from implementing agency were verified at district level • Kilkari was monitored by the DPM at the district level • Officials cross-verified with beneficiaries whether they received messages from Kilkari • Regular monitoring for Kilkari was done before COVID, but focus was diverted to vaccination during the pandemic
Odisha	<ul style="list-style-type: none"> • Officials mentioned that provision for technical team has been made for monitoring data • Monitoring of data is also carried out by the WCD department and it is discussed in monthly meetings too

Theme - Challenges	
Jharkhand	<ul style="list-style-type: none"> • Beneficiaries faced connectivity issue, along with language barrier during communication • Data was reported to be not properly maintained. Vacancy has been observed for the post of Block Data Manager • Lack of Regular monitoring and follow-up was observed • Social taboos around declaring pregnancy was reported for less ANC registration
Uttar Pradesh	<ul style="list-style-type: none"> • Network issues and accessibility posed challenges in receiving information by the beneficiaries • Follow-up was not properly carried out with the beneficiaries • Beneficiaries were reported to constantly change their phone numbers • Beneficiaries were somewhat less proactive in paying attention to information and suggestions provided to them • The program needs to be covered in all the district of the state with equal intensity
Haryana	<ul style="list-style-type: none"> • All beneficiaries did not have access to their own phones • Network connectivity issues were reported • The level of interest in beneficiaries was low thus leading to limited listenership • No exclusive monitoring was done for the program
Odisha	<ul style="list-style-type: none"> • Connectivity issue was reported by the beneficiaries • Message delivered in Hindi poses problem in understanding • Beneficiary might change phone number or give someone else's number(ASHA or family member) • Difficulty in updating numbers in database has also been noticed • No allocation of funds for Kilkari has also posed challenges for its proper implementation

Theme - Suggestions	
Jharkhand	<ul style="list-style-type: none"> • Better training to ASHAs and ANMs needs to be conducted • Regular monitoring and follow-up with the beneficiaries should be carried out with adoption of good practices from well performing districts • The program should be implemented in a properly planned manner, where focus must be laid on district-wise identifying and catering to the specific needs of the beneficiaries
Uttar Pradesh	<ul style="list-style-type: none"> • A program officer for each program needs to be designated • Dashboard should be properly handled for timely monitoring and reporting of data • Initiative must be taken to arouse awareness amongst beneficiaries via video messages or social media • Encourage attachment of beneficiaries through beneficiary profiles with pictures of mother and child • The frontline workers need to be strengthened for proper channelizing of information amongst the beneficiaries They should save Kilkari number in beneficiaries' phone so they would know when to answer
Haryana	<ul style="list-style-type: none"> • Regular and continuous monitoring of the program should be done • A dedicated consultant for each state should be appointed • Messages can be improved and made more engaging • Beneficiaries can be incentivised
Odisha	<ul style="list-style-type: none"> • Content should be updated such that it caters to tribal populations • Message should be disseminated slowly and in printed form for easy accessibility to the beneficiaries • Officials further suggested to reduce length and waiting time for the messages

4.3. Utilisation of services by beneficiaries

4.3.1 Characteristics of the Beneficiary Population

India constitutes of 28 states and 8 union territories. Estimations of population in India in 2022, based on the 2011 census, posit the population at over 139 crores. Women, make up about 48.49% of the total population in India.

Table 4.3 Characteristics of Beneficiary Population	
Estimated Population in 2022	
Total	1,326,093,247
Female	586,469,174
Total ANC Registration in 2019-2021	
Uttar Pradesh	12,719,391
Jharkhand	1,545,050
Haryana	1,363,949
Odisha	2,131,883
Source: RCH Portal	

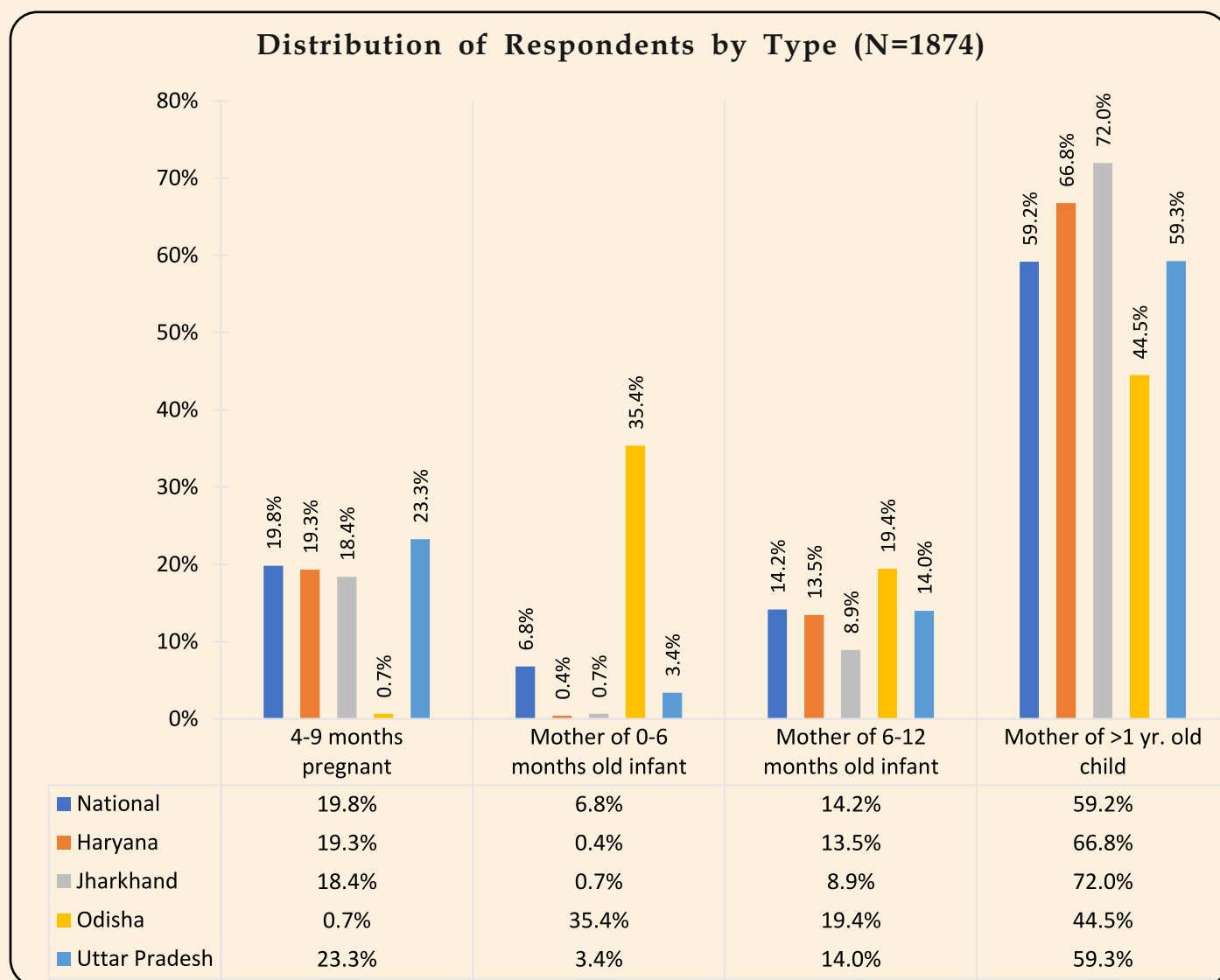
Of these, the number of ANC registrations are important to consider estimating the potential beneficiaries of Kilkari. ANC registrations are also pertinent to understanding what proportion of the total female population, Kilkari is aimed at to illustrate the significance of the programme.

Of these, 1874 women across the states of Uttar Pradesh, Haryana, Jharkhand, and Odisha where Kilkari was implemented, acted as respondents for this study. The demographic details of these respondents such as age education and source of income illustrated information about their background. The mean age of respondents was 26 years old with most respondents falling in the age group of 21-30 years. The distribution of educational qualifications across respondents varied with those having no formal education and those with undergraduate degrees and above were more common than those with education up to 12th. In Uttar Pradesh, the majority of the respondents had no formal education. Majority of the respondents had no source of income and thus were economically dependent on their spouses.

Table 4.4 Demographic Characteristics Of Respondents (n=1874)

Demographic Characteristics		National	Haryana	Jharkhand	Odisha	Uttar Pradesh
Age of Beneficiary	Up to 20 years	2.6%	3.7%	10.2%	8.1%	0.7%
	21-30 years	86.6%	86.1%	77.2%	76.7%	89.5%
	31-35 years	8.9%	8.8%	10.0%	13.2%	8.1%
	> 35 years	1.8%	1.4%	2.5%	2.0%	1.7%
Education	No Formal Education	33.8%	4.1%	22.6%	8.1%	42.7%
	Education Up to 12th	29.4%	15.2%	34.8%	41.4%	28.2%
	Under Graduation & above	36.8%	80.7%	42.6%	50.5%	29.1%
Source of Income	No Source of Income (Housewife, unemployed)	79.8%	96.2%	82.1%	64.4%	80.4%
	Income from daily wage, salary, & farming, etc.	20.2%	3.8%	17.9%	35.6%	19.6%

These respondents were categorised into four different types based on the stage of their pregnancy or the age of their infant or children. The four categories were that of 4-9 months pregnant, mother of 0-6 months old infant, mother of 6-12 months old infant and mother of child aged more than a year old. Majority of the beneficiaries were mothers of children older than a year old. It was observed that Odisha registered considerably lesser uptake of Kilkari messages in pregnant women before delivery. However, it performed well post-delivery for messages related to PNC in comparison to other states evaluated.



Graph 4.1 Distribution of Respondents by Type

Of these respondents, 623 dropped out of the survey because they had not registered their phone number for ANC. Of the 1251 that had, 132 dropped out of the survey because they did not have access to the number. 1119 respondents then proceeded with the survey, of whom 11 dropped out because their MCP card did not have the date of their registration as beneficiaries with ASHAs. Thus, out of 1874, 1108 of the respondents were left who continued the survey further.

4.3.2 Uptake of Kilkari

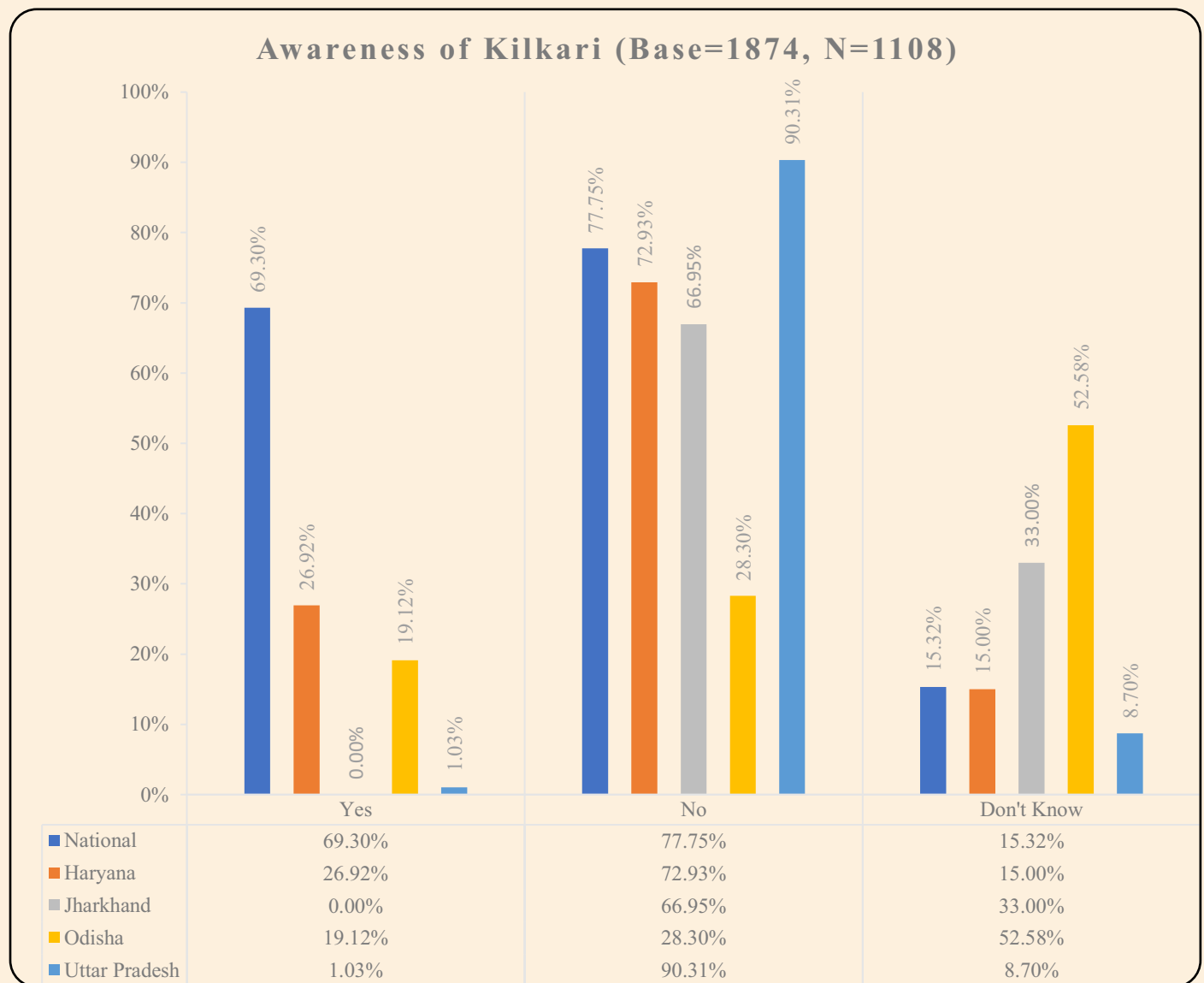
To encapsulate the uptake of Kilkari, the survey had three questions in progression – whether respondents were aware of Kilkari, whether they received messages from Kilkari and whether they attended those messages. Respondents who answered no or don't know in any of these questions exited the survey then. Thus, 1108 respondents were asked whether they were aware of Kilkari, 207 were asked whether they received messages from Kilkari and 203 were asked whether they attended those messages.

- At the national level, 77.75% of the respondents were not aware of Kilkari, which included 90.31% of the respondents from Uttar Pradesh.
- 26.92% of the respondents from Haryana and 19.12% respondents from Odisha were aware of Kilkari.
- All the respondents from Jharkhand did not receive any Kilkari messages, wherein 66.95% responded that they were not aware, and 33% respondents responded that they did not know. Thus, all respondents from Jharkhand exited the survey and were not asked the following questions such as attendance and experience of Kilkari messages.

Table 4.5 Provides the state-wise status of key determinants of Kilkari Messages Uptake.

Table 4.5 Determinants of Kilkari Message Uptake (N = 1874)											
Indicators		National	95% CI	Haryana (n=410)	95% CI	Jharkhand (n=13)	95% CI	Odisha (n=374)	95% CI	UP (n=311)	95% CI
Awareness of Kilkari Messages (n=1108)	Yes	6.93%	6.92- 6.95	26.92%	26.84-27.00	0%	---	19.12%	19.07- 19.08	1.03%	1.02-1.04
	No	77.75%	77.73- 77.78	72.93%	72.85-73.01	66.95%	66.59- 67.31	28.30%	28.23- 28.36	90.31%	90.29- 90.33
	Don't Know	15.32%	15.30- 15.34	0.15%	0.14-0.15	33%	32.69- 33.41	52.58%	52.51- 52.65	8.7%	8.64-8.68
Indicators		National		Haryana (n=97)		Jharkhand (n=0)		Odisha (n=107)		UP (n=3)	
¹⁶ Received Kilkari Messages (n=201), Yes		100%		100%		NA		100%		100%	
Indicators		National	95% CI	Haryana (n=97)	95% CI	Jharkhand (n=0)		Odisha (n=107)	95% CI	UP (n=3)	95% CI
Attendance of Kilkari Messages (n=201)	Yes	99.53%	99.51- 99.54	99.45%	99.43-99.48	NA		99.49%	99.47- 99.52	100%	---
	No	0.47%	0.46- .049	0.55%	0.52-0.57	NA		0.51%	0.18- 0.53	0%	---

¹⁶ Almost all of those beneficiaries who were aware of Kilkari received and attended Kilkari messages indicating that the programme was taken up well by those who were aware of it



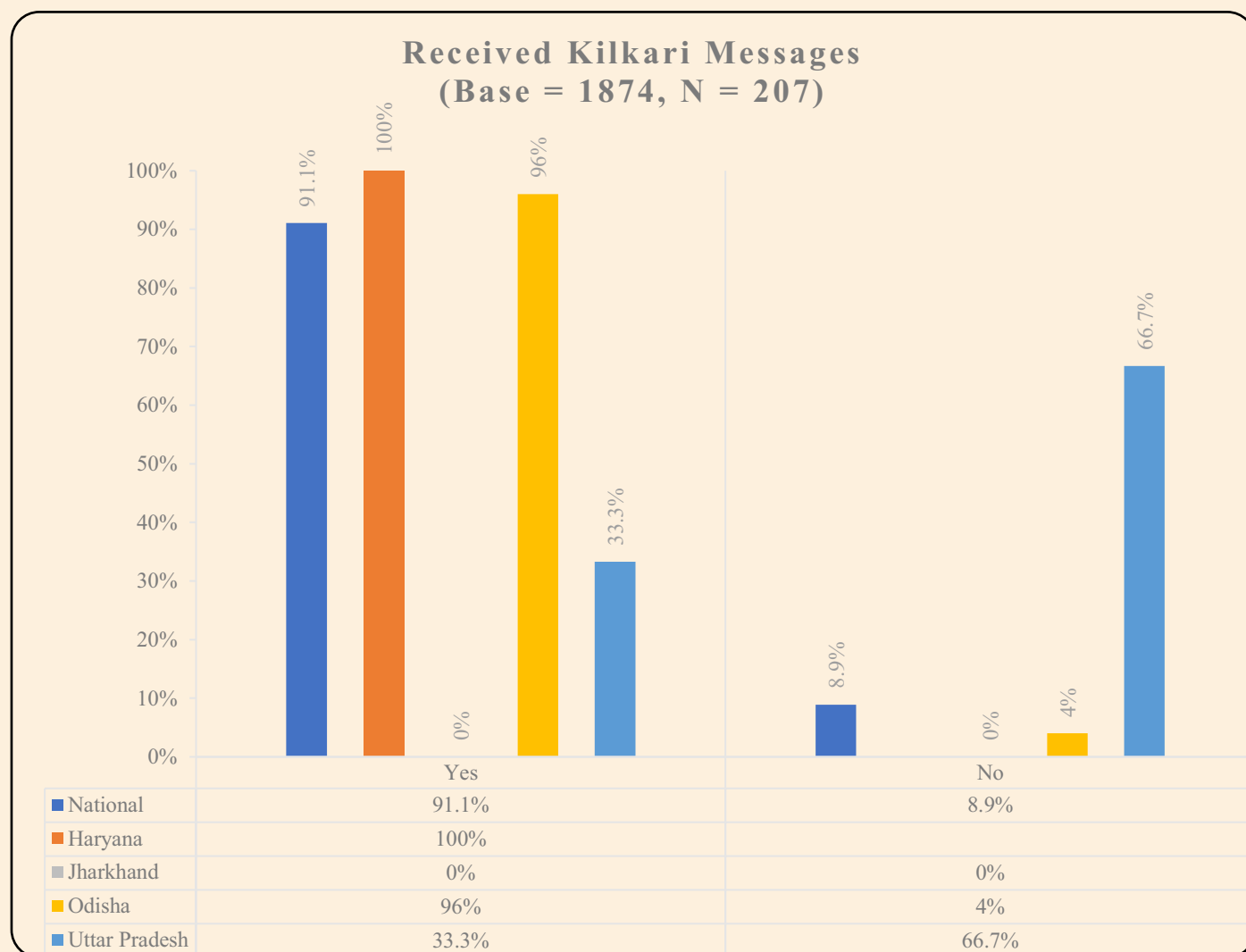
Graph 4.2 Awareness of Kilkari

- Of those who were aware of Kilkari, 91.1% received Kilkari messages.
- All such respondents in Haryana and 96% of those in Odisha received Kilkari messages.
- 66.7% of the respondents in Uttar Pradesh did not receive Kilkari messages.

Out of the respondents that received Kilkari messages, 99.5% of the respondents attended Kilkari messages.

- In Uttar Pradesh, all such respondents attended Kilkari messages while in Haryana and Odisha 99.5% respondents attended messages.
- The reasons for not attending the messages cited by respondents included:
 - They could not follow the messages.
 - The messages came during their work hours.

- They faced a language barrier.
- Their phone was not working or accessible to them.



Graph 4.3 Received Kilkari Messages

Thus, the uptake of Kilkari was illustrated that awareness of Kilkari was lacking amongst respondents. Almost all of those that were aware of Kilkari received and attended Kilkari messages indicating that the programme was taken up well by those who were aware of it.

4.3.3 Beneficiary Experience

It is of utmost importance to obtain feedback of the beneficiaries to understand their perception of Kilkari, their unmet needs and expectations as well any areas of potential constraints. Table 4.6 presents the findings related to Beneficiary experience of Kilkari.

Table 4.6 Beneficiary Experience (Base = 1874, N = 201)

Message and Reminder Frequency									
Indicators		National		Haryana		Odisha		UP	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
Frequency of Message	Daily	4.20%	4.16-4.25	9.77%	9.67-9.88	0.08%	0.07-0.09	0%	---
	Every alternate day	6.20%	6.15-6.26	10.27%	10.16-10.37	3.91%	3.84-3.97	0%	---
	Weekly	30.97%	30.87-31.08	52.90%	52.72-53.07	10.44%	10.34-10.54	33.33%	33.01-33.66
	Monthly	56.64%	56.52-56.75	23.65%	23.51-23.80	84.43%	84.31-84.55	66.7%	66.34-66.99
	Don't remember	1.99%	1.96-2.02	3.41%	3.35-3.47	1.14%	1.11-1.18	0%	---
Call back after missed call	Yes	43.51%	43.39-43.62	16.37%	16.25-16.50	62.97%	62.81-63.12	66.67%	66.34-66.99
	No	53.66%	53.54-53.77	77.75%	77.61-77.90	36.32%	36.16-36.48	33.33%	33.01-33.66
	Don't Know	2.84%	2.80-2.88	5.87%	5.79-5.95	0.72%	0.69-0.75	0%	---
Knowledge of Kilkari Toll-free number	Yes	22.25%	22.15-22.34	11.86%	11.75-11.97	13.98%	13.86-14.09	100%	---
	No	71.09%	70.99-71.19	85.38%	85.25-85.50	74.29%	74.14-74.43	0%	---
	Don't Know	6.66%	6.61-6.72	2.76%	2.71-2.82	11.74%	11.63-11.84	0%	---
Engagement of the Beneficiary									
Listeners of Kilkari Messages	Self	99.96%	99.96-99.97	100%	---	99.92%	99.88-99.95	100%	---
	Husband	42.51%	42.31-43.07	36%	35.81-36.14	42.96%	42.63-43.38	66.67%	66.34-66.99
	Parents	0.66%	0.64-0.66	1.29%	1.25-1.33	0%	---	0%	---
	In-laws	11.50%	11.28-12.11	10.14%	10.04-10.24	0%	---	66.67%	66.34-66.99
	Siblings	1.68%	1.65-1.70	3.84%	3.78-3.91	0%	---	0%	---
	Children	4.38%	4.33-4.43	1.94%	1.89-1.98	0%	---	33.33%	33.01-33.66
	Any other	0.66%	0.64-0.67	1.54%	1.42-1.64	0%	---	0%	---
Discussion of Kilkari Messages with family	Yes	77.32%	77.22-77.41	90.6%	90.5-90.7	67.64%	67.48-67.79	66.67%	66.34-66.99
	No	22.64%	22.55-22.74	9.4%	9.3-9.5	32.28%	32.33-32.41	33.33%	33.01-33.66
	Don't Know	0%	---	0%	---	0.08%	0.07-0.09	0%	---

- When asked about the frequency of calls from Kilkari, more than half of the total beneficiaries i.e., 56.6%, mentioned that they received monthly calls.
- In Haryana, 52.9% of the beneficiaries mentioned that they received weekly calls, which was the highest amongst all states.
- Since beneficiaries had used Kilkari a couple of years ago, it is possible that they are unable to recall the exact frequency of messages and thus responded that they received messages monthly, instead of weekly.
- 53.7% of the beneficiaries did not receive a call back after they missed a call. However, 66.7% of the beneficiaries from Uttar Pradesh said that they did receive a call back after they missed a call from Kilkari.
- Over 70% of the beneficiaries were not aware of the toll-free number for Kilkari. This could be attributed to the time that has passed since beneficiaries last availed Kilkari.
- Almost all beneficiaries responded that they listened to Kilkari messages, with 42.5% of the respondents' husbands also listening to the messages.
- 77.3% of the respondents discussed the messages with their families.
- Almost all the respondents found the content of Kilkari to be informative, the tone of the message to be pleasant, the messages convincing and useful in their daily routine.

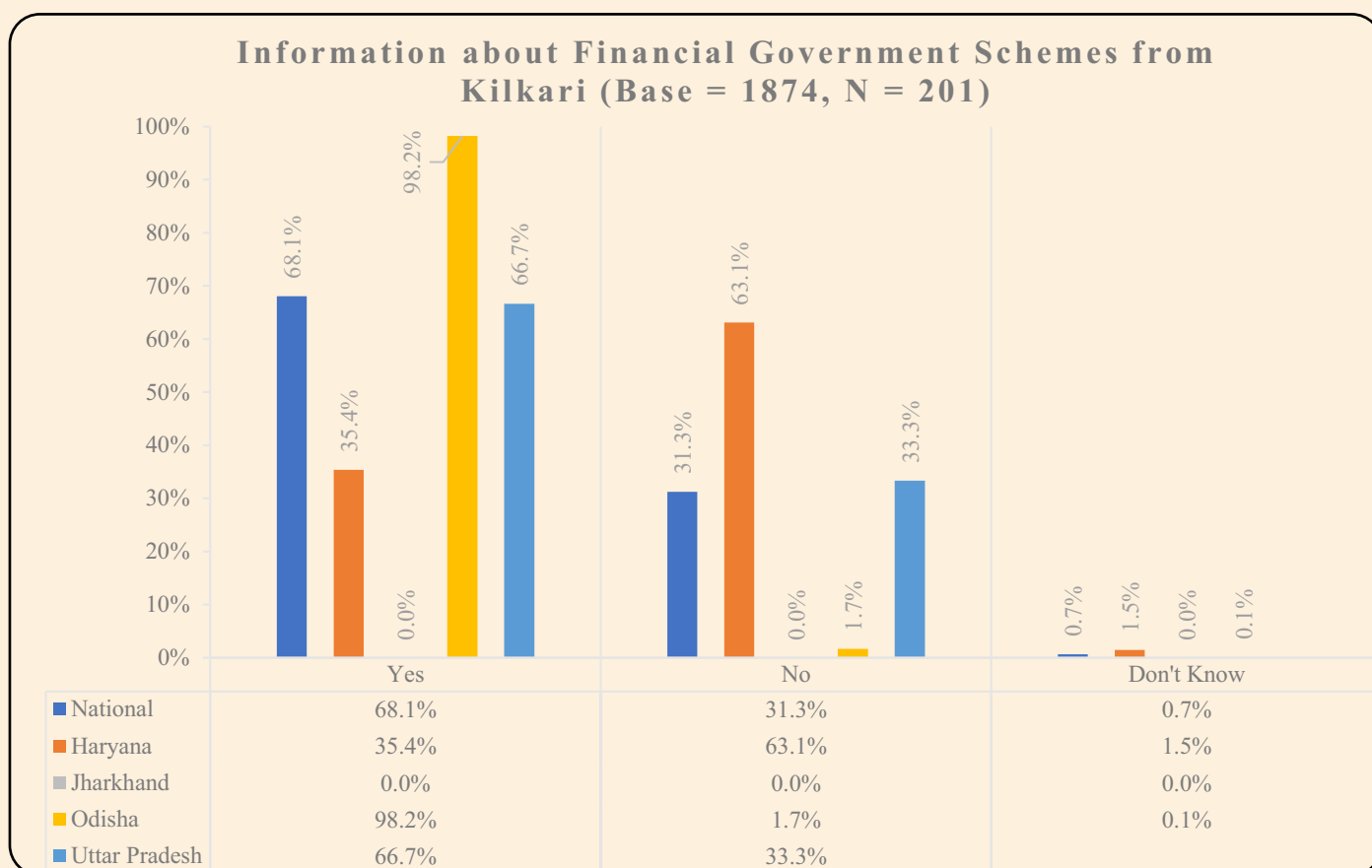
Table 4.7 Performance of Affect Components of Kilkari Messages (Base=1874, N=201)

Affect Components of Messages (N = 201)		National	Haryana	Odisha	UP
Informative Content	Yes	99.9%	100%	99.8%	100%
	Don't Know	0.1%	0%	0.2%	0%
Pleasant tone of Messages	Yes	100%	100%	99.9%	100%
	Don't Know	0%	0%	0.1%	0%
Convincing Messages	Yes	99.7%	100%	99.4%	100%
	No	0.3%	0%	0.6%	0%
Clear Messages	Yes	99.7%	100%	99.3%	100%
	No	0.3%	0%	0.7%	0%
Messages useful in daily routine	Yes	100%	100%	99.9%	100%
	Don't Know	0%	0%	0.1%	0%

➤ The range of topics covered under Kilkari included:

- Family planning
- Infant feeding: breastfeeding, complementary feeding
- Child immunizations
- Pregnancy care: ANC, rest, birth preparedness, danger signs
- Child malnutrition, anaemia, growth monitoring
- Diarrhoea
- Postnatal care: new-born danger signs, cord care, hypothermia
- Child health, Rashtriya Bal Swasthya Karyakram (RBSK)
- Delivery: institution, pre-term, home, ambulance
- Maternal nutrition/ anaemia/ IFA
- Safe drinking/ hygiene/ hand washing
- Janani Shishu Suraksha Karyakram (JSSK)
- Pneumonia

- Childhood diseases
 - Test for pregnancy
 - Malaria
- 68.1% of the beneficiaries at the national level responded that they received information about financial schemes by the government from Kilkari.
- 98.2% of the beneficiaries from Haryana responded that they received information about financial government schemes from Kilkari.



Graph 4.4 Information about Financial Government Schemes from Kilkari

4.3.4 Practice of Information Learned from Kilkari

Almost all the beneficiaries responded that they made behavioural changes after listening to Kilkari.

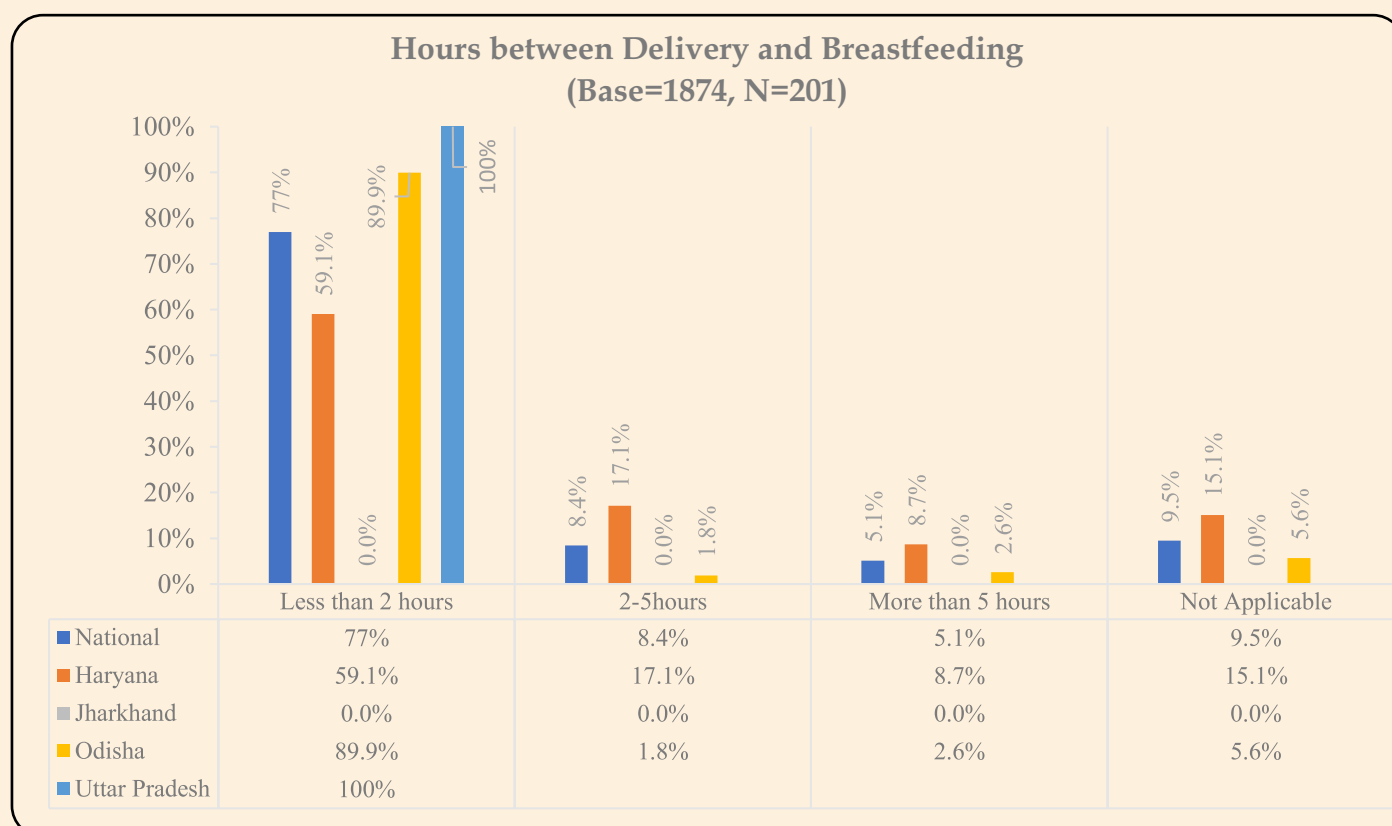
- 99.5% of the beneficiaries at the national level said that they made behavioural changes after Kilkari, with 100% of the respondents in Uttar Pradesh responding the same.

- Almost all beneficiaries had put into practice advice from Kilkari on maternal health indicators, particularly that of taking 2 Tetanus Toxoid (TT) Vaccine Doses and Iron Folic Acid (IFA) Supplements.
- All the respondents had made visits to receive check-ups during their pregnancy. The Ante-Natal Care (ANC) visits were categorised in two groups, up to 4 ANC visits and more than 4 ANC visits.
- Most of the respondents had had more than 4 ANC visits, a total of 68.6% at the national level. All beneficiaries from Uttar Pradesh had received up to 4 ANC check-ups.
- 86% of the beneficiaries in Haryana had received more than 4 ANC check-ups.
- At the national level, 89.9% of the beneficiaries had not visited for check-ups after their pregnancy, thus reflecting low levels of Post-Natal Care (PNC). Only 9.2% of the beneficiaries at the national level had made up to 4 PNC visits.
- 33.3% of the respondents in Uttar Pradesh had made up to 4 PNC visits, followed by 12.9% of the respondents in Haryana.

Table 4.8 Practice regarding Maternal Health Indicators (Base = 1874, N = 201)

Maternal Health Indicators		National	Haryana	Odisha	Uttar Pradesh
Immunisation and Nutrition Taken	2 TT Doses	99.6%	99.1%	100%	100%
	IFA Supplements	97.2%	93.3%	100%	100%
Number of ANC Visits	Up to 4 ANC	31.4%	14%	31.6%	100%
	> 4 ANC	68.6%	86%	68.4%	0%
Number of PNC Visits	No PNC	89.9%	87.1%	97.9%	66.7%
	Up to 4 PNC	9.2%	12.9%	0.3%	33.3%
	> 4 PNC	0.8%	0%	1.8%	0%
Practice regarding care of infants and young children					
Hours between delivery and breastfeeding	< 2 hours	77%	59.1%	89.9%	100%
	2-5 hours	8.4%	17.1%	1.8%	0%
	> 5 hours	5.1%	8.7%	2.6%	0%
	Not Applicable	9.5%	15.1%	5.6%	0%
Fed child with iron-rich food		100%	100%	100%	0%

- In terms of practice related to the care of infants and young children, all the beneficiaries apart from those in Uttar Pradesh and Jharkhand responded that they had fed the child iron rich food.
- 77% of the beneficiaries at the national level responded that they breastfed the infant in less than 2 hours after the delivery. All the respondents in Uttar Pradesh followed this practice, while 89.9% in Odisha and 59.1% in Haryana did the same.



Graph 4.5 Hours between Delivery and Breastfeeding

- The new-born care practices that beneficiaries followed included:
 - Breastfeeding within 2 hours of delivery and timely breastfeeding after that.
 - Maintaining hygiene and sanitation.
 - Ensuring immunisation of the infant.

It is thus evident that beneficiaries were able to translate most of what they had learned through Kilhari into practice, indicating that the Kilhari program positively impacted the practice of maternal and child healthcare.

4.3.5 Beneficiary Feedback and Suggestions on program content

- Beneficiaries of Kilkari posited that none of the information they received through the service was unnecessary.
- Beneficiaries felt that additional information was needed on the following:
 - Information about blood pressure and other pregnancy related complications
 - Information about COVID and other infectious diseases.
 - Information about illness in children such as cold, dengue, malaria, jaundice, and epilepsy
 - 98.9% of the respondents had no complaints about Kilkari. Those that did, were concerning language barriers and network connectivity.

4.3.6 Beneficiary Suggestions on program design constraints

- On an average only 49.6% of beneficiaries preferred receiving messages in the afternoon.
- Beneficiaries suggested that those who have missed calls be called back to deliver the messages.
- Beneficiaries also suggested that the scope of Kilkari be broadened beyond just delivering automated messages by including mechanisms for beneficiaries to interact and speak regarding the messages they receive.

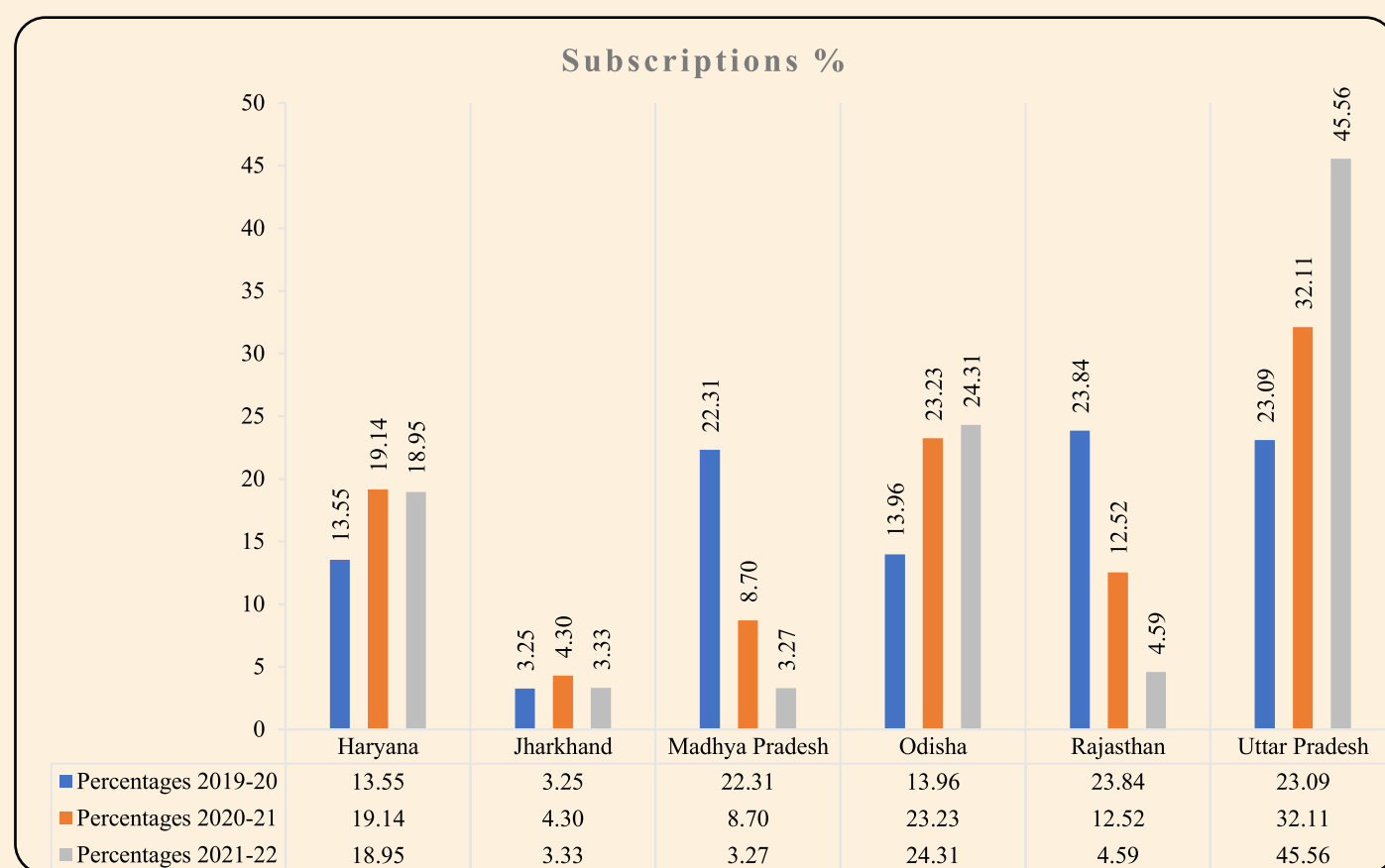
4.4. Analysis of data/report submitted by the agency to the ministry

The data of the program performance has been purely handled by the ARMMAN agency, reporting to the ministry through an IT platform. It has been linked with a Management Information System portal and was accessible at the ministerial level. For this evaluation, the reports/data submitted by the agency to the ministry during the period of 2019-2021 was sought from MMP cell.

During the evaluation, it was found that, follow-up of the program was near to inconsequential due to lack of priority for Kilkari Program, poor monitoring and evaluation and poor governance at state and below level. At the block level, the beneficiary's mobile number is registered at the time of ANC registration at facility level, or through ASHA during household visit in the community. The key observations from the reports/ data submitted by the agency to the ministry is mentioned below.

- The definition of the indicators used in the datasets shared by MMP Cell were not clear
- Data were overlapping with carry-overs from previous years data
- The sub-totals were not defined clearly

The utilisation representation is based on secondary data provided by the MMP cell. The data may have overlaps or carryovers from previous years. The MCTS app/RCH app will uptake the mobile numbers of pregnant women once it is registered. This will be absorbed by the MOTECH mechanism of the course operators. As per the program protocol, it does not accept any repeated or incorrect, or wrong mobile numbers which is then used to make system generated IVRS calls.

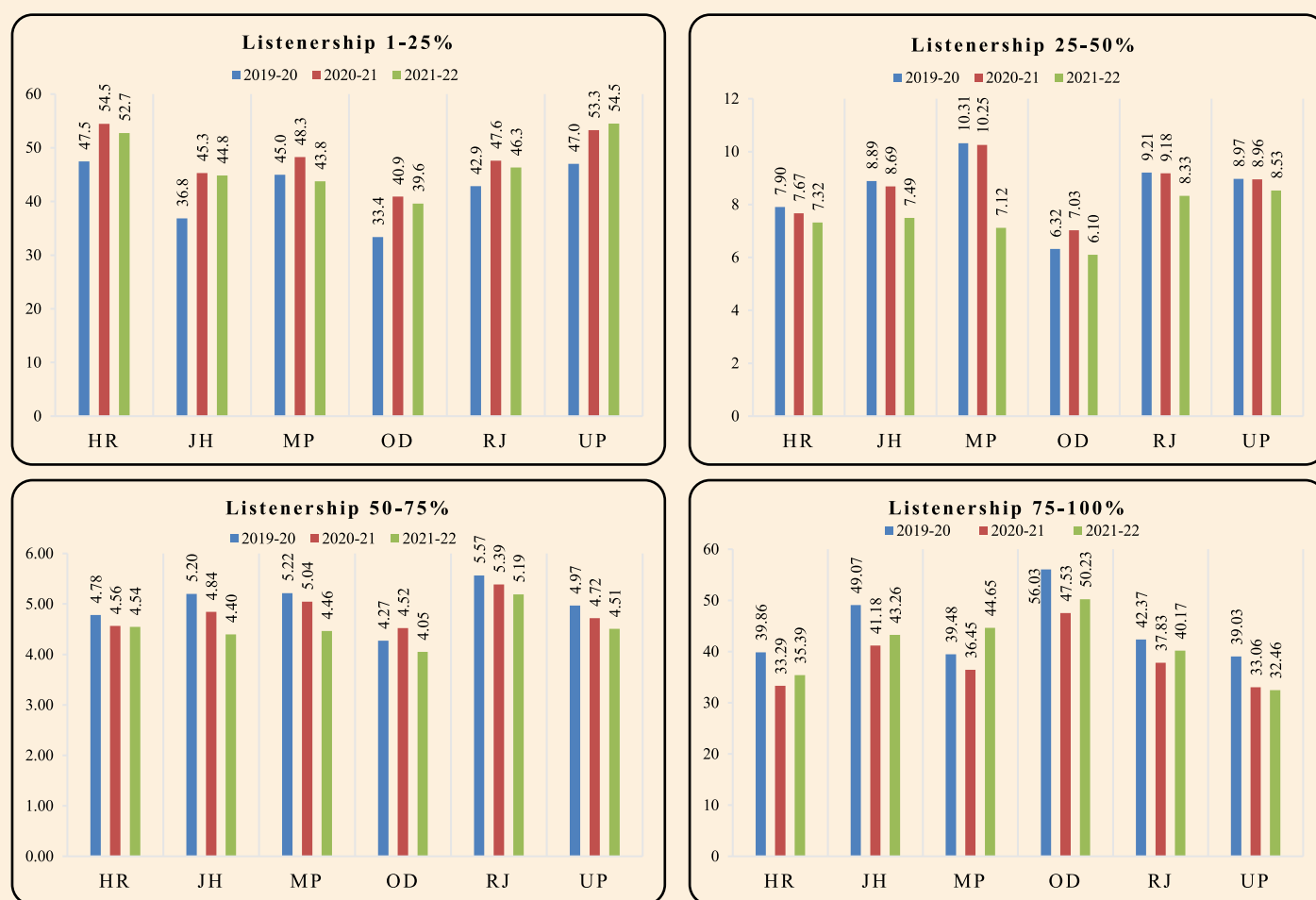


Graph 4.6 Subscriptions %

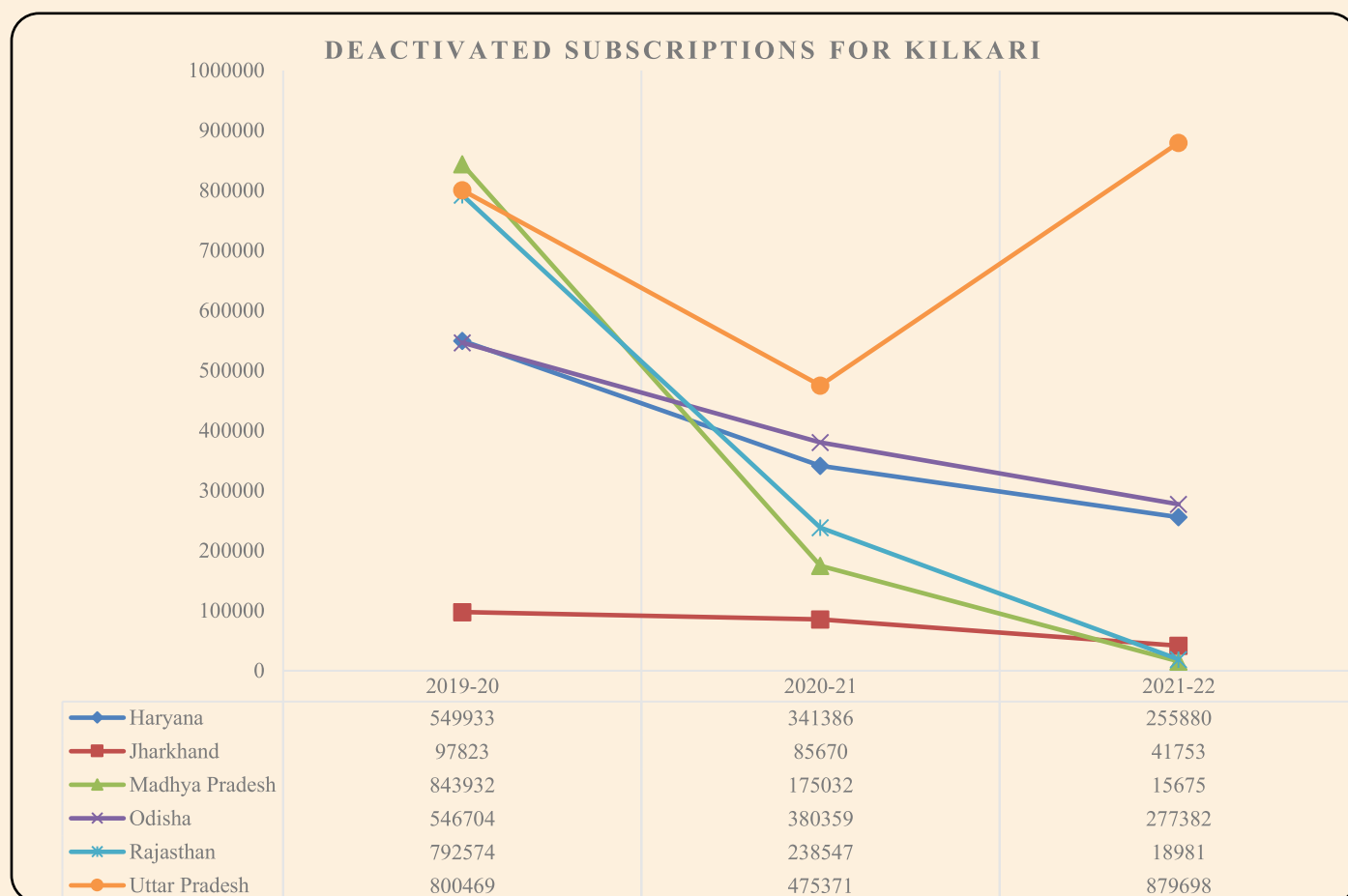
Graph 4.6 explains the status of Kilkari subscription in states. When we look at the data of these 6 states over the last 3 years, U.P has highest number of subscriptions as compared to the

other states over the last three years which is 23.09%, 32.22% and 45.56% in FY 2019-20, 2020-21 & 2021-22 respectively. Jharkhand recorded lowest percentage of subscriptions over the last three FY which is 3.25%, 4.30% and 3.33% respectively i.e., it never crossed even 5% subscription rate. The percentage of subscription declined in Madhya Pradesh and Rajasthan in last three years resulting into downwards trend whereas Odisha and Uttar Pradesh performed well with increasing trend in last three years. None of the states under this evaluation study crossed 50% subscription in any FY which is quiet concerning. Except Uttar Pradesh, none of the states crossed 25% subscription rate in any of the FY.

Graph 4.7 Status of Listenership of Kilkari Program



Graph 4.7 provides the status of listenership of Kilkari content in Haryana, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh from 2019-2021. The graph has four parts with listenership status 1-25%, 25-50%, 50-75%, and 75-100%. Out of the states included for the study U.P has recorded the highest percentage of people listening to almost 1-25% of the Kilkari messages while Odisha reports the lowest percentage. In terms of overall listenership Odisha has the highest listenership of 75-90%. When we look at the overall percentage of listenership, larger percentage of beneficiaries were either listening to at least 75-100% of the content or only 1-25% of the content.



Graph 4.8 Deactivation of Kilkari Subscriptions

When we look at the trend of subscription deactivation (Graph 4.8), U.P records the highest number of deactivations over the years while Jharkhand seems to have lower deactivation over the years. Where in 2020-21 there was a slight fall in the total number of subscriptions that were deactivated which could be attributed to the COVID as well when listenership may have increased across the states.

Chapter 5: Strength and Limitations

5.1. Project Limitations

The project was implemented in 2015 which varied across states and districts and over time its usage has waned along with the number of beneficiaries accessing and using it. Since the assessment is done in 2022, the responses from block, district, and beneficiaries may include higher degree of recall bias. The extent of actual implementation of the program may have been even lower than what has been recalled as little or no records were available with block and district level officials. Moreover, the states were not clear about the exact date of rollout of the program in their respective districts. Lower to no accessibility of mobile phones made it difficult for some beneficiaries to receive the audio messages, in which case ASHAs numbers were registered as beneficiaries for receiving the audio messages. As per our observations there was a lack of monitoring of program at state and district level. As well as no monthly or annual reports were submitted by the districts to their respective states. Additionally, implementing agency for Kilkari did not have any officials in place at districts to monitor the program-related activities.

One of the limitations was the unavailability of beneficiaries registered for 2019, 2020 and 2021 at all the PHCs in the state and for the PHC Selected due to maximum beneficiaries served under the catchment area. Due to this limitation, average numbers have been taken across the three years to fill in gaps wherever data was not available. So, the sample weights may not be a true representation of the beneficiaries in all 13 States.

Furthermore, beneficiaries did not have any means to communicate with the officials for their queries or feedback related to Kilkari content. Some key limitations which were assessed during the evaluation are as follows:

1. Poor network connectivity issues related to Kilkari- there were frequently reported cases of call drop due to network issues as well as beneficiaries receiving less to no call was reported
2. Some of the officials had noted concerns that the Kilkari audio messages sound akin to telemarketing calls, potentially resulting in low listenership.

3. Beneficiaries change number without informing ASHAs or give someone else's number (ASHA or family member) for registration on RCH portal leading to possible deactivation of services
4. Kilkari messages are delivered in Hindi and not in local language which makes it difficult for some of the beneficiaries in rural areas to understand
5. Lack of focus on program by government officials- no regular monitoring or implementation of the program at state or district level was reported
6. No regular monitoring or assessment of program
7. Difficult to update numbers in database
8. Poor coverage as beneficiaries from Jharkhand were not aware of Kilkari program
9. Poor governance and monitoring mechanism

5.2. Project Strengths

Kilkari was found useful in terms of content and helped improve beneficiaries' knowledge of the routine health check-up that are needed for pregnant women and children. The information provided through audio messages were helpful in terms of ante and postnatal care as well as nutrition. Many beneficiaries could listen to it comfortably and get re-oriented to the routine check-up, vaccination schedule of children and nutrition at the ease of their home. The affect component was found to be good but was limited to only those who could register and were regularly receiving the audio messages. Beneficiaries stated that these audio messages were especially helpful during the COVID pandemic since they were not able to visit the health facilities for any doubt clarification. The messages were specially tailored according to the gestational period of each beneficiary which gave them a sense of acknowledgement and was helpful in giving timely information to beneficiaries about the appropriate healthcare services to be sought. Kilkari complemented ASHAs work of mobilising beneficiaries to access health services and reduced the burden on them. It also proved useful during the pandemic when it was difficult to hold physical visits and awareness campaigns to encourage healthcare seeking behaviour.

5.3. Benefits of the Program

1. Audio messages are informative and cover all the aspects of pre- and post-natal care
2. During COVID time beneficiaries were given information about ante-natal care and post-natal care which proved beneficial

3. They provide timely and relevant messages according to the gestational period and childcare
4. Audio messages were supporting ASHAs in their activities by providing additional information on pre- and post-natal care

Chapter 6: Recommendations

Through the IDIs conducted with state and district officials many respondents suggested that there is a sound need for strengthening Kilkari project. Wherein some of the states were content with the performance of the project, there were a handful of respondents who shed light on what could be done for further strengthening and proper utilisation of Kilkari Project. Listed below are recommendations that emerged during the discussion:

1. Community Health Workers should be trained better to increase the reach of Kilkari
2. Recommended that designated consultants be appointed for implementation and monitoring of Kilkari to ensure timely feedback to address emerging issues.
3. Content of Kilkari be made more engaging by incorporating audio or video content to retain the interest of beneficiaries.
4. Some beneficiaries faced language barriers in understanding the messages from Kilkari. To address this, state/district officials recommended that the content of Kilkari be updated to cater to the needs of beneficiaries, especially that of tribal populations.
5. Audio message should be in printed form for later reference
6. Content should cater to tribal populations as well by making the content available in local languages as well
7. The speed of the message should be slower for beneficiaries to understand.
8. IEC activities at sub-centres should also be added in the program
9. Reduce length of and waiting time for messages in order to engage beneficiaries
10. Close monitoring of program and feedback mechanism for beneficiaries
11. Need for content updating to create awareness among beneficiaries

6.1. Recommendations for Implementing Agency

1. Making the database available to district officials for decision making and policy planning
2. Monthly or annual review of the program at state level to monitor the performance of the districts and operational guidelines for data reporting
3. A nodal officer should be available at each state to review the performance along with the state officials
4. Set up a mechanism for resolution of queries related to programs as well as feedback mechanism for the beneficiaries
5. Yearly content updating of the audio messages along with some video content to make them more engaging for the beneficiaries
6. Kilkari messages should be communicated through television or other mass media communications in areas with network connectivity issues.

Chapter 7: Conclusion

The demographic characteristics of the respondents indicate that the potential beneficiaries of Kilkari are young women with varying level of education who are financially dependent on their spouses. This socio-economic location of women indicates that women might not have access to phones, on which the use of Kilkari is hinged. A considerable portion of the respondents to this study dropped out because they were not aware of Kilkari. This illustrates that awareness of Kilkari needs to be increased to ensure that it reaches the greatest number of beneficiaries possible. The reach of Kilkari was severely inhibited by the lack of awareness about the programme. However, for its beneficiaries the service was greatly impactful in creating awareness of maternal and child healthcare practices amongst them and mobilising them to act on advice regarding the same. The beneficiary feedback for the service was also largely positive and included some recommendations to improve it further. Overall, Kilkari was well received and of great impact amongst its beneficiaries who received the messages but was poorly implemented and needs strengthening to make an impact.

Part B

Evaluation of Mobile Academy Project

Chapter 8: Introduction

8.1. Mobile Academy

Maternal Health is an important aspect for the development of any country in terms of increasing equity & reducing poverty. The survival and well-being of mothers is not only important in their own right but are also central to solving large broader, economic, social, and developmental challenges. Government of India adopted the Reproductive, Maternal, New-born, Child, and Adolescent Health (RMNCH+A) framework in 2013, It essentially aims to address the major causes of mortality and morbidity among women and children. This framework also helps to understand the delays in accessing and utilizing health care services. The Ministry of Health and Family Welfare (MOHFW) lists antenatal care, consumption of IFA supplements, delivery care such as institutional and home births, child vaccinations, treatment of diseases in children under five years of age, child feeding practices and nutrition of children as important indicators of maternal and child health. Antenatal Care (ANC) services include health check-ups during pregnancy that consist of women having their weight measured, blood sample taken, abdomen examined and their blood pressure measured. ANC also includes vaccination of pregnant women with tetanus toxoid (TT) and provision of information related to complications during pregnancy. Pregnant women are also advised to consume and provided with Iron Folic Acid (IFA) supplements as a part of ANC. While institutional births are always encouraged, it is a fact that many women still undergo births at home for various reasons. Thus, maternal health indicators also take into consideration skilled birth assistance during the delivery i.e., the presence of doctors, nurses, mid-wives, auxiliary nurse mid-wives and ASHAs. Child health indicators also include immunisation, treatment of childhood diseases like diarrhoea, child feeding practices such as exclusive breastfeeding up to 6 months, etc.

The services related to these maternal and child health indicators are embedded in the public health system through various schemes and programs that encourage beneficiaries to avail these healthcare facilities. Despite these continuous and persistent efforts, however, maternal and child healthcare services have not been able to penetrate the most vulnerable populations of the nation. The reasons for this are varied but often marked by the lack of awareness about public health facilities and reluctance to engage with the public health system. To bridge this gap between the community and the public health system, ASHA started working as a link to act as an interface between the community and the public health system under the National Health Mission.

The role of an ASHA mainly comprises three such service providers, facilitators, and an activist. Also, several different responsibilities, such as being the source of community participation in public health initiatives as the point of contact between the community and the healthcare system. ASHAs are also empowered to deliver first-contact healthcare. Not only are ASHAs responsible for creating awareness about mobilizing the community towards existing healthcare facilities but also have a responsibility to reach out to vulnerable populations that do not have access to healthcare, such as women and children. Within the ambit of the public health system, the main focus of ASHAs is related to creating awareness about nutrition, sanitation, and hygiene; and ensuring that women receive health advice and healthcare concerning their sexual and reproductive health. Across their various responsibilities then, ASHAs' underlying role is to connect beneficiaries, such as pregnant women and mothers of infants, to public health initiatives intended for them.

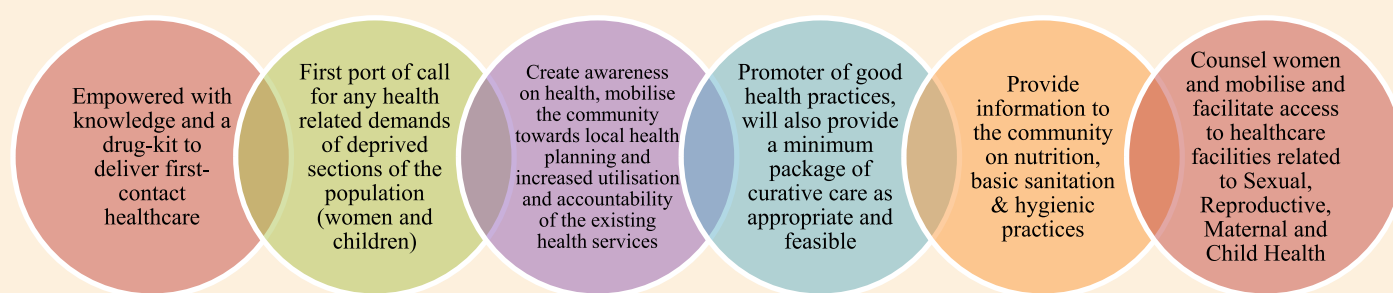


Figure 8.1 Few roles of ASHAs related to Maternal Health as Community Health Workers¹⁷

While the government of India runs a plethora of schemes for maternal and child health, institutional interventions are often limited in their reach when it comes to practice. They must be complemented with knowledge and awareness about healthy practices, which can be strengthened through community participation. While healthcare services are made available at public health centres, their uptake by beneficiaries depends on their consciousness about those services for them. The IEC activities done by ASHA in spreading health-related service availability information is valuable and irreplaceable for the behaviour change communication in the community. The kind of sustained behavioural change required is difficult to hold and needs to be reinforced again and again. With the constant developments in the national health programs, policy documents and guidelines, ASHAs is expected to well-run in their roles by consistently learning and performing their duties in the fields. Technological interventions, on the other hand, have not only eased management and follow-up but also have high uptake by their end users. This creates the need for refresher

¹⁷ About Accredited Social Health Activist (ASHA). Retrieved from <http://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>

training of ASHAs, which otherwise can be difficult to regularly update the records and disseminate the information easily in a way that adds to the existing institutional mechanism keeping the overall spirit intact but also catering to the need of the audiences. Recognizing this potential of technology, the health sector has also forayed into healthcare technologies.

Health technology continues to push the boundaries of how healthcare is delivered and has the power to create breakthroughs in our understanding of our health conditions. Towards prevention, health awareness campaigns on use of technology has proved to be an effective measure to reach a wider population more effectively. Employing technologies in initiatives such as mHealth (mobile health) to reach out to underserved populations. Leveraging the penetration of mobile phones, the Government of India launched the Mobile Academy Project in 2012, scaled up to cover 13 States, namely Assam, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, Uttar Pradesh, and West Bengal. Later, it was further expanded to four States/UTs where it was implemented in Hindi language in Chandigarh, Jammu & Kashmir, and Andaman & Nicobar Island and in Bengali language in Tripura. Till date (2022), the Kilkari program is implemented in four languages only namely, Hindi, Odiya, Assamese, and Bengali.

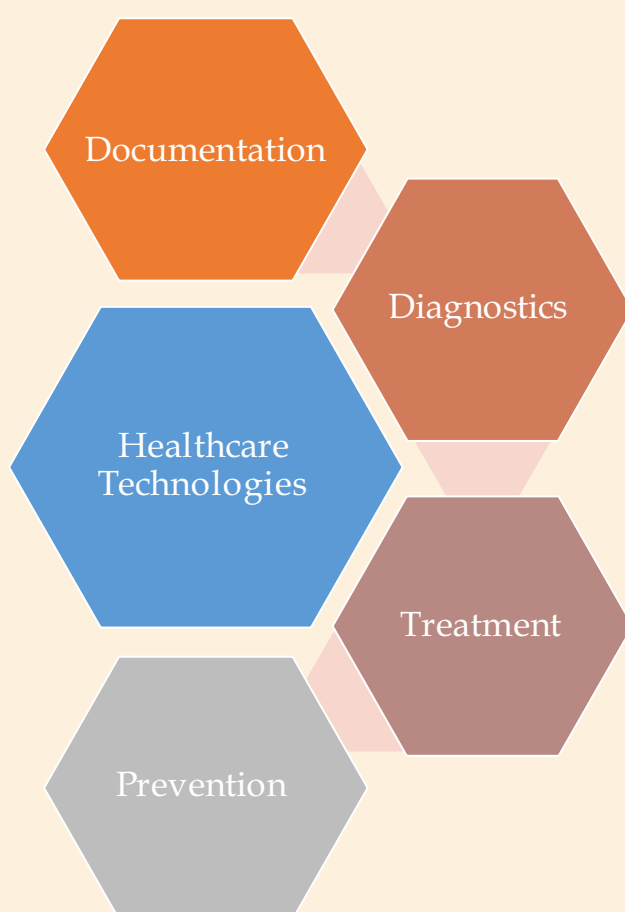


Figure 8.2 Areas of Healthcare Technology Interventions

Chapter 9: Program Design

9.1. Mobile Academy

ASHA plays the role of an activist who works for social change in the community. Her role is three-fold: as a facilitator of health services who links people to healthcare facilities, as a provider of community-level health care, and as an activist, who enables people to access their entitlements by building their understanding of health rights. As a part of Ayushman Bharat- Health and Wellness Centres, the role of ASHA got expanded to other functionalities such as NCD, TB, Mental Health etc, She works primarily to reduce inequities and improve the access of marginalized and disadvantaged to public health services¹⁸. Some of the primary functions of ASHAs include counselling women on birth preparedness, the importance of safe delivery, breastfeeding and complementary feeding, immunisation, contraception and care of the young child¹⁹. While these subjects are a fundamental part of the induction training provided to ASHAs, refresher training is also required to prevent loss of acquired skills and knowledge. ASHAs can gain confidence of the community by fulfilling their role more effectively with continuous training and support, which in turn increases the acceptability of services provided by them.

In 2012, BBC Media Action created an Interactive Voice Response (IVR) based refresher training course called Mobile Academy, under the Ananya Initiative in Bihar, with the goal of improving maternal and child health through community health workers. Ministry of Health and Family Welfare adopted the mLearning programme in 2014 and co-created a revised national version with BBC Media Action which was rolled out in November 2015. It provides inexpensive, standardized, and high-quality learning to the ASHAs at the time and location of their choice, without disrupting routine service delivery. The information provided through Mobile Academy would help in upgrading the medical and health skills of ASHAs by refreshing their knowledge of life



Figure 9.1 Mobile Academy Poster

¹⁸Induction Training Module for ASHAs in Urban Areas. Retrieved from http://nhm.gov.in/images/pdf/NUHM/Training-Module/Induction_Training_Module_for_ASHAs.pdf

¹⁹About Accredited Social Health Activist (ASHA). Retrieved from <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>

saving preventive reproductive, maternal, neonatal and child health behaviours. It works in tandem with Kilkari (IVR based mHealth service for increasing awareness about healthy practices in pregnant women and mothers of infants) to reinforce the information disseminated through Kilkari.

The database for Mobile Academy is drawn from the respective State RCH Portal/ASHAsoft/PCTS app where ASHAs numbers are registered. ASHAs who have registered their number on the State RCH Portal through DPMU²⁰ & SPMU²¹ can make calls on the toll-free number (18003101704 and or 14424) for Mobile Academy. Once the ASHAs are registered, they can avail the course content by simply calling the toll-free number. ASHAs can listen to the pre-recorded audio lessons and participate in the quiz at the end of each lesson using digit keys on their mobile phones. This interactive refresher course spans across eleven lessons with a four-question quiz at the end of each lesson making it a total of 44 (4 for each of the 11 lessons) quiz questions. They can repeat the lessons and quizzes as per their needs. The ASHAs are expected to score at least fifty percent of the total marks i.e., 22 out of 44, in order to qualify for the course. Upon qualifying for the course, they are awarded an academy course certificate either in monthly sector meeting or personally through district officials/ASHA facilitator issued by their respective DPMU/ SPMU. These certificates are intended to instil motivation amongst ASHA and to develop interest in getting the training online.

The Mobile Academy has been designed to be easily accessible and located in the local contexts of its intended users and is available in four languages - Hindi, Oriya, Assamese, and Bengali. To ensure that the Routine services provided by ASHAs continue uninterrupted, they can call as per their convenience and complete the course in multiple sessions, picking up the course from where they left off previously.

²⁰DPMU – District Programme Management Unit

²¹SPMU – State Programme Management Unit

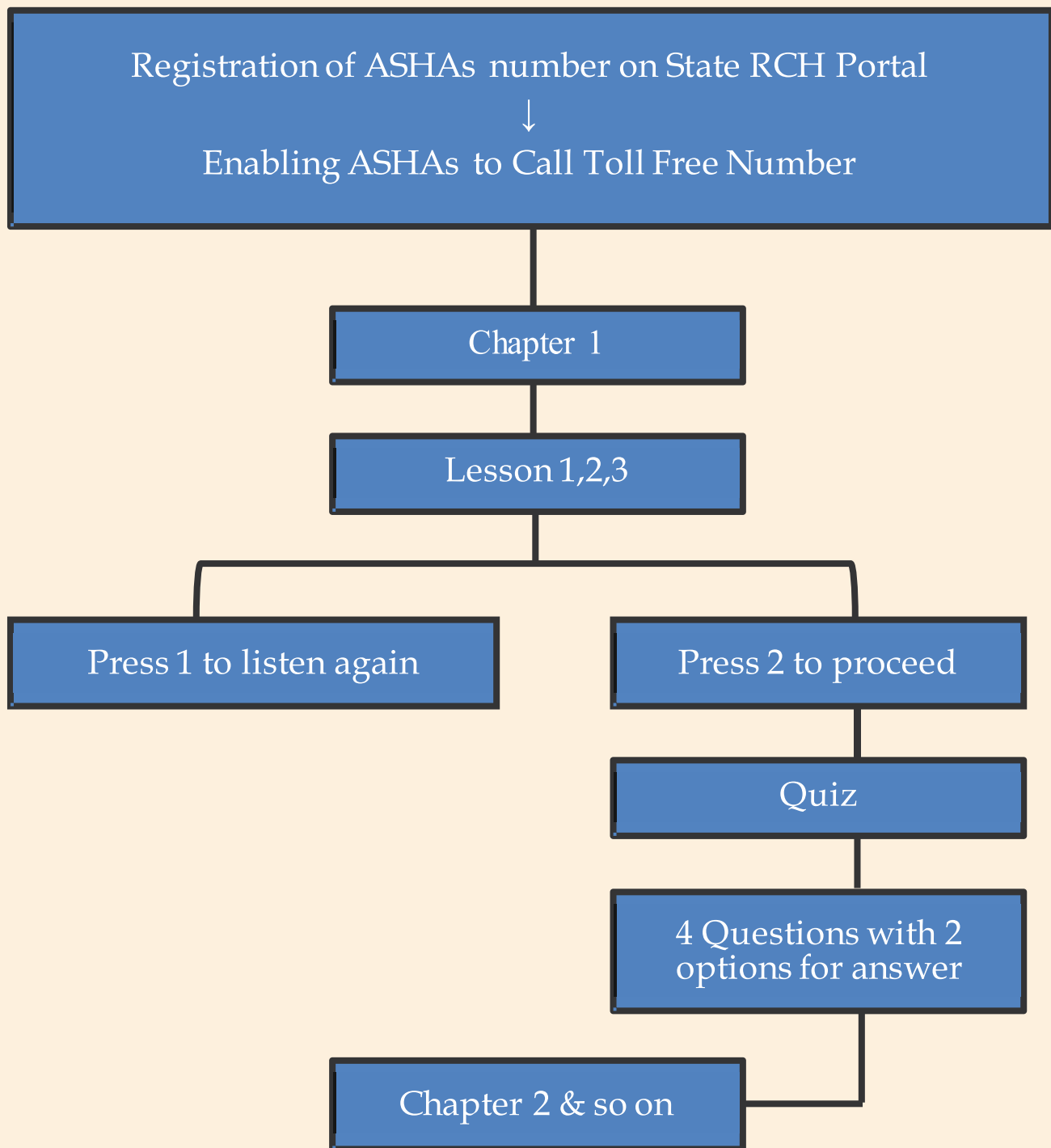


Figure 9.2 Workflow of IVRS Based Mobile Academy Training

Chapter 10: Evaluation Method of Project

10.1. Rationale for Evaluation

Mobile Learning (mLearning) training programmes involve multiple paradigm shifts when compared with traditional face to face training approaches and are influenced by various contextual factors. The extent of these contextual factors varies at the level of implementers as well as beneficiaries. The novelty of the initiative along with the significant investment of public funds towards the Mobile Academy mLearning programme warrants its thorough monitoring for ensuring success in the achievement of its targets. An insight into the ground level realities reflecting the actual status of programme performance and its impact on the target audience is imperative to make evidence informed decisions regarding the continuation or upscaling of the programme.

National Health Systems Resource Centre (NHSRC) was mandated to undertake third party evaluation to understand the uptake and impact of Mobile Academy on capacity building of ASHAs and thereby help in Health Systems Strengthening. The rationale behind this study thus, is to assess the quality, reach and uptake of services that Mobile Academy has made in training ASHAs to deliver routine healthcare services in the community during the years 2019-2021 and to provide recommendations for strengthening the project.

10.2. Objectives

The objectives of the study pertaining to evaluation of the Mobile Academy Project in the years 2019-2021 are listed below:

- To review the records, reports of Mobile Academy during 2019-2021
- To assess the quality, reach, uptake of services and also satisfaction with services under Mobile Academy Project at the end user level during 2019-2021

10.3. Design

This formative evaluation study was designed with mixed methods cross sectional approach focusing on the outcome and exposure to the Mobile Academy Project in order to assess the quality, reach & uptake of services and satisfaction with services under Mobile Academy amongst ASHAs. Secondary data like previous reports and call data records were used to understand the coverage, user engagement, initiation, and completion rate of the course during the years 2019-2021. The duration of the study was six months.

10.4. Sampling

Multistage Cluster Sampling was employed for this study. The study samples were drawn from Haryana, Rajasthan, Uttar Pradesh, and Madhya Pradesh based on their performances in the preceding years, which was provided by MMP Cell. The selection criteria of these were based on proportion to the performance of listenership among the 13 states with the Mobile Academy project in place, where two good-performing (Rajasthan and Haryana) and two low-performing states (Madhya Pradesh and Uttar Pradesh) were selected. In selected states, two districts were chosen based on their performance, i.e., the best and least performing districts to understand the range of services provided by Mobile Academy. Under each district, Primary Health Centre (PHC)/HWC PHC with the highest serving population was selected. All Sub Centres including Health and Wellness Centre Sub-centres (HWC) under the selected PHCs were included in the study.

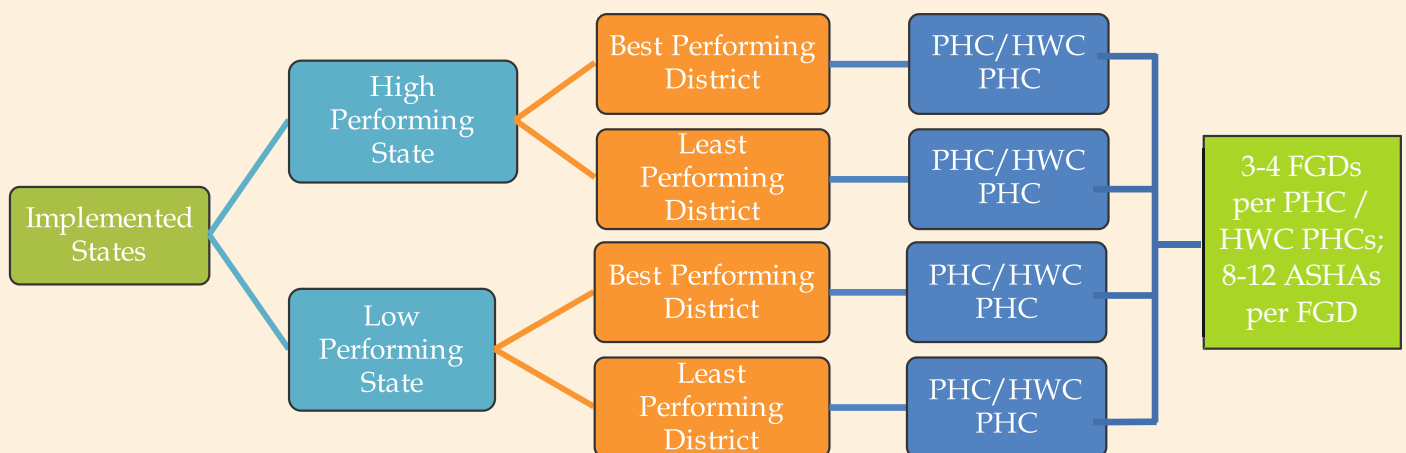


Figure 10.1 Multistage Cluster Sampling for Mobile Academy Project

All the ASHAs under the selected PHC/HWC-PHC, were included in Focus Group Discussions (FGDs). Each HWC-SC under selected PHC was represented by 3-4 FGDs, each FGD consisting of 8-12 ASHAs. Thus, one district was represented by at least 3 sample units (sample unit = 1 FGD) consisting of 8-12 ASHAs. The information saturation principle was used in deciding the total number of FGDs from each selected PHC/HWC-PHC.

A total of 41 FGDs were conducted as part of this study, across the four states of Rajasthan, Uttar Pradesh, Haryana, and Madhya Pradesh. The FGDs were conducted amongst two groups, Group A questionnaire for ASHAs who had taken Mobile Academy Course before, and Group B ASHAs who had not taken Mobile Academy training. Some of the FGDs were of

ASHA supervisors and facilitators as well, those who used to be ASHAs once between 2019-2021. The inclusion and exclusion criteria for the FGDs are indicated below.

Box - 1 : Inclusion and Exclusion Criteria for the FGDs	
Inclusion	Exclusion
1. Mobile Academy implemented districts and states.	1. Those unavailable at the first three attempts of contact.
2. All ASHAs under selected PHC/HWC	2. Non-residents of the area.

10.5. *Data Collection Tools

The Focus Group Discussions and In-depth Interviews helped in gaining an in-depth understanding of the experience of availing the Mobile Academy course and evaluating its performance. The FGD guide was pilot-tested, structured, and open-ended in nature. Field staff were trained through 2 days in person training at NHSRC for not only on how they must conduct the FGDs but also how they must record the responses and update the records onto the server to maintain the quality of data.

It revealed ASHAs perceptions regarding Mobile Academy through questions such as whether they found Mobile Academy easy, accessible, mid-training experiences, and how things had changed for them after they finished the course. FGDs enabled diverse opinions and perceptions of ASHAs to come to the fore, also illustrating common responses to the questions discussed. The qualitative method of data collection helped glean information on a range of subjects concerning the impact, roll out and uptake of Mobile Academy on ASHAs including perceptions of community and ASHAs who had (and had not) taken the course, ASHAs confidence in their work after the course, their preferred modes of training, feedback, and suggestions etc. The FGD guides were created and translated to local languages before collecting from the field. The FGD topic guide was prepared keeping two groups of ASHAs in mind - those who had undergone Mobile Academy refresher course (group A) and those who hadn't (group B).

Before approaching ASHAs at the selected PHCs & HWC-SC, the field team co-ordinated with the State and District officials for data collection and related support. All the team members had active coordination during the entire data collection process and daily reporting was done through the appropriate method. All possible efforts were made by

NHSRC to resolve the field-level technical issues and other challenges faced by the data collection team. The FGDs were conducted following COVID protocols. However, detailed notes were taken in cases where the respondents agreed to the interview but denied audio recording.

All the audio-recorded transcripts were then transcribed and translated into English, following which the emerging data was organized, coded, and analysed to identify key themes. Since the topic guide was structured in a thematic manner, relevant and recurring themes within these topics were focused on in the analysis. The key findings from the specific study sample were used to draw upon and represent a larger understanding of the end-user impact of the Mobile Academy project. Thus, the analysis was inductive in nature, extrapolated from the key findings based on the study sample. Further, the analysis was done across themes, delving into factors that affect the impact of the Mobile Academy and how they operate. Such an understanding enabled the formulation of pertinent recommendations to strengthen the project.

The In-Depth Interviews (IDIs) with District Officials were also essential to understand their perspectives on Mobile Academy. IDIs were characterized by a one-on-one engagement with district officials, enabling rapport building which created the space for district officials to open in detail about their perceptions of Mobile Academy. The IDI guide spanned across five major themes of Governance, Implementation, Utilisation, Monitoring, Challenges, and Suggestions covering questions concerning the planning, implementation, relevance, monitoring, and feedback for Mobile Academy.

10.6. Quality Monitoring Steps

The following steps were taken to help ensure quality data collection:

- The study instruments were pilot-tested and standardized before they were finalized.
- To ensure that no language and socio-cultural barriers were present, the Supervisors and State Coordinators were recruited from within the region.
- To prepare the field staff for undertaking fieldwork, they were given training for 2 days at NHSRC. Moreover, after initial briefings, the field staff were required to undertake mock interviews and role plays in order to get sufficient exposure to the nature of work requirements.
- Doubt-clearing sessions were held and a detailed set of instructions was issued to the survey teams for ensuring quality data collection.
- The field teams were deployed within a week of training to collect the required primary data from the targeted respondents in the allotted locations.

- Supportive supervision of the Core team of experts was provided to the Data Collectors to ensure the quality of data collection. Refresher orientations were also conducted as per the requirement.
- Regular spot checks and back checks were conducted by the supervisors and NHSRC Team members to ensure the completeness and consistency of interviews and FGDs taken by the Field Team.
- The scanned images of the collected interview protocols, the field diaries/ notes maintained by the data collectors, and the audio recordings of the interviews were duly uploaded to the agreed-upon server by the Supervisors after checking for inconsistencies at the end of each day. On the same day, the headquarter team synced the data from various locations to the common database. This process was done to ensure the backup of data at all levels on a regular basis.
- The back-office teams accessed the data and immediately started working on the transcription and translation of the Audio recordings.

10.7. Ethical Considerations

Prior Institutional Ethical Clearance was taken from the IEC Committee of the National Health Systems Resource Centre. All research ethics including but not limited to voluntary participation, informed consent, anonymity, and confidentiality was ensured during data collection. Only those who voluntarily agreed to be a part of the data collection exercise were asked for further appointments. It was ensured that the data collection exercise was taken up at the convenience of the participants for which appointments were made well in advance. Before the interview participants were duly informed in the local language (preferably in Hindi) about the detailed purpose of the exercise, their rights during the interview, do's and don'ts during the interview, and the implications of participation and were asked to make the decision freely without any pressure or coercion. Support from the district and block team was taken to build rapport with the respondents, however, the FGDs were conducted in absence of any local-level officials.

Also, while conducting the interviews, particular care was taken to ensure the confidentiality of information collected from the participants and also to protect their respective identities. For the same, all information collected from the participants was duly de-identified in order to masquerade all personal information that can reveal the identity of participants. Efforts were made to gain privacy from the beginning so that the participants could share their views freely. It was emphasized that under no circumstances, the field supervisor would be allowed to share the personal information of the research subjects with any external or internal source.

Chapter 11: National Level Report

11.1. State and District official's perspectives

In-Depth Interviews with District officials illustrated various facets of planning and implementation of Mobile Academy (MA) and the ensuing challenges, which prompted varied suggestions from district officials. We could perform in-depth interviews with state representatives of all four selected states i.e., Uttar Pradesh, Madhya Pradesh, Haryana, and Rajasthan. All the state representatives shared their experiences, views, and suggestions on the Mobile Academy course. All of them were practicing public health for more than 5 years and had a clear perception of the uptake or acceptance of this training course by the ASHAs. The five main themes that emerged from the responses of the IDIs were Governance, Implementation, Utilisation, Monitoring, Challenges, and Suggestions.

11.2. Themes

11.2.1 Governance

All the officials agreed to the fact that the introduction of health technology into the healthcare system is beneficial, especially during the time of COVID-19. According to officials, the health care technologies enabled faster reach to the community, and also the collection and maintenance of data. And they remember well that there was no budget allocation for its implementation.

“Alag se is program k liye koi fund allocation to tha nahi... ye 1 bada negative point raha is program k liye kunki at least thoda fund to chahiye hi hota hai kisi bhi program ko run karne k liye... kuch financial norm to hone chahiye they is program k liye hamne isko routine ke jo process hai unke sath hi implement kiya tha ... ye RoP ke through budgeted nahi thi”

-State Official

11.2.2 Implementation

According to the officials, the implementation and initial training for the Mobile Academy course implementation was done in 2015-2016 and that was the only training given to them. The training sessions were rolled out till the block level on the same year.

There were no activity or training for the past two years and also the topics or the contents were valid but need to be updated.

"Content wise to waise bahut acha program hai... definitely agar 4 baar kisi ke dimag me chal gaya to acha hi response ayega"

-State official

"The content of MA is old and needs to be updated, it is very old, ASHA does get training for certificates but the content needs to be updated"

-State official

"Nahi sir, implementing agency (ARMMAN) ya centre se ya state se aisa koi bhi person nahi aya... aur koi coordination bhi aisa kuch nahi hua..koi meeting bhi nahi hui... sirf 1 training hui thi state level pe 2017-18 me bas... .. Beech me ye program dead sa ho gaya tha ...to logo ko pata hi nahi hooga ki certificates bhi rakhe hai aur issue karne hai... kunki agar kisi kaam ko aap lagatar karte hai to uska momentum bana rehta hai... aur yaad rehta hai ki ab next kya karna hai"

- State Official

11.2.3 Utilisation

For Mobile Academy course utilization, all the respondents favoured it and mentioned its utilisation that helps ASHAs for their better performance in the community. The mechanism of 'e-certificate' boosts the confidence level of the ASHAs who have undertaken the course.

"Jo ASHA nahi kar pati unhe hum facilitator ke through saamne baitha kar karvate hai"

- District Official

"Mobile Academy ki training certificates to meine khud issue kiye hai sir... jo nahi aa paye lene k liye certificates unko hamne block level pe distribute bhi kiya ... block waalon ko blank certificates provide kareye kunki block walon ko hi pata hain ki kitni ASHA ne training complete kar liya... aur ASHA monthly meeting me bhi diya... hamare paas receiving bhi hai certificates k liye"

-District Official

ASHAs work in the community has shown a significant improvement in MCH indicators over years. They act on proactive measures and initiatives on such programs. All the state officials collectively recognized the functioning of ASHAs in the improvement of RCH indicators. They also mentioned that the Mobile Academy training had played a significant part to encourage ASHAs to function well in the community. While some

"ARMMAN issues certificates, state government has no role in issuing certificates"

-State Official

officials have mentioned the ASHAs who have done this course was during 2016-17 and recently enrolled ASHAs were unable to access the course even after registration in portal.

“Total 770 Rural ASHA hai aur 35 Urban ASHA hai... total 805 ASHA hai.... aur isme sirf 27 ASHA ne course complete kiya hai 2016-17 ki baat hai ye jab hamne ise implement kiya tha... us time pe kuch ASHA ne +ve feedback bhi diya tha”

- District Official

The affect component of MA training course was pleasant for everyone and was easily understandable and clear.

“Dr. Anita ki awaz itni achi thi ki log sunte they uska phone, Nahi negative snahi hai.... ulta... help milti hai is program ses... agar kuch miss ho gaya ya vo dobara sunna chahti hai to baad me bhi usko dobara sun sakti hai ASHA”

-District Official

At some places, gender also played a role in undertaking this course.

“In rural areas, women are not free to use mobile phones. Hence, gender also has a role”

-State Official

“ Hamne poori koshish ki saari ASHA ko cover karne ki par jo bhi ASHA ne miss kar diya training ... vo log miss ho gaye aur cover nahi kar paye is program ke under me... jo information ham tak aa gayi unhe hamne resolve kar diya”

-District Official

11.2.4 Monitoring

The most common concern shared by all the state officials was the lack of monitoring of this course under the theme ‘Monitoring’. They have also suggested a regular, systematic, continuous, and rigorous monitoring mechanism at the state district and block level to understand the flow of data and information about program performance. They strongly recommend an NHM coordinator for the same. Though the block level team is trying to monitor, the communication from block to district or district to state level is not proper due to various reasons such as never received any resolutions for queries raised, never sought any feedback, etc.

“Kuch puchta hun bata dete hai (ARMMAN) par khud se actively coordinate nahi karte ... mujhe pata hi nahi hota kunki kahin se information hi nahi ati ki kis district me kya chal raha hai KMA me. Agar koi mujhe batayega tabhi to mein kuch administrative corrective measures le pauna ya kisi ko phone karke use karwaunga”

-State Official

“We have communication gap largely, jaate to hai nahi kahin (ARMMAN) ...salary inki kahin aur se aati hai... NHM se salary hoti to kuch control hota... inka roaster bhi kahin aur se banta hai aur ab us roaster me kya included hai kya nahi vo mujhe pata hi nahi ... initially I tried to coordinate...1-2 bar inlogon ne samjha uske baad se nahi hua kaam ... Agar ye program jaise ministry baaki program chalati hai GoI ke through to bahut acha chalta lekin ye dependency dusare (ARMMAN) pe create karke koi fayda nahi hua, Definitely iska 10 times jyada effect hota agar GoI khud se implement karti to”

-State Official

They also delivered their concerns about the changing priorities in the health system. Regularity in program functioning, reporting, and monitoring will be happening only if the program is on priority.

“Mobile Academy is not the priority as no measures taken to resolve the issues... Is this program beneficial to ASHAs? If yes then continue. If No then END the program... ARMMAN ki bhi apni kuch priorities hai.... Kaha tha 25 jilo me karenge ...25 jile to UP me kuch bhi nahi... Jeere ke saman hai 25 jile UP me we are having 75 districts”

-State Official

11.2.5 Challenges and Suggestions

Most of the officials clearly pointed out the issues on network/internet and other portal updating and registration-related issues, unavailability of e-certificates, Less education level of ASHAs and no provisions for query resolutions. They also suggested the need for refresher training as many officers have shifted or joined newly to the system. The provision of mobile number edit was unavailable in the RCH/MCTS/PCTS portal which was a common challenge in all the states.

“Mobile Academy program lawaris chal raha hai... koi Nodal Officer yahan pe baitha hi nahi hai... hai hi nahi coordinate karne k liye”

-State Official

The concrete 'recommendations' raised by the state officials were, the upgradation of the course content, repeated and continued access to course material, a strong support system, and integration of the RCH portal with other analogous portals.

"Bahut si ASHA padhi likhi nahi hai, ve 8th pass bhi nahi hai.. par kafi dino se ASHA hai aur kaam kar rahi hai to wahan pe bahut issues aatey hai hame... vo log bhi koshish karte hai... but uska best output nahi aa pata... bahut sare ASHA apne bacho se kaam karate hai... ab unko mobile and tabs de diya hai... par uska chalane me issue to hota hi hai"

-State Official

"Abhi kuch din pehle hi saare ASHA ke number change kar diye gaye aur new CUG Sim card diya de diya gaya.. number ko PORT nahi kiya gaya aur new sim card matlab new number issue kar diya gaya"

-District Official

"Abhi kuch din pehle hi saare ASHA ke number change kar diye gaye aur new CUG Sim card diya de diya gaya.. number ko PORT nahi kiya gay aur new sim card matlab new number issue kar diya gaya"

-District Official

"Number update karne me major issue ata hai"

-District Official

Under the theme 'Suggestions' both state or district officials commented on the Mobile Academy program's continuity, where they unanimously quoted that they would like the idea of training ASHAs through mobile but were hesitant to hand it over to a private agency.

"Mobile Academy program ko continue karna chahiye... par third partner mujhe kahi dikha hi nahi... directly NHM se hona chahiye"

-State official

“Ji bilkul chalna chahiye... jaise ki meine bataya apko... refresher training bahut jarroori hai... ASHA jab ghar jaati hai to vo agar ye training aram se sunti hai... ye audio module refresher k liye bahut acha hai... vo usko sun payegi aur us message ko apne behaviour me implement kar payegi”

-District Official

“Whenever the consultant of ARMMAN group or whatever, the people who are looking after it, they provide us the report on, like monthly basis or quarterly basis. We always ask them this question that how many ASHAs have completed the training, how many are interested and what kind of responses they're providing, they're interested or not. We ask them this kind of question. And this question has been arisen two, three times that, uh, whether the certificate are being provided, the answer given to us is that they'll provide soon. This is the answer we have got... they're not reporting, they're somehow indirectly reporting to us, we ask them for monthly report, since January we are asking them to submit.”

-State Official

The official also raised a concern on ASHAs incentives for this MA program.

“ASHA ko incentives dene ki need hai MA ke liye because we want them to actively participate in MA course and actively get trained and learn from it to deliver best services. ASHA jab apne kaam se free ho jaati hai tab vo phone use karke apne personal time pe mobile phone se MA ki training karti hai... vo apna personal time devote kar rahi hai iske liye.. hume iske liye jaroor compensation dena chahiye... hume is baat pe bhi dhyan dena chahiye ki agar ham thoda sa bhi incentives ASHA ki training pe de jo vo khud actively apne time ke accordingly man se poora karti hai to uska kitna positive effect ayega uptake of services par and community ki health improve hogi”

-District Official

Table 11.1 Key Themes identified from IDI on Mobile Academy

IDs with Key State & District Officials

Governance	<ul style="list-style-type: none"> Healthcare Technologies served well during COVID, ASHAs learned to make zoom calls with help of their husbands/children Mainly government agencies engaged in ASHA training under NHM, with no private partners Last MA training was in 2015/16 with no refresher training afterward Existing officials handling the MA project reported very less or no coordination / follow up on Mobile Academy either with state/centre/ ARMMAN (the implementing agency) The state officials were aware about a third-party agency ARMMAN managing the Mobile Academy Project at central level however all of the officials below state were in the impression that the same is being implemented and managed by state NHM
Implementation	<ul style="list-style-type: none"> As reported in the interview, MA implemented in 2016-17 HCT enables faster reach, collection, and maintenance of data District level training was provided for all block officials soon after state level training in 2016 No centralised order on how to conduct training at PHC, sector wise meeting at block level, trained BCPM, MOs, ASHAs, ANM ASHAs register their contact number in ASHA Soft/PCTS and the MA will take these number to register itself Communications are only with state level officials, and no involvement of implementation agency Mobile academy training was not a mandate in other states while in Rajasthan, they made it compulsory for ASHAs No activity or training for the past two years
Utilisation	<ul style="list-style-type: none"> Content of Mobile Academy is extremely useful and helped ASHAs' performance to improve in the community though needs a detailed updation of topics and RCH programs ASHAs can listen to it comfortably and get re-oriented to the subject at their own convenience

	<ul style="list-style-type: none"> • The affect component is good and ASHAs are better able to deliver and disseminate the learnings into the field • Certificates gave sense of achievement and confidence, however, only a few of them who completed the training actually got the certificates • There was no defined mechanism to issue these certificates. Few district officials reported handing over the certificates during the monthly team and sector meetings • Certainly, Mobile Academy, have contributed to improving the key health indicators such as IMR, MMR & nutritional status
Monitoring	<ul style="list-style-type: none"> • Monthly monitoring mechanism at district level was in place 3-4 years back and it was not regular as in other health programs at the district level due to no human resources dedicated for follow-up, or query resolution • ASHAs give feedback to Block level ASHA coordinator during monthly review meetings and then to District level ASHA coordinator • Only a few ASHA reported their issues being answered by block and district officials
Challenges	<ul style="list-style-type: none"> • Poor network and registration related issues • Inaccessible: ASHAs registered after 2019 are unable to connect to the MA course. • Majority of the ASHAs didn't receive the e-certificates • ASHAs phone number can't be edited once entered in the ASHA soft app • No query resolutions or doubt clarifications in the course • Less mobile literacy makes it difficult for few ASHA to do the training • Data Privacy – Instances of data being leaked and ASHAs and other beneficiaries getting fraud calls and losing money under the pretext of KMA • Lack of monitoring because resources directed toward new programs • No funds allotted towards the project, no due process • Issues in updating CUG and ported numbers on the RCH portal • Some ASHAs did not have access to mobile phones (Rajasthan)

<p>Suggestions</p>	<ul style="list-style-type: none"> • Program content needs to be updated to include Pre-Natal Care, the latest guidelines, medical developments, and programs and must be linked to ASHA modules • Repeated and continued access to course material even after completion of the course • Audio-Visual training would be more impactful than audio training • Bi-annual orientation of ASHAs regarding these programs. Uploading training videos online for easy access • Age and educational qualifications of ASHAs may be considered while designing content • Feedback calls to ASHAs to ensure the acceptance and query resolutions • An advanced-level MA course can be implemented for those who have completed a basic MA course. This increased training and capacity building of the programs ASHA will reflect in the community to reduce MMR, IMR • Access of MA to all healthcare providers and registered pregnant mothers. • A regular, systematic, continuous, and rigorous monitoring mechanism should be performed at the state, district, and block levels to understand the flow of data and information about program performance • Supporting systems should also be made available like network, internet, tabs, feedback, and dedicated HR mechanism • Integration of (portal like PCTS) RCH portal to avoid duplication and ensure an updated database. • Program Implementation through government agencies for ease of coordination like an NHM coordinator. • Not only ASHAs, but everyone should know danger signs during pregnancies
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11.3. Discussions with other stakeholders

Along with the IDIs, the Mobile Academy project coverage perspectives and suggestions were shared by the other concerned officials at the state and district levels officials such as State Program Managers, State ASHA co-ordinators, State Data managers, District Program

managers, District ASHA co-ordinators, District data Managers, Medical Officers, Auxiliary Nurse Midwives, ASHA facilitators, etc. Their viewpoint on the subject echoes the same of State officials. They consider the Mobile Academy course as a relevant and useful one for re-orienting and refreshing ASHAs on their focus areas which also helps them to perform better in the community.

11.4. ASHAs perspective

The Focus Group Discussions conducted with ASHAs reflected their acceptance of the Mobile Academy course. In the 41 FGDs conducted across all four selected states, around 372 ASHAs participated in the FGDs (Table 11.2). During the FGD, most of them showed their keenness and their acceptance toward the Mobile Academy course. The majority of the ASHAs who attended the FGDs were well knowledgeable about their focus area and especially the ASHAs who attended this course were able to recall the chapters, quizzes, and process.

Table 11.2 Details of FGDs performed on Mobile Academy across the states

S No	State	District and PHC Name	Number of FGDs Conducted	Number of ASHAs who attended the FGDs
1.	Uttar Pradesh	Bareilly, PHC Harharpur	5	54
2.	Uttar Pradesh	Mirzapur, PHC Devala	5	69
3.	Haryana	Ambala, PHC Aambli	6	58
4.	Haryana	Panchkula, PHC	3	22
5.	Madhya Pradesh	Seoni, PHC Adegaon	8	67
6.	Madhya Pradesh	Sheopur, PHC Dantarda	8	55
7.	Rajasthan	Sikar, PHC Sirohi	3	23
8.	Rajasthan	Jhunjhunu, PHC Papurna	3	24
Total			41	372

The mainstream of the participants did the Mobile Academy course before 2019 and most of the ASHAs who joined ASHA after 2019 were facing issues taking this course even after registering their mobile numbers in the RCH/ASHA soft/PCTS app. ASHAs also claimed that the Mobile Academy needs a topic update as many new initiatives in the health care system has launched in the last three years and are highly demanded by the community as well. ASHAs reinforced their acceptance of the Mobile Academy by stating that they would like to listen to course chapters again even after their completion. The other main findings have been state-wise.

11.5. Mobile Academy Training Related Opinions

This section in the FGDs was divided into two - group A for ASHAs who were trained under Mobile Academy and group B for ASHAs that weren't. Group A ASHAs were asked about their experience with Mobile Academy while group B ASHAs were asked about why they weren't trained under Mobile Academy and their ensuing experiences.

11.5.1 Group A – ASHAs trained under Mobile Academy

Mobile Academy is an IVR-based training course, ASHAs were asked about their opinions on telephone-based IVR training. Group A ASHAs when asked about their experience with

"I like the training that I took but ASHAs don't understand because trainer gives time but they are ASHAs, they belong from the village and don't know Hindi, they face problems. They sit by me and do it and tell me that they didn't understand it and asked me to tell them again. I support them and tell them to dial the phone again and listen to it again"

- ASHA Supervisor

"We would like to receive the trainings in Hindi language, as it will be easy for us to understand and follow in the activities. We are unable to understand the occasional English terms used by the trainers while explaining a topic or an activity"

-ASHA Supervisor

"We can ask you about something that I don't understand during our conversation, but we cannot do the same with the seniors. We revise the topics that we tend to forget again and again. We are able to call and talk to the operators twice, through the IVR system"

- ASHA Supervisor

"Older ASHAs have taken the training and since we are new we didn't know, we didn't have the information. Right now, we are trying to understand and work, we make mistakes in registers and sangini supports us and tells us how to do it"

-ASHA

IVR training and all ASHAs responded that they started liking the IVR mode of training due to its use during the pandemic.

- A. ASHAs had heard of the Mobile Academy training course from their supervisors, and some had heard of it through their mobiles. While some ASHAs reported that they received prior training for the mobile academy at the public health centre while most ASHAs said that they did not.

"जब फिल्ड में प्रशिक्षण लेने हम लोग जाते थे, तो डॉक्टर ने बहुत अच्छी तरह से समझाया तो मुझे समझ नहीं आया, तो उन्होंने कहा आशा जी यदि आपको नहीं समझ आया तो आप फिर से मोबाइल में नंबर डाइल करो एक नंबर बराबर प्रयास करो, फिर हमने मोबाइल से समझा, बहुत अच्छी तरह समझ आया दिमाग में बैठ गया अब हमें इतना अच्छी तरह समझ आ गया की अब जब हम फिल्ड में जाते हैं तो बड़े जोश से और अधिक काम कर सकते हैं। अनुभव बहुत अच्छा रहा"

"(When we went for a training in the field, doctor made us understand it nicely, but I didn't understand it then he told me to dial the number again and keep trying it. I understood it through mobile nicely. Now it is embedded in my brain and now when I go to the field I work with enthusiasm. My experience has been very good.)"

- ASHA

"I felt the need to listen again when they talked about a child who has diarrhoea and vomiting then what are the thing, we need to pay attention to. Like when we feed them, cook food, or go to the toilet we should wash our hands. I knew about this before but not to this extent. I liked listening to it again because I felt it was necessary"

- ASHA

- B. Some ASHAs reported that they were given prior training, while others said they weren't, they just learned by using Mobile Academy on their mobiles. All ASHAs found the **registration process** of Mobile Academy easy and met with no difficulties such as language barriers while availing the course.
- C. ASHAs found the information on Mobile Academy **complete** and never felt the **need to contact customer** service while using Mobile Academy. While some ASHAs would appreciate, if such an option was present for resolving their doubts and queries.

"We had learned a little bit in the past, but now we feel like taking the trainings again through phone calls. We know that the pregnant mothers must be checked up four times. We were unable to listen it and now we are unsure if it is four times or three times. The information is given by the madam so it would be correct, and we disseminate it to the beneficiaries. We did not understand the things explained by Dr. Anita, but we agreed to everything during the trainings. We had little knowledge during that time, so we did not understand it, but now we understand everything after we went through the trainings. We understand the time when the children must be vaccinated and the time for their four routine check-ups, and we are able to answer these questions now"

-ASHAs

"If we have forgotten something then it was all repeated through mobile academy, we have heard with Dr. Anita tells about mother and child, about nutrition, immunization of children. We have gained the knowledge again. We received the training again after the training we received earlier"

-ASHA Facilitator

- D. In the case of any queries, ASHAs go to the CHC or ask **ASHA facilitators to resolve them**. Some ASHAs also listen to the lesson again in the hopes of clearing their doubts but can't access the same chapters once they submit answers or quiz. While there are currently no online or offline methods of availing support, ASHAs would like to have both methods available for support.
- E. Many of the ASHA wanted to listen to the **topics repeatedly** simultaneous to their field experiences but there were no options to listen again once the quiz/assessment is submitted. However, if they had to lodge a complaint or ask questions there **was no mechanism** that ASHAs were aware of. Further, there were no methods of availing online or offline support on Mobile Academy that ASHAs knew of.
- F. Although Mobile Academy **certificates** do not foster any benefits or prizes from officials, ASHAs were appreciative of the fact that they got to learn and improve their knowledge about their work. Wherein, 2/3rd of the ASHAs didn't receive e-certificates on completion of Mobile Academy courses.
- G. ASHAs responded that their **overall experience** with the mobile academy has been good. Although ASHAs responded positively about the **content of Mobile Academy**, they felt that information regarding the administration of injections and medicines and procedures for delivery could have been incorporated more.
- H. In terms of connectivity of Mobile Academy, ASHAs responded that although their calls get connected easily, sometimes they get disconnected due to **network issues**. ASHAs faced no language difficulties in understanding the messages delivered by Dr. Anita on Mobile Academy. Some ASHAs articulated that they were unable to see any messages because they shared a phone with their family members. Mobile Academy also does not have the option for ASHAs to pick any lesson, they have to pick up where

We are able to explain it. We have been given 8 responsibilities:

1. Delivery
2. Taking patients to the hospital
3. Looking after malnutral children
4. To look after the patients
5. Immunization
6. To look after low weight babies
7. Distribution of nutritional diet
8. Taking them to VHND

-ASHA

they left off. There is no reminder message for the training either, ASHAs have to remember to attend the lessons of their own volition.

- I. The **voice, tone, and pace** of Dr. Anita's messages were received positively by ASHAs. ASHAs also informed that they found the information delivered through Mobile Academy to be **correct and easily understandable**. When asked if ASHAs felt the need to listen to the messages. All over again, they responded that they sometimes did about topics related to pregnant women, newborn babies, tubectomies, nutrition, etc. Few also mentioned that they liked listening to the message again because of the depth and detail of the message Regarding the course evaluation, ASHAs were **clear about the quiz at the end of each chapter**. However, the responses of ASHAs regarding the grading scheme were inconsistent, while some were aware that they would be graded out of 44 marks, others believed it to be 100. Some also expressed the inability to go back and listen to the audio lessons.

“We tell the pregnant women that if you are high risk or have any problem you will have blurred vision in the eye, you will feel like vomiting and the baby will stop to move inside the stomach, you will have seizures. We tell them that if you have any of these problems then you come to us or go to the doctor. Like how Dr. Anita says to give first, yellow and thick breast milk to the baby and some women say that this should not be given but we tell them that they have to give this to the baby because it is healthy for him, it is nutritious. We make them give it to the baby because we go with them for delivery. Older women tell them to give honey and we tell them not to give anything other than this milk. We tell them to breast feed for six months.”

-ASHA Facilitators

- J. The ASHAs reported that there has **been no change in the content** of Mobile Academy since before the COVID pandemic. And its high time to update the contents as the government has initiated various public health programs in the country.
- K. It was also noted that the **new ASHAs were unable to join** even after registering their number in ASHA soft app.

"Everything is told and is easy language. We are told about the topics that we want to know. There is no lacking, and all the topics are there. There are no difficulties. The best thing is that there are no time boundaries in it."

-ASHA

- L. While ASHAs found the course content to be informative and meaningful, there seemed to be some confusion regarding the evaluation criteria. However, it is apparent that ASHAs got to learn about subjects they were only aware of before, in much greater detail. This has in turn impacted the delivery of this information by ASHAs in the community. ASHAs were able to better explain subjects that they learned from Mobile Academy related to medical procedures and nutritional advice.
- M. While some of the ASHAs opined that Mobile Academy answered all their agendas and questions. Most ASHAs agreed that they know more now that they had trained under Mobile Academy.

"अब एक ज्यादा मजबूत कड़ी हो गयी है. अब लोगो को ज्यादा भरोसा हो गया है. पहले पूछती थी की बी.सी.जी का टीका क्यों लगवाते है. अब हमे ये पता है की ये टी.बी से बचाता है इसलिए बी.सी.जी का टीका लगता है. जब हम ये सब बताते है तो उनको ज्यादा भरोसा होता है और डॉक्टर ने भी यही बताया है"

("Now, it is a stronger link, people trust (us) more. Earlier they asked about why to get BCG vaccination, now we know that it prevents TB so we are able to tell them. They trust us more when we tell them all of this and the doctor has said the same things.")

-ASHA

"We are able to tell it easily. We like telling them in the language they speak. Some pregnant women say that they don't like eating iron pills because it stinks so we tell them that if you eat one kg of spinach then it is like on iron pill so you think it like this and then eat your pills"

"If there is a pregnant woman and it is not her time but she is having problems then what will you do, what preparations will you do for hospitals, what things should she keep in her bag. We tell all these things to women."

-ASHAs

- N. The **confidence had also increased since training** with Mobile Academy, they were able to answer questions faster now.
- O. Mobile Academy has **helped resolve subjects** that were difficult for ASHAs earlier such as registration of beneficiaries to the public health system and helping them avail services. ASHAs reported that they are able to perform these functions better now.

"The voice on the call used to buffer, pause, and unclear. The network coverage dropped most of the times, and we kept on saying hello for some time. We had to stop the training if there was any disturbance in the networks, the voice broke, or the children came to us and started talking to us, as we had to give a test after the sessions was complete"

- ASHA supervisors

"We received the messages, and the husband or the children used our mobile phones in case of any requirement, so we are unable to see it. We cannot afford separate phones for each member of the family, as it costs approximately Rs. 10,000/-"

-ASHA Supervisor

- P. ASHAs also spoke about how women and their family members **trust them more**, now that their knowledge has increased, and they are able to explain in more detail. ASHAs narrated such instances. Women heeded the ASHAs advice more than before, since doing the Mobile Academy course. ASHAs also observed a change in the fact that women were more willing to get immunized. ASHAs were excited to see such changes where women were more forthcoming about matters relating to reproductive, maternal, and child health and took ASHAs in their confidence.
- Q. All ASHAs feel that they are able to give information **more effortlessly** now. Women have also started to trust ASHAs more now, and ASHAs have noticed changes including significant ones such as the dispelling of myths related to immunisation. All ASHAs were eager to see such changes.

"I feel that sometimes because I have not taken the training and I feel less confident than the others"

-ASHA

“We go and talk to them and they listen. Pregnant women get tested on time and eat well. They follow what we teach them. If a woman gets married then we talk to her then when she gets pregnant then we talk to her and she will understand. She will remember that didi had told me to take the pill for three months. This has changed”

- ASHA

R. It is evident that Mobile Academy was **not only well received by all the ASHAs** but also has greatly impacted their work where they feel more confident and are able to overcome the challenges that they faced earlier.

11.5.2 Group B – ASHAs not trained under Mobile Academy

At the same time, there were some ASHAs in these districts that did not avail of the Mobile Academy course, constituting Group B. Few ASHAs said that they were not informed of the Mobile Academy course, which is why they did not take it up while some ASHAs could not reach the number or register for the course even when they tried repeatedly. And some ASHAs of group B did not take the course because after they joined in the year 2018, the Mobile Academy project was not in the run technically. Group B ASHAs did not avail of the course because they **didn't have mobile phones**. Those that did have phones only **knew to operate** them with someone's help. While sometimes ASHAs faced **network issues**, ASHAs said that although it was a hilly region, it was well connected to the city. However, some areas including tribal blocks had poor connectivity. The lack of training under Mobile Academy can be attributed to all these factors for group B ASHAs. These ASHAs also noted a difference in their **confidence and work** from Mobile Academy-trained ASHAs and wished to be trained under Mobile Academy. The areas that they felt weak in were similar to those of Group A ASHAs, such as managing emergency deliveries, immunization, and the administration of medicines.

“We feel that the ASHA workers who have received training from the mobile academy have more knowledge than us”

-ASHA

“I don't have a mobile so I don't get the information. It takes time but we have to do it. We don't get the information on time due to lack of mobile. We get the information when supervisor tell it to us”

-ASHAs

11.6. Analysis of reports/data submitted by the agency to the Ministry

The data of the program performance has been purely handled by the agency and was reporting the Ministry through an IT platform. It has been linked with a Management

Information System portal and was accessible at the ministerial level. For this evaluation purpose, the reports/ data submitted by the agency to the ministry during the period of 2019-2021 was sought from MMP cell. At national level, state level and district level officials had access to the data as 'read-only' status. This access is supposed to help the concerned officials to prepare and act accordingly at the field level.

During this evaluation, it has been found that, follow-up of the program was near to inconsequential due to lack of priority, launch of newer initiatives, and changing priorities. At the block level, the healthcare providers assess the status of coverage of the mobile academy program in their own 'head-counting' method during monthly review meetings with ASHAs. As the query resolution was not proper, the communication from block to district and district to state, regarding the program was minimal during the period of 2019-2021.

Observations found with reports/ data submitted by the agency to the ministry

- a. Monthly data were available in the datasheet
- b. The data was in numbers (not percentage or proportions) for the years 2019-2021 period
- c. Data were overlapping with carry-overs from previous years data
- d. The sub-totals were not defined clearly
- e. Column definitions were not corresponding and clear
- f. Basic denominator of 'Count of ASHAs as per MCTS' has discrepancies with the original data with what NHSRC possesses
- g. For comparative ASHA analysis it is not provided that what percentage of ASHAs enrolled and got trained

The utilisation representation is based on secondary data provided by the MMP cell. The data may have overlaps or carryovers from previous years. The MCTS app/RCH app will uptake the mobile numbers of ASHAs when they upload in it. this will be absorbed by the MOTECH mechanism of the course operators. As per the program protocol, it does not accept any repeated or incorrect, or wrong mobile numbers. Such scrutinized mobile numbers are eligible to make calls to take this Mobile Academy course. In the graph, we have portrayed the percentage of ASHAs who have utilized this course by registering and completing during 2019-2022 out of the total ASHAs in the ASHA update document by NHSRC.

As per their report during the time period 2019-2021, the graph shows that the Chhattisgarh (30.80% and 24.06%) has utilised this program well in terms of Course registration and completion, compared to other states followed by Assam (27.60% and 18.25%) and Haryana

(21.60% and 17.88%). Other 9 states have reported less than 10% activity for both registration or completion (see Graph 11.1).

Graph 11.1 Utilisation of Mobile Academy Program during 2019-2022

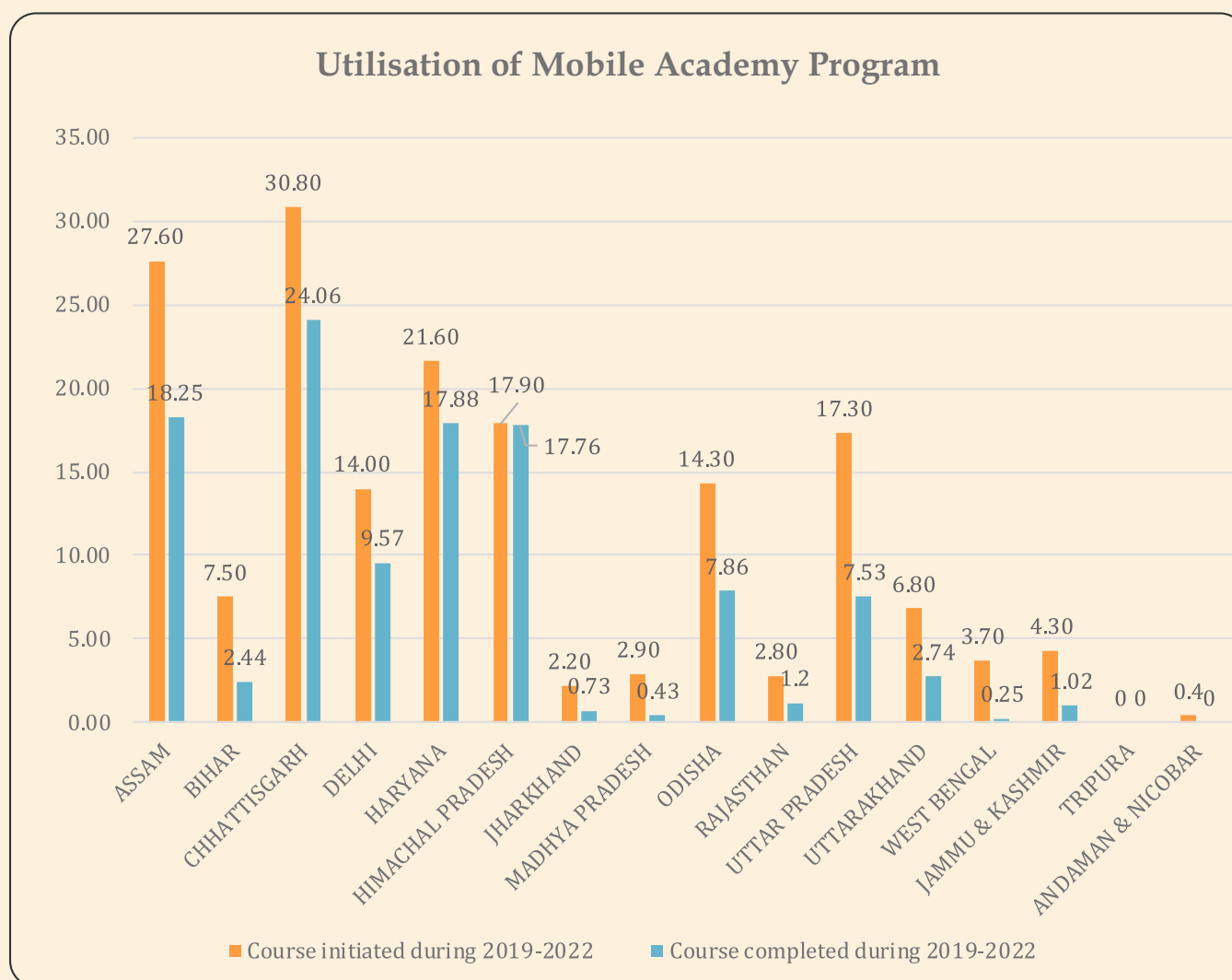
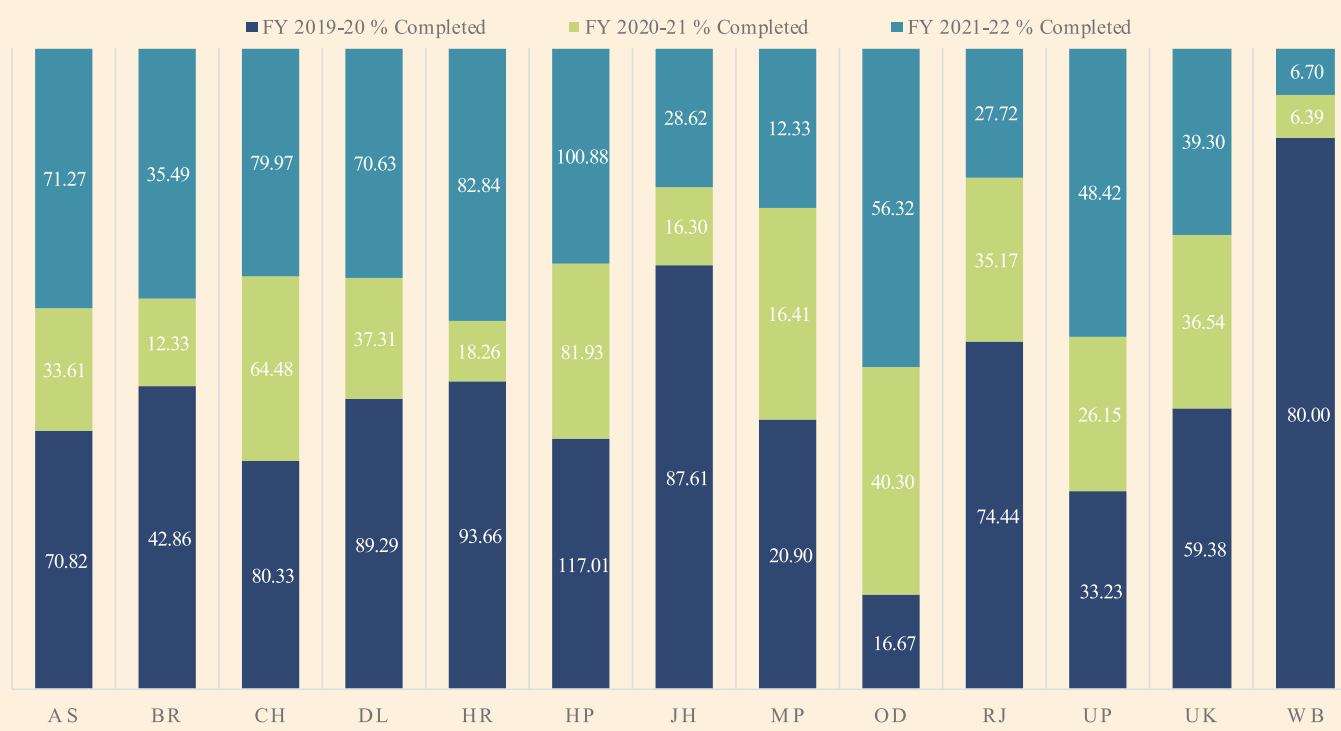


Table 11.3 State wise MA course status from FY 2019-21 to FY 2021-22									
	FY 2019-20			FY 2020-21			FY 2021-22		
State	Started	Completed	% Completed	Started	Completed	% Completed	Started	Completed	% Completed
Assam	1,268	898	70.82	1,193	401	33.61	6200	4419	71.27
Bihar	28	12	42.86	795	98	12.33	5726	2032	35.49
Chhattisgarh	7,290	5856	80.33	2,635	1699	64.48	11096	8874	79.97
Delhi	140	125	89.29	134	50	37.31	640	452	70.63
Haryana	726	680	93.66	115	21	18.26	2943	2438	82.84
Himachal Pradesh	147	172	117.01	238	195	81.93	1024	1033	100.88
Jharkhand	113	99	87.61	227	37	16.30	545	156	28.62
Madhya Pradesh	402	84	20.90	384	63	16.41	1046	129	12.33
Odisha	6	1	16.67	603	243	40.30	6009	3384	56.32
Rajasthan	403	300	74.44	435	153	35.17	606	168	27.72
Uttar Pradesh	316	105	33.23	6,318	1652	26.15	22508	10898	48.42
Uttarakhand	64	38	59.38	208	76	36.54	575	226	39.30
West Bengal	5	4	80.00	986	63	6.39	940	63	6.70
Grand Total	10,908	8374	76.77	14,271	4751	33.29	59,858	34404	57.48

Table 11.3 & Graph 11.2 depicts the status of Mobile Academy turnover (% of ASHA completing the Mobile Academy Training out of those of started training) from FY 2019-21. The total average percentage of ASHA who completed Mobile Academy course in FY 2019-20, 2020-21 & 2021-22 was 76.77%, 33.29% & 57.48% respectively. It is evident that the maximum turnover was noted in FY 2019-20 (76.77%) with a considerable decrease in FY 2020-21 (33.29%). Out of the four states namely Rajasthan, Uttar Pradesh, Madhya Pradesh & Haryana where the evaluation study was undertaken, the percentage of ASHA completing the Mobile Academy training was registered highest by Haryana (93.66%) in FY 2019-20, by Rajasthan (35.17%) in FY 2020-21 and again by Haryana (82.84%) in FY 2021-22 whereas the lowest was registered in Madhya Pradesh in all three years i.e., FY 2019-20 (20.90%), FY 2020-21 (16.41%) & FY 2021-22 (12.33%).

Graph: 11.2 Mobile Academy Course % Completed for 13 states:
FY 2019-20 to FY 2021-22



Despite lower turnout rate in Madhya Pradesh (20.90%) in FY 2019-20, no improvement was observed. Overall, almost all states performed poor in FY 2020-21 suggestive of ASHAs largely indulged with COVID related services & training, leaving no sufficient time to undertake Mobile Academy training. Interestingly, Himachal Pradesh observed more than 100% turnover.



Chapter 12: Strength and Limitations

12.1. Project Limitations

Some key limitations which were assessed during the evaluation were as follows. The project was implemented in 2015 which varied across states and districts and over time its usage has waned along with the number of ASHAs accessing and using it. Since the assessment was done in 2022, the responses from block, district and ASHA may include higher degree of recall bias. The extent of actual implementation of the program may have been even lower than what has been recalled as little or no records were available with block and district level officials. Moreover, the states were not clear about the exact date of rollout of the program in their respective districts. Majority of the ASHAs did not receive the e-certificates after course completion however the district and block level officials verbally conveyed that they distributed certificates to all those ASHAs who completed the course. But, given the absence of any official records, the same could not be cross verified. No provision for query resolutions or doubt clarifications in the course. Lower mobile literacy made it difficult for a few ASHAs to do the training, especially the ones who are aged. The program suffered from a lack of monitoring because human resources were dedicated to this program. Moreover, none of the ARMMAN officials were placed at a level below the state or even coordinated with officials below the state level to monitor the program-related activities. ASHAs faced issues in updating Closed User Group (CUG) numbers on the RCH portal however no such official complaint/feedback could be shown by district officials. The program was found to be limited to only those who could manage to register their mobile number on the ASHA portal while others who could not remain deprived of availing the training under Mobile Academy. No defined communication channel was observed with state and district officials for query resolution related to Mobile Academy, it was taken for granted as no funds movement was related to this program.

12.2. Project Strengths

Mobile Academy was found useful in terms of content and helped improve ASHAs' knowledge of the routine services they provide in the community. The training was easy to access and time friendly. ASHAs could listen to it comfortably and get re-oriented to the

subject. The affect component was found to be good but was limited to only those who could register and ASHAs were able to explain well to beneficiaries. It may be noted that during the time of implementation of the Mobile Academy program in states only 1/3rd of the total ASHAs could register themselves on ASHA Portal. The Mobile Academy Certificates gave a sense of achievement and confidence to the ASHAs.

Chapter 13: Recommendations

Through the IDI s and FGDs conducted with state and district officials as well as the ASHAs, many respondents suggested that there is a sound need for strengthening Mobile academy projects. Wherein some of the states were content with the performance of the project, there were a handful of respondents who shed light on what could be done for further strengthening and proper utilisation of Mobile Academy. Listed below are recommendations that emerged during the discussion:

- 1) Provision for regular monitoring of the program such as Monthly or bi-annual reporting of activities done in districts.
- 2) Flow of data and information about program performance to implementers at the district level
- 3) Increased training and capacity building of the programs of ASHA will reflect in the community to reduce MMR, IMR
- 4) Integration with Community Processes' (CP-CPHC division) efforts towards capacity building of ASHAs/ ASHA Facilitators.
- 5) Mechanism needs to be established to ensure data sharing between RCH portal and newly launched SASHAKT portal (track training for healthcare workers).
- 6) There should be non-monetary incentives for ASHAs to undertake training of Mobile Academy through PIP
- 7) The Mobile Academy content may be updated based on the ASHA modules published by MoHFW and further revision can be made through consultation with the CP-CPHC division. The content of the Mobile Academy Training program to be reviewed by CP-CPHC division, to ensure uniformity with existing training content of ASHAs. Also, videos to be added, in addition to the existing audio messages.
- 8) Given the program being mHealth based and intended for continued refresher training of ASHA, the scope of this program should not be limited to RMNCHA+N services rather should be expanded to include program such CPHC, NCD etc
- 9) Some of the topics that ASHAs felt weak in or the need of training for were:

- a. New initiatives on RCH and related programs including financial benefits
 - b. Communicable and Non-Communicable Diseases
 - c. Immunisation of pregnant women
 - d. Cancer-related information and training
 - e. Emergency delivery and new-born care
 - f. Excessive bleeding
 - g. Administration of medicines
 - h. Adolescent Health
- 10) For the mode of training, most ASHAs preferred offline, face-to-face training while few preferred online trainings.
- 11) Age and qualifications of ASHAs should also be considered while designing the content of the program with the availability of supporting mechanisms such as the internet, feedback mechanism, etc
- 12) To ensure better coordination of activities, program execution should be handled by the government, primarily through NHM

13.1. Recommendations for Agency

1. A proper tracking of MOTECH data and real-time upgradation should be ensured through Standard Operating Procedures of reporting format.
2. A systematic and regular monitoring mechanism should be in place to coordinate and sustain this field-level program.
3. Provision for self updation of registered mobile number by ASHAs on the portal for better access to the course content.
4. Yearly updation of course content to broaden their knowledge on new programs and health initiatives in consultation with respective divisions in the MoHFW

Chapter 14: Conclusion

The results from our analysis show that though mobile academy received a positive response from the stakeholders there were many ASHAs who were not able to complete the course on time. This was attributed to the fact that their numbers were not updated on the portal and some of them did not have access to their mobile phones. Where ASHAs who were much younger to older ASHAs found the course beneficial and were aware of the program and its functioning, some ASHAs who were older were not able to access the course and were also not aware of the program. Those ASHAs who reported to have completed the course highlighted that some of them had not received the certificates after course completion. They also urged that the chapters be updated regularly to broaden their horizon on the new health programs and initiatives in the country. ASHAs responded that their overall experience with mobile academy has been good. Although ASHAs responded largely positively about the content of Mobile Academy, they felt that information regarding the administration of injections and medicines and procedures for delivery could have been added. A certain budget can also be allotted for incentivising ASHAs under PIP to encourage timely course completion.

Stakeholders who were interviewed regarding the functioning of Mobile Academy program, deliberated upon regular monitoring and performance review of the program through NHM coordinator along with submission of monthly or annual reports to be submitted by the implementing agency. Some of the respondents also stated that the program if implemented through government could perform better due to a sound monitoring system. For effective and impactful implementation of the program feedback mechanism should be made available for its beneficiaries along with a provision for query resolution.



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