POSHAN Abhiyaan
Social and Behaviour Change Communication in Aspirational Districts

BACKGROUND TO STUDY
POSHAN Maah in September 2018 was an exciting opportunity for several ministries to come together to push social and behaviour change communication (SBCC) platforms and disseminate nutrition-related messages to households. Through the use of Jan Andolan platforms, SBCC can empower women and families to make better decisions regarding their health and nutrition. Data on the reach of platforms and their effectiveness in disseminating nutrition-related messages was sought after to understand what went well and to continue to improve SBCC strategy. In November 2018 IDinsight conducted a survey in 27 aspirational districts to assess platform reach, recall of nutrition-related messages, and knowledge levels, attitudes and practices of pregnant and lactating women (henceforth women, or PLWs). We also collected data on the reported activities of Anganwadi workers. The findings are encouraging and indicative of the immense effort behind POSHAN Abhiyaan. We hope it can help inform the strategy moving forward.

QUESTIONS WE CAN ANSWER
• Which platforms have the greatest reach?
• Which messages do women recall hearing?
• What are the recall levels of specific messages across each platform?
• What is the association between SBCC messaging and knowledge levels and practices?
• What are the remaining gaps between knowledge levels and practices?

SUMMARY OF EMERGING RECOMMENDATIONS
1. Prioritise platforms with high reach (e.g. home visits, television, Village Health Nutrition Days, Community Based Events) and further prioritise messaging through platforms with high recall rates (home visits and television).
2. Continue to disseminate messages frequently and through multiple platforms.
3. Prioritise messaging around behaviours where knowledge levels are lower.
4. Support higher self-efficacy by incorporating content on barriers and by increased targeting of family members.
Sample: We constructed our sample to be representative at the district level of ASHA/AWW listed pregnant and lactating women, and Anganwadi workers to assess the status of implementation and to inform SBCC strategy going forward. 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), which included the period of POSHAN Maah.

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-checking a proportion of surveys. A team of over 300 surveyors and over 30 team members closely oversaw data collection and data quality, flagging and resolving issues on a daily basis.

All figures presented in the main text show population weighted averages across 27 districts along with 95 percent confidence intervals.

CHARACTERISTICS OF THE POPULATION

- 63 percent of women reported to be literate
- 87 percent had a mobile phone in their household
- 38 percent had a television in their household
- 5 percent had a radio in their household
- 20 percent of women indicated they rarely or never left the house
- 75 percent of women are of Scheduled Caste, Scheduled Tribe, or Other Backward Caste
KEY FINDINGS
1. Community Engagement and Interpersonal Communication (IPC) platforms and television reach the most women. Community engagement and IPC approaches are the best at reaching women of all socio-economic status.

Across the broad Jan Andolan categories of mass and digital media, mid-media, and community engagement & IPC, the highest proportion of women (87 percent) report being reached by at least one community engagement & IPC platform (see Figure 1). IPC platforms typically involve more face-to-face conversation between health workers and beneficiaries. Comparatively, 60 percent of women have been reached by at least one mass or digital media platform and 39 percent have been reached by at least one mid-media platform.

The top five platforms that reached women were: home visit (64%), frontline health worker elsewhere (58%), Village Health Nutrition Day (56%), TV (43%), and Community Based Event (31%). Within home visits, 55 percent of women had received a home visit from an ASHA and 44 percent had received a home visit from an Anganwadi worker. Mid-media platforms such as audio vans and nukkad natak tended to have less reach and digital media platforms had very limited reach. The bottom five platforms were: Nukkad Natak (12%), Newspaper or magazine (12%), Whatsapp (9%), Radio (8%), and Facebook (7%).

The limited reach of some of the print, digital media and mid-media platforms may have been driven by lower literacy rates, access to technology, and frequency at which pregnant and lactating women leave the house.
Home visits become especially important for the mothers who never leave the house (see Appendix for key platform definitions).

When assessing platform reach across socio-economic groups, we find mid and digital media reaches more women with a higher socioeconomic status. However, reach of community events and IPC does not suggest a similar disparity and is in fact uniformly high across socioeconomic strata, suggesting this type of platform can reach the most socially disadvantaged women (see Figure 2).

2. Household members of pregnant and lactating women were approximately half as likely to be reached by Jan Andolan platforms as compared to the women themselves. Home visits were the platform with the highest reach across all target audiences. The likelihood that at least one family member was reached by a given platform was about half the likelihood of mothers being reached by the same platform, though there was variation across platforms: for home visits (the highest reach platform), family members were 52 percent as likely as mothers of being reached, for POSHAN events, the likelihood was 57 percent. Given that SBCC aims to reinforce messages through raising awareness of behaviours across the whole family, this result is encouraging because it suggests that family members are indeed being reached across different platforms (see Figure 3). Nevertheless, there is still considerable scope to increase reach for family members.

Home visits had the greatest reach across all target audiences (mother, any family member, mother-in-law and husband). Given that mothers-in-law are a key influencer, it is encouraging that 1 in 5 women indicated their mother-in-law had received a home visit. Less than 10 percent of women indicated that their husbands had been reached by each platform, suggesting that more targeted efforts may be needed to encourage husbands to attend community events or receive counselling during home visits.
3. Recall levels of nutrition-related messages are not far behind recall levels of sanitation messages.

The vast majority of women (80 percent) recalled hearing at least one of the ten nutrition-related messages listed (see Figure 4).

The proportion of women who recalled each nutrition-related message ranged from 30 to 53 percent. The messages with the highest levels of recall were related to toilet usage (53%) and handwashing or faeces disposal (49%), indicating the potential reach of messages through the Swachh Bharat Mission in addition to POSHAN Abhiyaan. Recall levels of nutrition messages such as dietary diversity during pregnancy (42%), breastfeeding (39%), and complementary feeding (36%) are not far behind.

Given the very recent launch of POSHAN Abhiyaan, it is also encouraging that proportion of women who have heard about POSHAN Abhiyaan and its slogans are at moderate levels. Specifically, 22 percent of women had heard of POSHAN Abhiyaan or POSHAN Maah, 21 percent had heard of “Sahi Poshan, Desh Rohan” and 14 percent had heard “Har Gar Poshan Tyohaar”.

Figure 3: Reach of Platforms Across Target Audiences

![Graph showing reach of platforms across target audiences]

- Mother
  - Home Visits: 64%
  - Village Health Nutrition Day: 56%
  - Community-Based Events: 32%
  - POSHAN Events: 21%

- Any Family Member (other than Mother)
  - Home Visits: 33%
  - Village Health Nutrition Day: 23%
  - Community-Based Events: 16%
  - POSHAN Events: 12%

- Mother-in-law
  - Home Visits: 21%
  - Village Health Nutrition Day: 13%
  - Community-Based Events: 10%
  - POSHAN Events: 7%

- Husband
  - Home Visits: 9%
  - Village Health Nutrition Day: 3%
  - Community-Based Events: 3%
  - POSHAN Events: 2%
4. Knowledge levels vary substantially by behaviour.
Correct knowledge was assessed by testing women on how to practice a behaviour (e.g. when to breastfeed a child after birth) and whether they could indicate the benefits or risks of certain behaviours. This differed from measuring recall, for which women were asked whether they had heard anything about a topic and did not assess correct knowledge.

The proportion of women with correct knowledge of the risk of infection from open defecation, four or more antenatal care (ANC) check-ups, when to wash hands, and introduction of complementary foods is relatively low (see Figure 5). Knowledge of iron folic acid (IFA) supplements during pregnancy, prevention of anaemia and breastfeeding practices were higher than knowledge of introduction of complementary foods. More women were knowledgeable about seeking ANC within the first trimester than the correct number of ANC check-ups during a pregnancy (4 or more). The vast majority of women surveyed possess correct knowledge of the minimum age of girl education until 16 and minimum age of girl marriage at 18.

Of note is that even though recall of toilet usage messages was the highest, knowledge of risk of infection from open defecation was the lowest. This indicates the importance of ensuring that messages effectively convey correct nutrition-relevant knowledge.
5. Certain platforms are more effective in terms of recall levels than others. Comparing reach of platforms with their recall levels should be a criteria when determining which platforms to further prioritise.

We can compare the reach of various platforms with the recall levels for those same platforms to gain a sense of which platforms have the greatest potential for further investment (see Figure 6). Potential for investment can be defined as platforms that through investment could have both high reach and high recall levels. High reach is important because as per the SBCC theory of change shown in the Appendix - women must first be reached by a given platform in order to receive messaging through the same platform. A high level of recall is important because the platform also needs to be effective in instilling the nutrition-related message to women such that they can recall the message in the future.

Home visits and television have both high reach and high recall levels. Based on the above theory for platform investment, these platforms represent ripe opportunity for further investment.

The Village Health and Nutrition Day platform has high reach as well (56%), but comparatively a much lower level of recall (12%). This platform might also be worth further investment, as VHNDs are clearly already reaching quite a few women. Now the focus may be on improving messaging such that the women who are already at the VHND can receive nutrition-related information.

While the nukkad natak, radio, and WhatsApp platforms have been a policy priority, it is worth noting that they have low reach and also low levels of recall. Platforms such as WhatsApp might still be worth investment for other reasons, such as cost-effectiveness, but from the perspective of reach towards pregnant and lactating women and recall level they are currently less promising than other platforms.

Although self-help groups and newspaper/magazines have low reach (13% and 12%, respectively), they have moderate recall levels and are performing better than other low reach platforms in terms of recall levels (Self-
7. Recalling a message is associated with higher knowledge and practice levels, suggesting SBCC potential to change behaviour.

It is notable that recall of hearing a message recently (last three months) is consistently associated with higher knowledge levels. The proportion of women with correct knowledge of a behaviour is consistently higher out of those who recall hearing a message in the last three months versus those who do not recall hearing a message in the last three months (see Figure 7).

Furthermore, the proportion of women practicing a behaviour is also significantly higher for women who recall hearing a nutrition-related message in the last three months versus those that do not (see Figure 8). A higher proportion of women (at least 4 months pregnant) consumed IFA tablets for 30 days last month out of those who recalled a message about anaemia versus those who did not. Similarly, a higher proportion of women consumed at least 5 food groups out of those who recalled a message about dietary diversity or food intake during pregnancy versus those who did not.

These findings indicate the potential value of SBCC and messaging in promoting the correct knowledge and behaviours. Of note is that while we find that SBCC messaging is strongly and positively correlated with knowledge and behaviours, these are descriptive associations, meaning we cannot isolate the causal influence of SBCC messaging from other unobserved factors.

6. Frequency of exposure was the main reason women found messages memorable. Hearing messages from more than one platform was associated with higher knowledge levels for several behaviours.

When women were asked why they found a specific message disseminated through a specific platform memorable, the top reason indicated across all messages and platforms was that they had seen, read or heard the content many times. This reason was consistent for all messages and all platforms. Consistent with the multi-platform communication strategy which underpins the SBCC approach, this indicates that frequency of content dissemination is one of the main drivers for recalling messages.

Furthermore, for several behaviours including 4+ ANC, prevention of anaemia, when to wash hands, and risk of infection from open defecation, the proportion of women with correct knowledge was higher among those who recalled hearing a general message about that behaviour from more than one platform as compared to those who recalled hearing a message from only one platform.
8. Lower levels of self-efficacy signal remaining gaps between knowledge and practice.

Although the proportion of women with correct knowledge is relatively high for several behaviours, the proportion with perceived self-efficacy (or confidence to perform a behaviour in midst of potential barriers) and the proportion practicing the behaviour are lower (see Figure 9).

The proportion of women with correct knowledge of IFA supplementation was 65 percent however the proportion of women who indicated that they would want to complete the course of IFA supplements even if they experienced nausea or vomiting was much lower, at 19 percent. Similarly, the proportion of women with correct knowledge of exclusive breastfeeding for six months was 70 percent, while the proportion of women who felt they could prevent others from feeding their child anything other than breastmilk was 42 percent and the proportion who indicated they exclusively breastfed their child was 56 percent. This suggests that even when information is no longer a barrier, other factors such as family support and social norms, as well the ability to manage side effects, may impede women from practicing behaviours.

Given this, including appropriate support and self-efficacy related messaging (along with a continued focus on the correct knowledge) may help women better translate knowledge to practice.
EMERGING RECOMMENDATIONS

1. Prioritise platforms with high reach (e.g. home visits, television, Village Health Nutrition Days, Community Based events) and further prioritise messaging through platforms with high recall levels (home visits and television).

Platforms that have high reach amongst pregnant and lactating women should be prioritised, such as home visits, television, Village Health and Nutrition Days, and community-based events. Platforms with high levels of message recall should be considered for further prioritisation, including home visits and television. Given that home visits involve one-on-one counselling and messaging through television has the advantage of frequency and consistency, a strategy which combines interpersonal and consistent messaging may generate higher recall. Platforms that are promising and warrant further promotion for nutrition-related messaging are self-help groups, given that these are less costly, involve interpersonal communication and have moderate levels of recall.

As indicated earlier, the recommendations for platforms mentioned above come from a comparison of reach and recall rates. However, policy makers will also need to take into account cost-effectiveness of platforms and strategic priorities.

2. Continue to disseminate messages frequently and through multiple platforms

Messaging on nutrition-related behaviours should continue to be frequent and through multiple platforms even during non-POSHAN Maah periods. Our data and SBCC literature suggest that frequency of messaging is key and utilisation of several strategies (mass media, mid media, community engagement, interpersonal communication) is more effective than any single strategy on its own. One potential approach for further exploration is to select a few platforms to disseminate consistent messaging throughout the year.
3. Prioritise messaging around behaviours where knowledge levels are lower
Given the large matrix of interventions within POSHAN Abhiyaan, the prioritisation of behaviours and content for SBCC programming should be based on the behaviours with the lowest knowledge levels. In the Aspirational Districts, knowledge levels greatly varied depending on the behaviour. For instance, knowledge of minimum age of girl marriage is high, but knowledge of complementary feeding is significantly lower, potentially indicating greater need for complementary feeding messaging.

4. Improve self-efficacy by incorporating content on barriers and increasing targeting of family members.
Messaging content should address the key barriers per nutrition-related behaviour, such as management of side effects, convincing family members of the importance of certain behaviours, and providing information on financial and other resources available through the health system. Such messages are key in order to help improve the self-efficacy of pregnant and lactating women to perform these behaviours.

Increasing the targeting of messages to family members can improve the practical support such as resources and assistance women receive to practice behaviours and further reinforce the communication of messages from within her home environment. Given that home visits already have the highest reach across all target audiences, one potential avenue to increase reach towards family members such as mothers-in-law can be through efforts to ensure other family members are present and involved during home visits. For men, it is potentially useful to consider other platforms such as WhatsApp, since they tend to have more access to mobile phones.

Note
As per need, our data can also be separated for each of the 27 Aspirational Districts that we survey, and by literacy or Poverty Probability Index (PPI) levels. Such additional analysis can enable policy makers to be even more targeted in terms of platform and messaging investment.

Acknowledgements
We would like to thank the Ministry of Women and Child Development, NITI Aayog, Bill & Melinda Gates Foundation, UNICEF, World Bank, Ashoka University Centre for Social and Behaviour Change, International Food Policy Research Institute, Alive & Thrive, and BBC Media Action for their input and contributions to our study.

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APPENDIX

Simple Theory of Change for SBCC

Definitions of Platforms (Figure 1)

- Television - Percentage of women who watch television ever
- Home Visit - Percentage of women who indicated that an ASHA or Anganwadi worker spoke to her in her home to provide health or nutrition information or services in the last three months
- FHW (elsewhere) - Percentage of women who have met an ASHA, Anganwadi worker, or ANM elsewhere other than platforms listed in the last three months
- Community-based Event - Percentage of women who have attended a community-based event defined by the survey as an Annaprasan Diwas, Godbharai, or Suposhan Diwas in the last three months
- POSHAN Event - Percentage of women who have attended a POSHAN event defined by the survey as a POSHAN mela, rally, walk or Prabhat Pheri in the last three months
- Other Event - Percentage of women who attended any other event related to health, nutrition, sanitation or gender in the last three months, such as a recipe demonstration, farmer club meeting, haat bazaar activities, harvest festival, Bachpan Diwas, Podha Ropan, Saas Bahu Samellan, or other

Please see online for a comprehensive list of definitions per figure.

Technical Note

We employed a two stage stratified random sampling procedure. In the first stage we randomly sampled polling stations from a district proportionate to the number of households on voter rolls; the selection was stratified by assembly constituency (AC), meaning a greater fraction of polling stations were drawn from more populous ACs. We then identified an ASHA or Anganwadi worker associated with that polling station by randomly selecting a pregnant or lactating woman from the polling station and identifying her ASHA or Anganwadi worker if the ASHA was not available. We asked each ASHA/AWW to provide a listing of all the current PLWs in their catchment area and on their rolls. In the second stage we randomly sampled four respondent PLWs from each of these lists.

While the sample was designed to be representative at the district level, this document presents findings that have been pooled across all 27 of the study districts. Because sample allocation per district was uniform at approximately 200 PLWs while district population varies widely, the sample selection was not conducted with probability proportional to size and 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).