

# One Year of POSHAN Abhiyaan

## Social and Behavior Change Communication 2018-2019

March 2020  
Final Report



Surveying a mother  
in rural Bihar

### BACKGROUND

The Prime Minister's Overarching Scheme for Holistic Nutrition or POSHAN Abhiyaan is the Government of India's flagship programme to improve nutrition outcomes among children, pregnant women and lactating mothers. The programme leverages social and behaviour change communication (SBCC) as one of its four strategic pillars to build a Jan Andolan (or people's movement).

POSHAN Abhiyaan made an effort to regularly push behaviour change communication throughout the year along with focused campaigns. In September 2018, POSHAN Maah was launched as a month-long intensive campaign with the aim of motivating mothers and communities to practice healthier nutrition behaviours. This was followed by POSHAN Pakhwada in March 2019 and another POSHAN Maah in September 2019. With a focus on the first 1,000 days, these campaigns have disseminated over 10 nutrition-related messages leveraging more than 20 platforms, including mass media, mid-media, and interpersonal communication.

The current scale of national SBCC programming under POSHAN Abhiyaan means that a number of messages are being disseminated through a variety of platforms across India. This raises a number of questions. **What is the reach of platforms and messages? Has pregnant and lactating women's knowledge of nutrition behaviors changed over time? Have nutrition behaviors changed over time? Going forward, which strategies will ensure greater effectiveness of SBCC platforms?**

IDinsight generated evidence for the Ministry of Women and Child Development on SBCC in **November 2018** (Phase I), July 2019 (Phase II), and **November 2019** (Phase III). Phase I was conducted across 27 Aspirational Districts in eight states; Phase II across four states (Gujarat, Madhya Pradesh, Andhra Pradesh, Bihar); and Phase III across 16 of the 27 districts from Phase I. The purpose of returning to the same 16 districts in Phase III was to track changes over a year in the reach and quality of messages as well as the platforms that sent those messages, knowledge levels, and practices. These changes may be attributed to the efforts of India's national health and nutrition policies, including POSHAN Abhiyaan, along with other major programs. **This brief focuses on presenting findings on changes between November 2018 to November 2019 (Phase III) while also touching on key findings from previous phases.**



## METHODOLOGY

### Research Design

We first constructed a theory of change based on Jan Andolan guidelines. The key steps for a woman's behaviour to change are: a) exposure to effective platforms sending nutrition messages at least once in three months (we call this “**reach**”), b) hearing and remembering a nutrition-related message from any source (we call this “**recall**”), c) correctly articulating how to practice a behavior (we call this “**knowledge**”), d) being able to overcome barriers to performing that behaviour (“**self efficacy**”), and e) practicing the behaviour (“**practice**”). Accordingly, we designed detailed questionnaires for pregnant and lactating women to assess the status of SBCC implementation at each of these steps of behaviour change. We received feedback on our questionnaires from the Ministry of Women and Child Development, NITI Aayog, and 8+ development partners. Our recall period for platform reach and message recall was the three months prior to the survey dates (approximately mid-August to mid-November) during Phase I and III and five months during Phase II to include the period of POSHAN Maah in all Phases.

### Sample and Sampling Strategy

In Phase III, the study sample was designed to be representative of pregnant women and mothers of children under 2 years old that were listed with ASHA or Anganwadi workers across 16 Aspirational Districts. We sampled women in two stages. First, we randomly selected polling stations, identified an ASHA or Anganwadi worker associated with that polling station, and asked her to provide a list of all pregnant or lactating women in her catchment area. Next, we randomly selected four women from this list. This resulted in a sample of 1,901 women. We had also followed the same sampling strategy during Phase I to select 6,208 PLW women across 27 districts, allowing us to compare results across phases. Note that during Phase II, we used a different approach. We randomly selected 200 villages or wards in each of the 4 states we worked in, selected an ASHA worker in each of them, and selected 3 PLW women registered with her. This gave us a sample size of 2,400 women for Phase II.

### Data Quality and Analysis

Several data quality systems were built into data collection to ensure high fidelity to survey protocols and best practices. These included daily data quality checks, spot checks, random audio audits of surveys, and back-checks of a proportion of surveys. This ensured that issues were flagged and resolved on a daily basis.

## SUMMARY OF KEY FINDINGS

- **Platform reach:** Platforms that reached the most women are Interpersonal Communication (IPC) platforms – Home Visits, Health Facility Visits, Village Health Sanitation & Nutrition Days (VHSNDs), Community-Based Events – and Television. In November 2019, community-based events (i.e. Annaprasan Diwas, Godhbharai, Suposhan Diwas) reached 35% more women than in November 2018.
- **Home Visit reach:** Home visits remain a relatively high-reach platform. 65% of women received at least one home visit within three months of POSHAN Maah 2019. Out of these women, most were visited by both ASHA and Anganwadi workers multiple times in the same time period and for longer than 10 minutes. However, the reach of home visits did not increase compared to 2018, suggesting scope for improvement.
- **Family exposure to nutrition programming:** More family members were reached by Interpersonal Communication platforms in the last year. However, overall levels remain low; only 26% of mothers-in-law and 8% of husbands engaged with any one IPC platform.
- **Platform recall:** Compared with other platforms, the increase in the proportion of women who recalled hearing a message from ASHA Mother's Meetings was the highest. Recall from Home Visits, VHSND, and CBEs also increased substantially in a year's time.
- **Recall of messages:** The proportion of women who recall hearing the average nutrition message has gone up from 40 to 48 percentage points, almost as high as the proportion of women who recall hearing sanitation



messages (56% of women). However, only 24% of women recall hearing about the importance of the first thousand days.

- **Knowledge:** Knowledge of anemia prevention and early breastfeeding is high and increased significantly in the last year. On the other hand, knowledge about introduction of complementary feeding as well as 4+ antenatal checkups both remained low (ranging from 45%-54%) and saw no change.
- **Counseling quality:** Frontline health workers are mainly telling women what behaviours to practice, not the “how” and “why” of those behaviours. Consequently, women may not know how to overcome barriers to performing a behaviour.
- **Practices:** Significantly more women registered their pregnancy within the first trimester and initiated breastfeeding within an hour of delivery. However, the percentage of mothers who receive a diverse diet or provide their children under 2 years an adequate diet remains low and showed little improvement.

## SUMMARY OF KEY RECOMMENDATIONS

- **Right platforms:** Continue leveraging home visits, community-based events, and health facility visits. Focus on enhancing the use of television for nutrition messaging as well as quality of VHSND messaging given their high reach, and expand reach of ASHA Mother’s Meetings given the large proportion of women who recall hearing messages from them.
- **Right messages:** Prioritise sending messages for which knowledge and practice levels are low, especially the importance of the first thousand days, 4+ ANC check-ups, complementary feeding, and mother’s/children’s dietary diversity.
- **Right audience:** Improve targeting of poor women who leave the house infrequently as well as family members, especially husbands. Doing so can increase self-efficacy and create a supportive environment for practicing important nutrition-related behaviours.
- **Right quality:** Ensure frontline workers emphasize the ‘how’ and ‘why’ of nutrition behaviours during counseling sessions.





## CHARACTERISTICS OF THE POPULATION

In Phase III, 85% of our respondents fell in the Scheduled Caste, Scheduled Tribe, or Other Backward Caste category. The average respondent was 24.5 years old, and 54% of women reported to be literate. Most (78.5%) of these women do housework but nearly 14% are involved in agriculture. A significant proportion of them had access to some sort of technology – while 86% had a mobile phone in their household, 39% had a television, 4% had a radio at home, and 2.3% had a car. Notably, 10.25% of these women indicated they rarely or never left the house.

## KEY FINDINGS

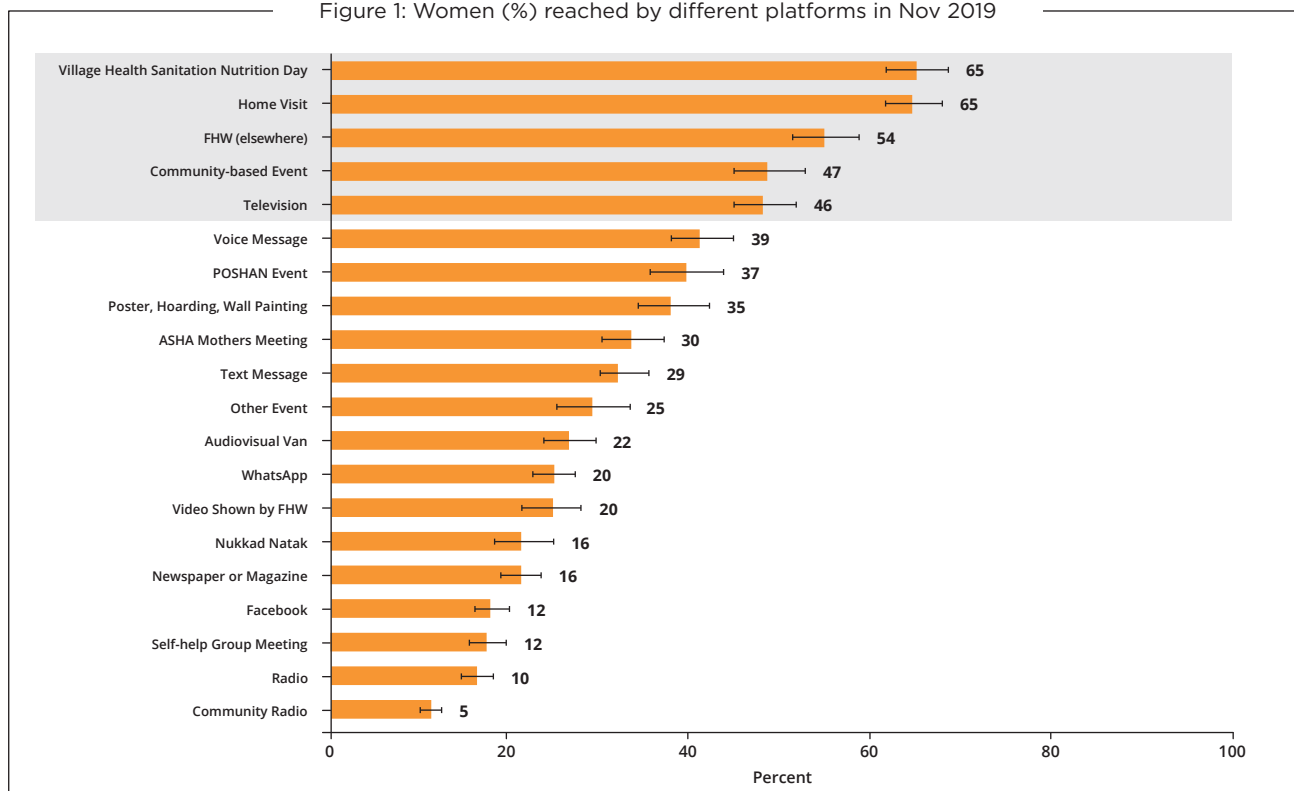
Findings 1-5 are focused on analysing which platforms are effective at disseminating messages, and 6-8 focus on message retention, knowledge levels, and practices.

**1. Home Visits, Village Health Sanitation Nutrition Days (VHSND), Community Based Events – reach the most people. In the past year, community – based events (Annaprasan Diwas, Godhbharai, Suposhan Diwas) reached 35% more women.**

Across the board, Jan Andolan categories of mass and digital media, mid-media, and IPC platforms, the most women are reached by at least one IPC platform. These platforms typically involve more face-to-face interaction between health workers and beneficiaries.

The top five platforms that reached women were: Home Visit (65%), VHSND (65%), meeting frontline health workers elsewhere (54%), Community-Based events (47%), and Television (46%). Moreover, the reach of most of these platforms is uniformly distributed across socio-economic categories. On the other hand, the bottom five platforms are Newspaper/Magazine (16%), Facebook (12%), Self-Help Group Meeting (12%), Radio (10%), and Community Radio (5%). The limited reach of some of these print, digital media and mid-media platforms may have been driven by low literacy rates, low access to technology, and the low frequency at which pregnant and lactating women leave the house.

Figure 1: Women (%) reached by different platforms in Nov 2019





In the last year, the platforms that saw the largest increase in reach were Community – Based Events (35%-47%), POSHAN Events (23%-37%), Posters (21%-35%), and Voice Messages (26%-39%). However, none of these high growth platforms except CBEs reach even close to the majority of women. In contrast, the proportion of women reached by Home Visits remained the same over the year (about 2 out of 3 women).

Figure 2: Women (%) reached by interpersonal communication platforms

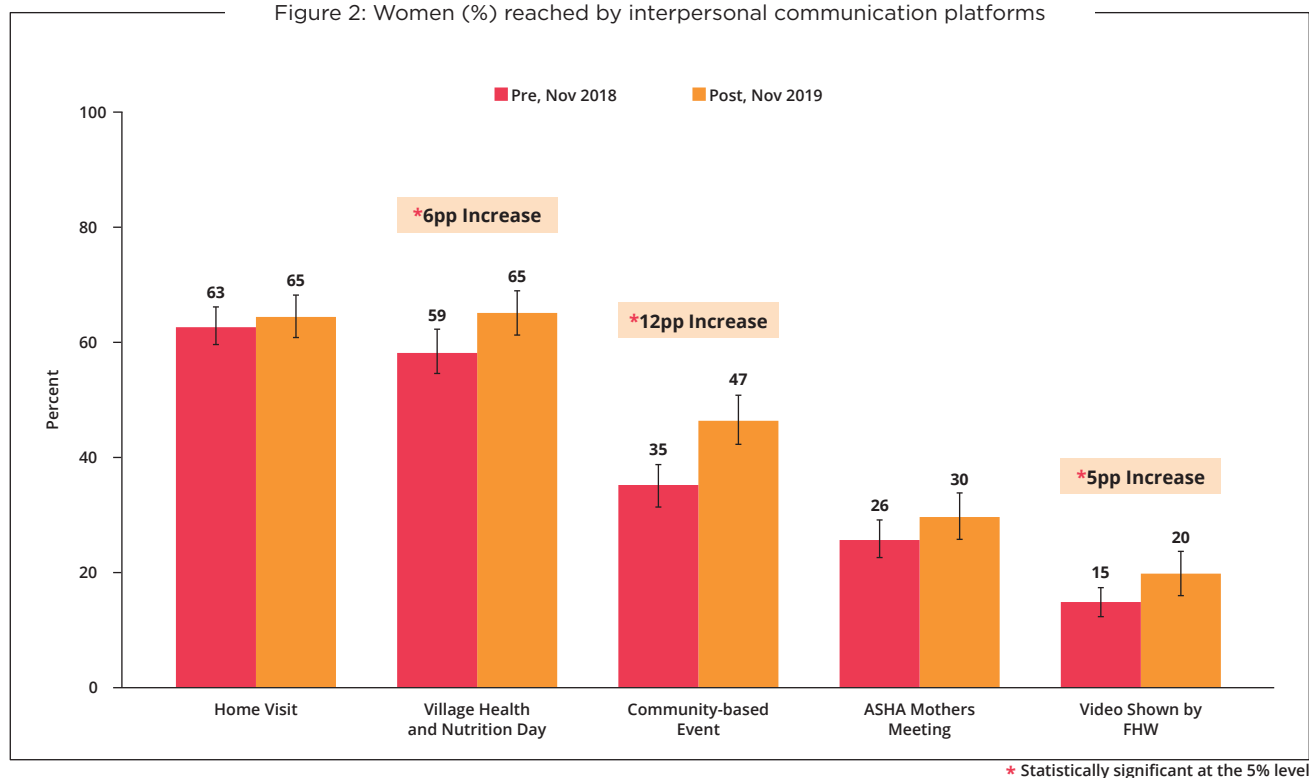


Figure 3: Women (%) reached by other community-based Jan Andolan platforms

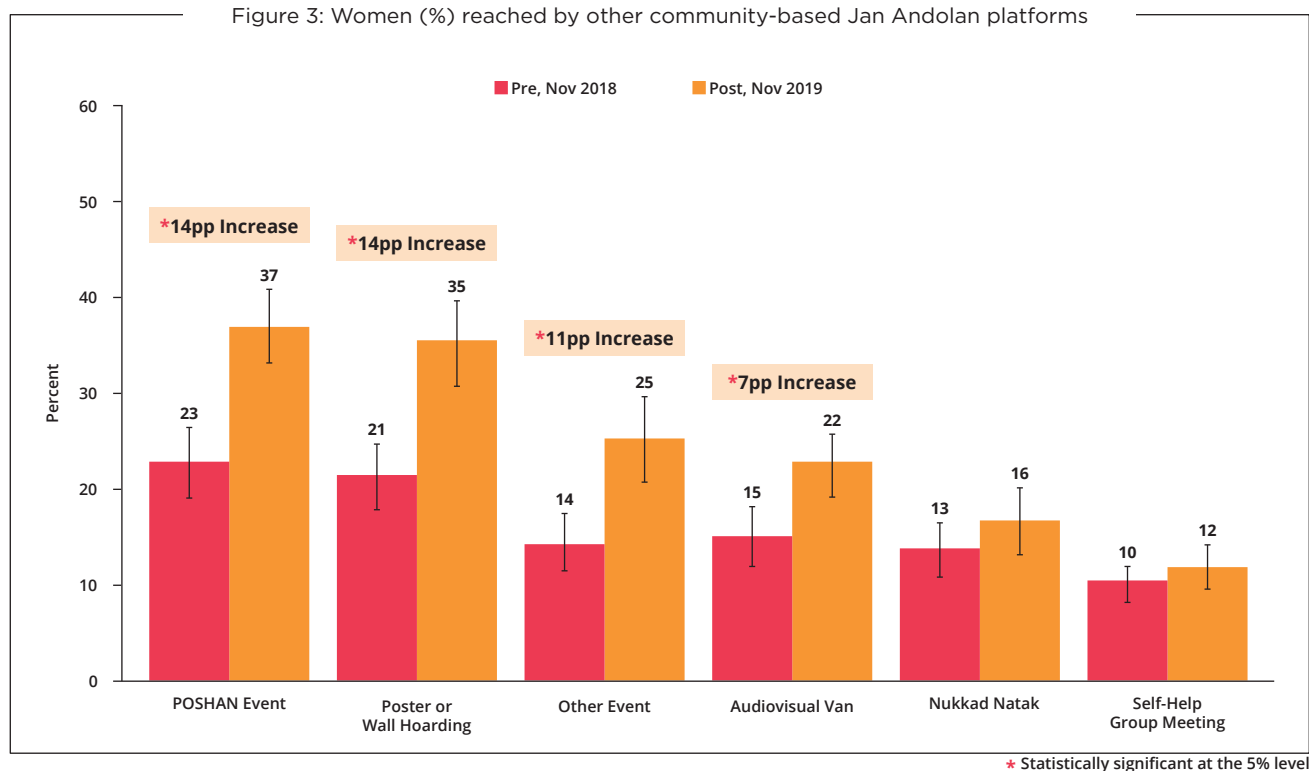
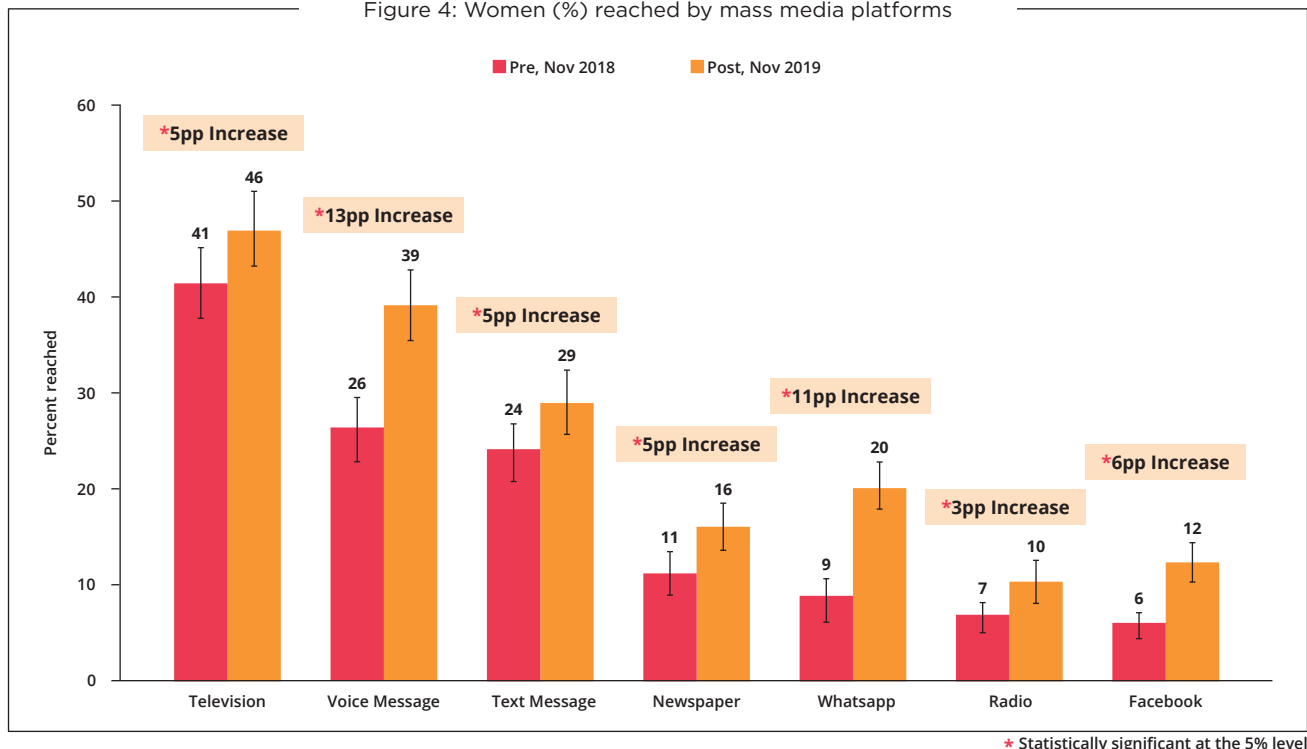




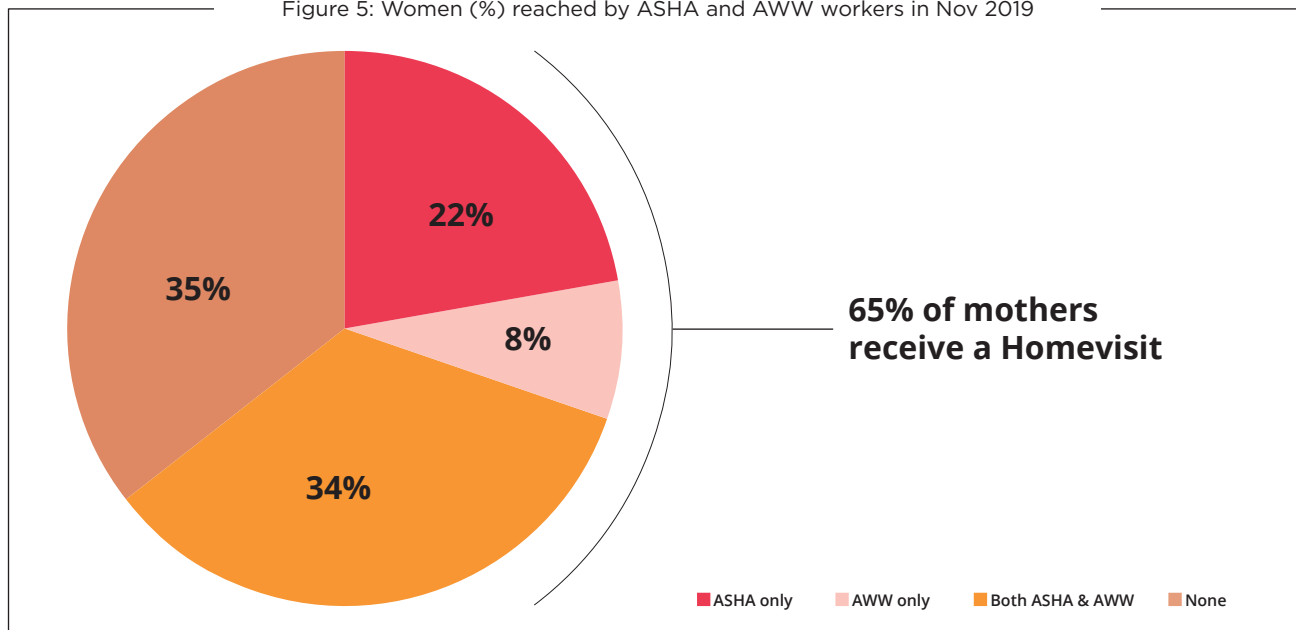
Figure 4: Women (%) reached by mass media platforms



## 2. Most women received at least one home visit. Of these women, the majority received multiple visits by both ASHAs and Anganwadi workers.

While a third of women received no home visit in the last three months, out of the 65% who were visited, 34% were visited by both an ASHA and Anganwadi worker, 22% by only an ASHA, and 8% by only an Anganwadi worker (AWW)<sup>1</sup>. Out of all women who were visited at least once, the vast majority (84.2%) were visited on multiple occasions. Moreover, most of these visits lasted 10 minutes or more. Receiving multiple home visits of substantial length may enhance retention of messages since most mothers point to the frequency with which they have heard a message as key to remembering it.

Figure 5: Women (%) reached by ASHA and AWW workers in Nov 2019



1. Note that we round each percentage above. More precisely, 34.155% of women receive a visit both from an ASHA and AWW worker, 22.31% are visited by an ASHA worker, and 8.49% receive a visit from only an AWW worker.



Even though ASHA workers did visit more women, we find that AWW and ASHA workers are spending the same amount of time and making visits at comparable frequencies to the women they do visit.

Figure 6: Number of times ASHA or AWW workers visited women who received at least one visit

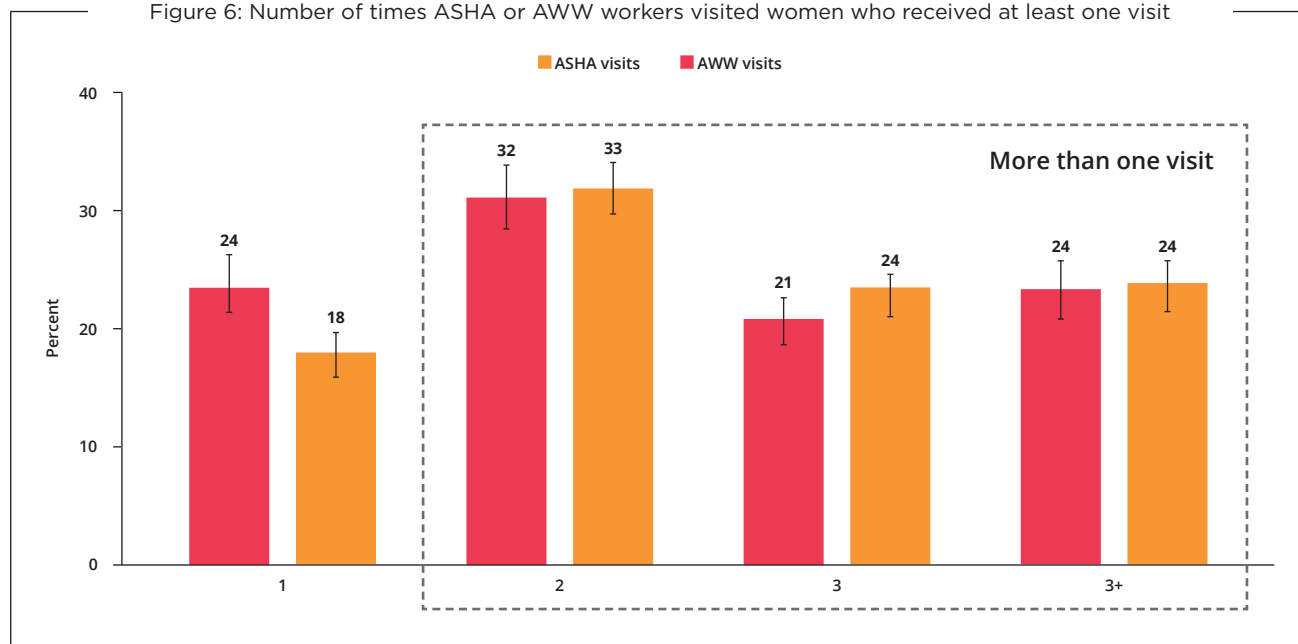


Figure 7: Length of visits by ASHA or AWW workers to women who were visited at least once

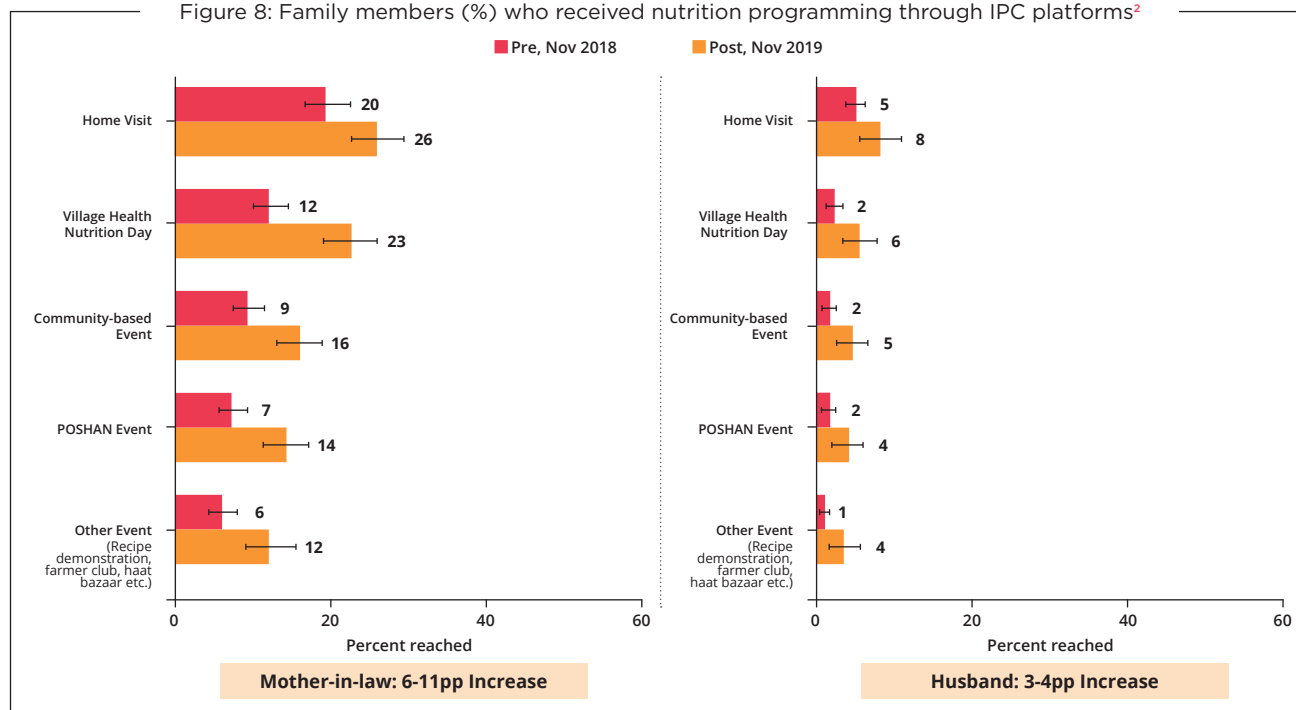


### 3. Although more family members interacted with Interpersonal Communication platforms in the last year, overall levels remain low.

Support from family members can create a conducive environment to perform a nutrition behavior and help mothers overcome barriers they face. More mother-in-laws received nutrition programming through Interpersonal Communication Platforms this year. Most notably, the proportion of mother-in-laws attending Village Health Sanitation Nutrition Days rose from 12 to 23 percentage points while attendance of both Community - Based Events and POSHAN Events rose by 7 percentage points each. Alongside, the proportion of husbands engaging with these platforms too rose by 3 - 4 percentage points.



Figure 8: Family members (%) who received nutrition programming through IPC platforms<sup>2</sup>



However, overall levels remain low; no more than 26% of mother-in-laws and 8% of husbands have engaged with any such platform in the last three months. This indicates that there is still large potential to further engage family members.

#### 4. Recall of messages from ASHA Mothers' Meetings, Home Visits, VHSND, and CBEs rose dramatically in the last year.

In addition to the reach of platforms which determine how capable they are of reaching targeted women, it is also important to assess how effective platforms are at actually delivering nutrition - related messages. This was assessed by estimating "recall rate" of platforms, defined as the percentage of women who recalled hearing at least one nutrition- related message from the platform in the last three months out of those who had been reached by that platform.

The top 5 platforms in terms of recall rate are home visits (70%), ASHA Mothers' Meetings (50%), CBEs (47%), Television (43%), and Newspaper/Magazine (36%). On the other hand, the bottom performing platforms are Audio Vans (8%), Voice Messages (10%), Facebook (11%), and Nukkad Naatak (13%). This indicates that interpersonal communication platforms are best at ensuring that recipients actually remember messages from them, perhaps because the way they deliver messages is more conducive to retention or because they send such messages more frequently.



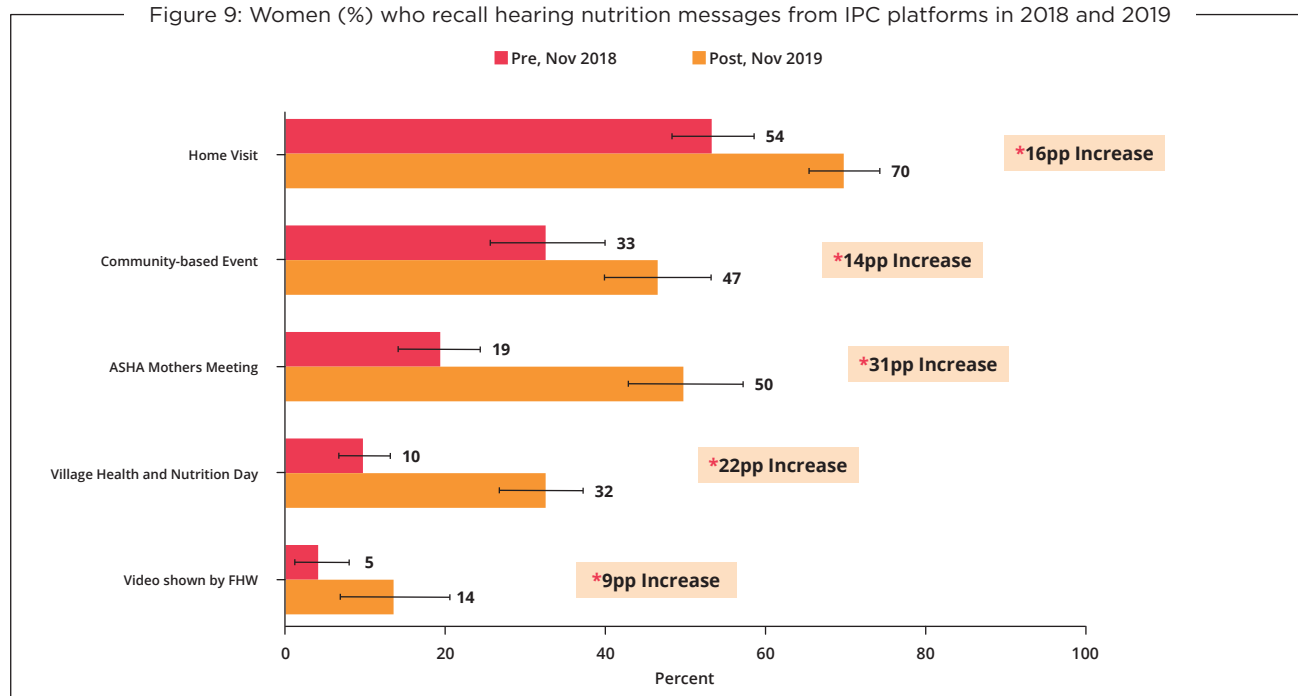
Most of these IPC platforms have also shown considerable improvement in the last year. For instance, the recall rate of ASHA Mothers' Meetings has increased dramatically from 19 to 50 percentage points. Similarly, the recall rates of VHSND and Home Visits too have increased from 10 to 32 percentage points and 54 to 70 percentage points respectively. On the other hand, most mid-media platforms perform poorly on this front and showed little to no improvement.

<sup>2</sup>. All of these changes are statistically significant at the 5% percent.





Figure 9: Women (%) who recall hearing nutrition messages from IPC platforms in 2018 and 2019



\* Statistically significant at the 5% level

### 5. Overall platform strategy should be informed by both the reach and recall of platforms. Home Visits, CBEs, Television, VHSND, and ASHA Mothers' Meetings are the most promising platforms.

Whether or not a platform should be prioritized depends both on (a) how good the platform is at reaching the target population, and (b) whether beneficiaries are able to recall messages from it.

Out of the 19 platforms we examine, Home Visits and Community-Based Events have both high reach and high recall rate. This indicates that it may be worthwhile to further prioritize disseminating messages through them. Notably, the proportion of women reached by Home Visits has remained unchanged in the last year, indicating that there is still scope to do so.

Other promising platforms are those that either have high reach and recall but are not disseminating nutrition messages or those that have only high reach or high recall. Television has high reach (46%) and high recall (43%) but is highly skewed towards sending messages about sanitation and hygiene. Leveraging television to send more nutrition themed messages may be highly effective. VHSND has high reach (65%) but a low recall rate (32%), while ASHA Mothers' Meeting has a high recall rate (50%) but low reach (30%). Increasing focus on these two platforms to increase platform quality and reach respectively could increase the efficacy of POSHAN Abhiyaan's SBCC strategy.

Table 1: Reach and Recall Rate of Platforms  
Platforms are ranked by reach

Platform	Reach (%)	Recall Rate (%)
Home Visit	65	70
Village Health Sanitation Nutrition Day	65	32
Community-based Event	47	47
Television	46	43
Voice Message	39	10
POSHAN Event	37	26
Poster	35	20
ASHA Mothers' Meeting	30	50
Text Message	29	15
Other Event	25	14
Audio Van	22	8
WhatsApp	20	15
Video Shown by FHW	20	14
Newspaper or Magazine	16	36
Nukkad Natak	16	13
Self-Help Group Meeting	12	27
Facebook	12	11
Radio	10	15

High Reach, High Recall Rate    Either High Reach, High Recall only  
Low Reach, Low Recall Rate



On the other hand, Facebook, Nukkad Natak, Radio, Whatsapp and Video Shown by FHW are all platforms that have both low reach and a low recall rate. This could be for several different reasons including a lack of access to technology, not having the literacy required to understand the messages, and a lack of effective implementation of these platforms. Regardless of the reason, given that both the reach and recall would have to be improved for these platforms, there might be good reason to deprioritize them.

It is important to note that the relative efficacy of these platforms remains about the same across geographical regions, though the levels of reach and recall in some places may be higher than others.

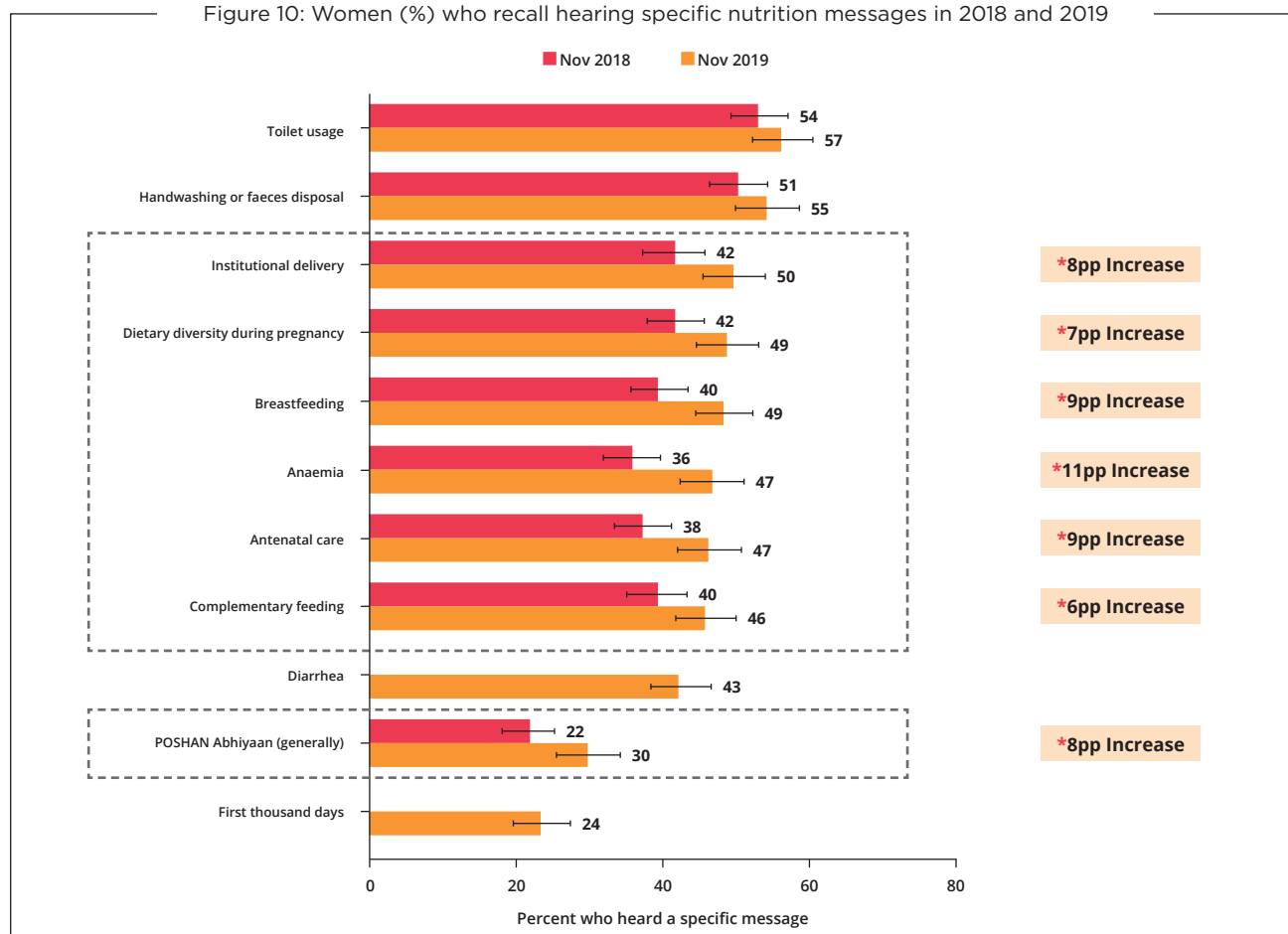
## 6. The proportion of women who recall hearing nutrition messages continues to increase and catch up to sanitation messages.

The next step in encouraging behaviour change through SBCC is ensuring the target audience actually remembers hearing messages disseminated through chosen platforms. We measure this through recall of a theme, defined as the percentage of pregnant and lactating women who recall hearing about that theme in the last three months from any source.

In the last one year, sizable improvements have been made in this regard. The recall of most nutrition messages, including dietary diversity during pregnancy, anaemia, antenatal care, and complementary feeding rose by between 6 and 11 percentage points each. Nearly half of all women remember hearing about each of these messages in our recall period, likely due to the large-scale dissemination of messages during POSHAN Maah. This is also the percentage of women who recall hearing about sanitation messages in the last three months (55%-57%).

However, certain gaps still remain. Only 43% of women recall hearing anything about diarrhea, and only 24% recall hearing anything about the importance of the first thousand days.

Figure 10: Women (%) who recall hearing specific nutrition messages in 2018 and 2019

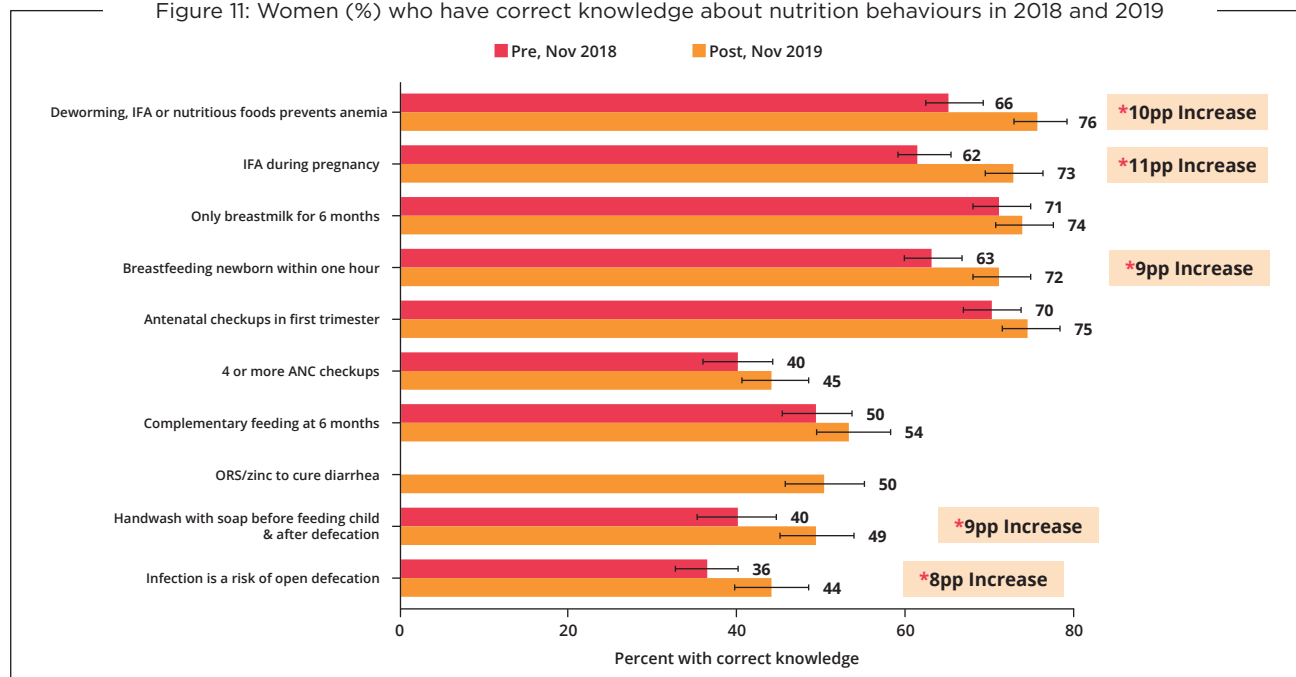




**7. Knowledge of anemia prevention and early breastfeeding is high and increased significantly in the last year. On the other hand, knowledge about complementary feeding as well as 4+ antenatal checkups both remained low and did not change.**

Next, we ascertained whether women possessed correct knowledge about key behaviors. Knowledge of anemia prevention in particular increased dramatically; 10+ percent more women now know the importance of taking Iron-Folic Acid supplements, deworming, and consuming nutritious foods to prevent and alleviate anaemia. Knowledge about the importance of breastfeeding within an hour also increased to a similar extent. Consequently, more than 70% of women know about the best practices related to anemia as well as know the importance of getting checkups in the first trimester, starting breastfeeding within an hour of birth, and providing exclusively breastmilk for 6 months.

Figure 11: Women (%) who have correct knowledge about nutrition behaviours in 2018 and 2019



However, knowledge levels for a few behaviors remain low. Only 54% of women know to introduce complementary feeding at 6 months, and 45% know to get 4 or more antenatal care checkups during pregnancy. Moreover, there was no significant increase in knowledge about either of these behaviors.

Most strikingly, knowledge about hygiene is the lowest amongst all behaviours despite the fact that more women heard sanitation related messages in the last three months than nutrition themed messages. Only 49% of women know the importance of handwashing before feeding children and after defecation, and only 44% recognize that open defecation creates a risk of infection. This indicates that there is potential to further explain the “how” and “why” of sanitation behaviours.

**8. Frontline health workers often only tell women which behaviours to practice and not how or why to practice them. Consequently, women may not know how to overcome barriers to practicing a behavior even if they possess the correct knowledge about it.**

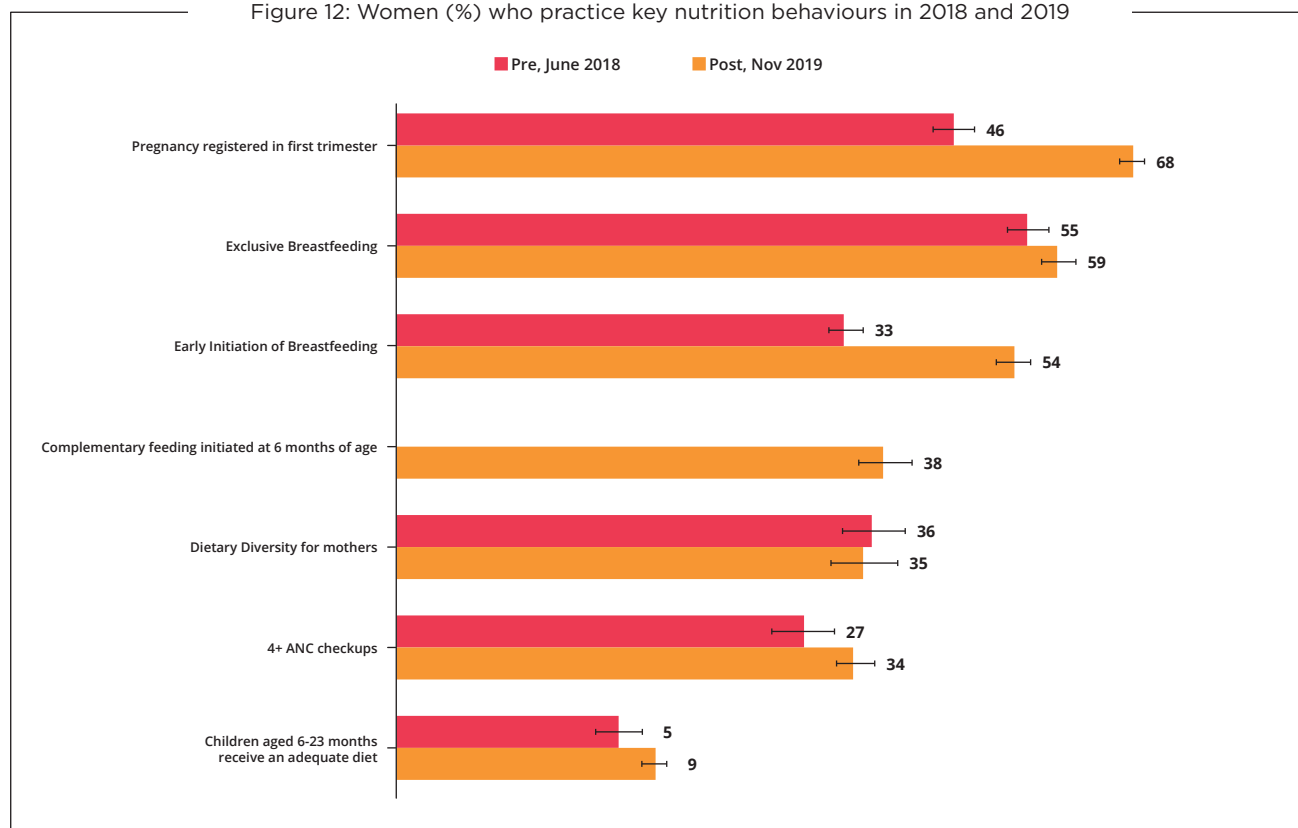
Effective SBCC requires quality counseling from frontline health workers. To gauge the quality of FHW counseling, women who had heard about breastfeeding or complementary feeding from frontline health workers were asked about the kinds of information they recalled receiving. A high percentage of these women were informed about the behaviours they should be practicing, but a lower percentage were told about the importance of these practices or how to actually practice them. This may result in low self-efficacy; women may not be able to overcome barriers they may face in performing a behaviour, resulting in low practice levels even if knowledge levels are high. For instance, even though 73% of women know the importance of taking IFA tables if they have diarrhea, only 25% say they would do so even if they experienced nausea. Thus, there is potential to increase the likelihood of behavior change by emphasizing the “how” and “why” of messages. Notably, self-efficacy for several different behaviors did go up in the last year.



**9. Registration within the first trimester and early initiation of breastfeeding improved significantly. However, the percentage of mothers who have a diverse diet or provide their young children under 2 years an adequate diet remains low and showed little improvement.**

In the last year, there has been a significant increase in practice of certain behaviours. Most strikingly, the percentage of women registering their pregnancy in the first trimester increased by 22 percentage points (from 46 to 68pp). Alongside, the proportion of women initiating breastfeeding within an hour of birth has gone up by 11 percentage points (from 33 to 54pp). On the other hand, key behaviors like exclusive breastfeeding and adoption of a diverse diet for the mother showed little to no change.

Figure 12: Women (%) who practice key nutrition behaviours in 2018 and 2019



Some of the behaviors that showed little or no change are also the ones with the lowest overall levels of adoption. At present, only 9% of children aged 6-23 months receive an adequate diet with the needed diversity in food groups as well as meal frequency. Similarly, only 34% of pregnant women get 4+ ANC checkups.



## KEY RECOMMENDATIONS

**1. Right Platforms:** Platforms that have high reach and high recall such as **Home Visits, Community-Based Events, and Television** should be prioritized. Television in particular should focus more on sending nutrition-themed messages as opposed to primarily sanitation messages. Given that home visits involve one-on-one counselling and messaging through television has the advantage of frequency and consistency, perhaps a strategy which combines them may be the most effective at increasing both exposure to and memory of nutrition messages I.

Additionally, platforms that have either high recall or high reach and moderate levels of the other show promise. It might be useful to channel resources into increasing the reach of **ASHA Mothers' Meetings** since they have particularly high recall rates. Additionally, seek to increase the quality of messaging at VHSNDs so that more women recall hearing messages from them.

As indicated earlier, these recommendations are based on reach and recall rates only. However, policymakers will also need to take into account the cost-effectiveness of platforms as well as any other strategic priorities.

**2. Right Messages:** Behaviors related to the first thousand days such as the timely introduction and ideal set of foods for **complementary feeding, 4+ ANC check-ups, and dietary diversity for mothers** still have low knowledge and/or practice levels. Frontline health workers can be trained on emphasizing these messages to beneficiaries. Additionally, content released through television, frontline health worker job aids, and other media should focus on these messages.

**3. Right Audience:** Poorer and less educated women have less exposure to most SBCC platforms, with the exception of exposure to Home Visits and Village Health Sanitation Nutrition Days. This increases the importance of using these platforms particularly to target lower socio-economic classes of women. To operationalise this, frontline health workers should be trained on the importance of targeting this set of women. Additionally, participation of women from lower socio-economic groups can be included separately in monitoring reports.

Alongside, family members need to receive more nutrition messaging since this can enable women to overcome key barriers to behaviour. Frontline health workers should seek to target more mother-in-laws and particularly more husbands. To operationalise this, they may need to adjust the timing of home visits so that the males in the household are also present.

**4. Right Quality:** Frontline health workers must move beyond a focus on festivities and providing commodities to focus on connecting well with the beneficiaries and explaining the “how” and “why” of a behaviour. This can be operationalised through training for these workers on how to deliver high-quality counseling.





## TECHNICAL APPENDIX

### Weighting Procedure

Since our sample allocation per district was uniform while the district population varies widely, the sample selection was not conducted with probability proportional to size. Consequently, respondent mothers had unequal probabilities of selection. If unequal probabilities of selection are correlated with characteristics that affect indicators of interest, then estimates of those indicators may be biased. For instance, the outcomes of women from larger districts contribute a relatively smaller share of the overall mean. If these larger districts are also associated with more intensive SBCC efforts, then, without adjusting for unequal probabilities, an estimate of an outcome such as average attendance at a POSHAN event would be lower than expected from the population.

We correct for this potential bias by applying sampling weights. A sample weight is the inverse of one's probability of selection into the sample- those with lower probabilities receive a relatively higher weight in the final estimates, and those with higher probabilities of selection weigh less. We calculate overall probability as the product of the probability of selection at stage one (probability a catchment was selected) and stage two (probability of selection from a catchment list).

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