Delivering for Nutrition in South Asia
Equity and Inclusion

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Improving Dietary Practices among Young Children Through Male Engagement: Lessons from Bihar

Presentation Subtitle

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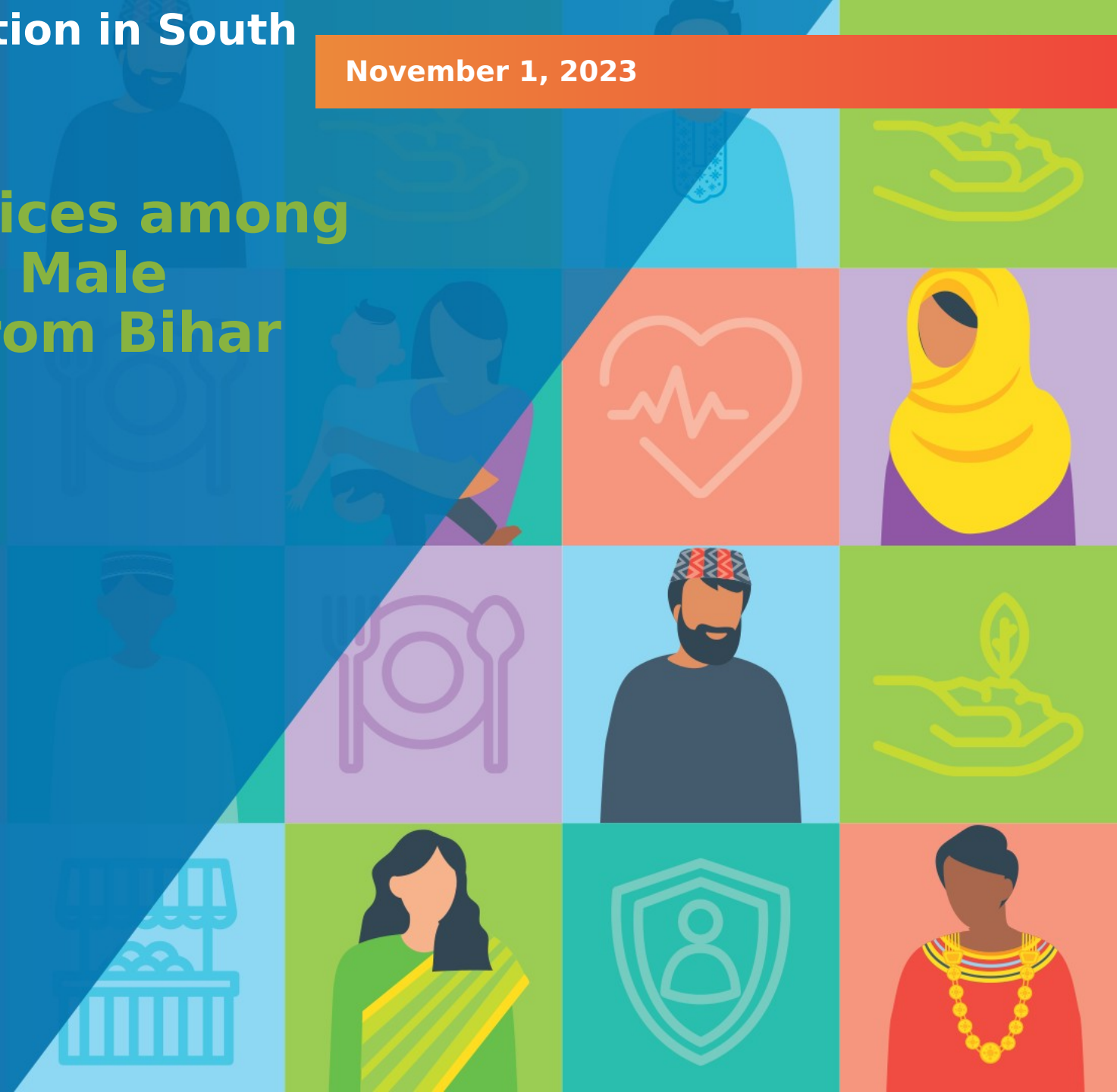


Rationale and opportunity

Engaging men in health and nutrition programming provides an opportunity to move towards better health and gender outcomes.

Historically, the development sector has anchored on family planning and nutrition programs that focus on women, both as end-users and as providers (e.g. ASHAs, ANMs, SHGs)[1]. While many of these programs have seen considerable success in their outcomes, challenges have emerged in the long-run:

1. **A disproportionate burden has been put on women, both as end-users and as the ones to deliver health programs.**
2. **These programs reinforce the imbalanced gender norms that underlie women's unpaid care work and time poverty, and relatedly their mobility and workforce participation.[2]**
3. **Men have been further alienated from the *"female"* domains of family planning and nutrition.[3]**

Evidence shows positive improvements in health, nutrition, and gender outcomes when men's engagement increases, but falls short of showing lasting behaviour change at scale. There is a need for innovative programs that can fill this gap.

[1] Morgan, R., Ayiasi, R. M., Barman, D., Buzuzi, S., et al. (2018, Jul 6). Gendered health systems: Evidence from low- and middle-income countries. Health Res Policy Syst, 16(1), 58.
[2] Ved, R., Scott, K., Gupta, G., Ummer, O., Singh, S., Srivastava, A., & George, A. S. (2019, Jan 8). How are gender inequalities facing India's one million ASHAs being addressed? Policy origins and adaptations for the world's largest all-female community health worker programme. Hum Resour Health, 17(1), 3.
[3] Vouking, M. Z., Evina, C. D., & Tadenfok, C. N. (2014). Male involvement in family planning decision making in sub-Saharan Africa: What the evidence suggests. Pan Afr Med J, 19, 349.

Methodology

METHODOLOGY

We used a quasi-experimental design with two arms, i.e. intervention and comparison. One block was assigned as intervention and an adjacent block with similar socio-cultural dynamics was assigned as comparison. The village organisation (VO) was considered the sampling unit.

SURVEYS

Our findings are based on in-depth, 45- to 60-minute surveys. Baseline surveys were conducted in June 2021 with men and women participants in each arm. Endline surveys were conducted in April 2022 with a different group of men and women participants in each arm.

PARTICIPANT SELECTION

For each program, a listing exercise was done, which was considered the sampling frame. A total of ~1000 households were listed before the baseline. Using this sampling frame, a total of 800 respondents (400 women + 400 men) were selected through a random sampling technique from each arm. Hence, a total of 1600 respondents were selected for a round of study.

REPLACEMENT PARTICIPANTS

Replacements were selected using systematic random sampling when the sample size was not completed. Major reasons for sample non-completion were: 1. Migration of respondents and 2. Non-availability of respondents (respondents were marked as “unavailable” after three attempts to reach them at their home).

Since the catchment area was finite (1000 households for each program), there were insufficient replacements and some of the survey sample sizes are below 400, particularly for the men’s surveys, as migration and unavailability were more common for men.

QUALITY ASSURANCE

The baseline survey instruments were pretested in one village in Maner block, Patna district. Field supervisors did spot checks of at least 20% of the samples, and at least 10% of the sample was spot checked by a PCI researcher. 10% of the sample was back-checked by supervisors for data quality assurance. All back checks were conducted on the day of interview.

COMPLEMENTARY QUALITATIVE DATA

The quantitative data was complemented by qualitative data, gathered from participants through focus group discussions and individual interviews. With couples, 44 individual in-depth interviews (IDIs) and eight focus group discussions were conducted. In addition, 40 IDIs with couples’ parents/parents-in-law and 18 with CRP couples were run. Respondents for qualitative research were recruited purposively, using a screener to select a representative sample of those participants who reported adequate exposure to the programs.

Our interdisciplinary approach

1. HUMAN-CENTRED DESIGN RESEARCH AND CO-CREATION

We conducted in-depth interviews, small group discussions & ideation sessions, intercept interviews, observations and shadowing with a diverse mix of **92 participants in two districts of Bihar** (see details). We engaged with couples, their families, and other stakeholders across the ecosystem to uncover their needs, behaviours and aspirations, understand their reactions to early ideas, and generate nuanced insights.

2. BEHAVIOURAL SCIENCE

We used behavioural frameworks to understand couples' aspirations and motivations. We ideated rigorous **behaviourally-informed solutions** for male engagement to drive nutrition and family planning outcomes, organised around knowledge, motivation, and enabling environments, and developed **impact pathways** to keep us anchored to the behaviour change frameworks.

3. LITERATURE REVIEW & EXPERT INTERVIEWS

We conducted a literature review of **40 reports and studies** (see details), as well as learnings on couples' engagement in family planning generated by ICRW and Vihara. This helped us identify actionable learnings on program design and men's behaviour that formed the basis of our program ideas. We also interviewed **six sectoral experts** (see details) to gain a swift understanding of the evidence landscape.

4. RAPID PROTOTYPING

Rapid prototyping enabled us to stress-test the key features and interactions of the programs in real-world conditions and further refine the program design. We conducted this live prototyping of the programs with **10 diverse couples** and **11 community stakeholders.**

5. PROOF-OF-CONCEPT

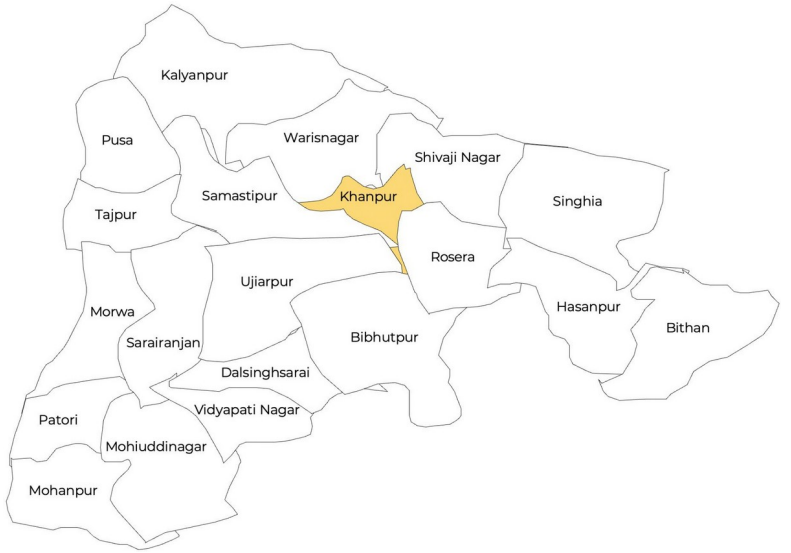
We rolled-out and assessed the full programs with **almost 2000 couples participating**, and used a qualitative and quantitative data collection approach to assess the programs' effectiveness in delivering on outputs, and get early indications of their influence on behaviours and outcomes. Learnings gathered during this stage helped us make final refinements to the programs and their implementation.

6. COMMUNITY PARTICIPATORY RESEARCH

At various points in our journey, we collaborated with **community representatives as partners for research, design, and testing**. Community representatives were closely involved with gathering feedback and sharing their learnings to inform refined programs during the prototyping and proof-of-concept phases. Community participatory research served not only as a way to gather rich insights, but also to shift power dynamics between stakeholders.

LOCATION

- Program implemented in Khanpur Block, Samastipur District
- Intervention and comparison villages selected randomly from the same block



PROGRAM PARTICIPANTS

- 963 eligible couples enrolled
- Primary target group: Couples with a child aged 6-23 months
- Secondary target group: Other family members (parents/in-laws of couples)

SURVEY SAMPLES

Gender	Intervention		Comparison	
	Baseline	Endline	Baseline	Endline
Women's survey	399	402	418	402
Men's survey	394	243	333	346

Collateral

User Journey

TARGET AUDIENCE

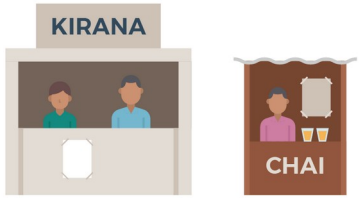
Primary: Couples with children aged 6-24 months who are part of an SHG household

Secondary: Other family members (children, grandparents), SHG members

1. DISCOVERY

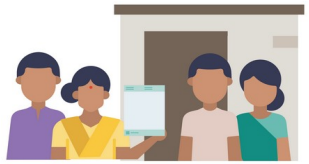
SHG members learn about the programme in weekly meetings through CRPs which SHG leaders reinforce in following meetings

Community leaders organise a meeting for men to introduce them to the programme



Posters are put up at kirana, chai and paan stores and other popular areas such as Primary Health Center to build awareness

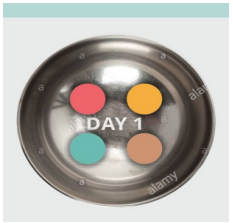
2. ONBOARDING



CRPs make a pre-onboarding visit to introduce themselves to the couple, build familiarity, obtain baseline info and schedule a time to meet

CRP* distributes a calendar, stickers and step-by-step guide during home visits, and demonstrates how it should be used

3. INITIAL ENGAGEMENT



Couples record their food purchases and consumption for the week

Men use purchase guides when buying food items for the household

CRPs provide feedback to couples on their food habits based on their weekly calendars

4. SUSTAINED ENGAGEMENT

Weekly **phone calls** encourage and remind couples to continue using the calendar and purchasing guide

Successful couples are connected to lower-performing couples, to serve as role models

Members are encouraged to use the calendar regularly in SHG meetings

Couples receive rewards beginning from the second week and at completion of the program

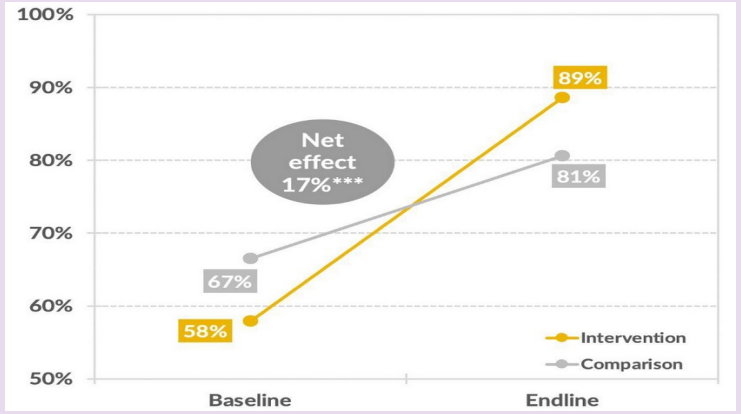
** Note: CRP refers to a community resource person (should be a couple), a pilot-specific resource deployed to test the concept. If this concept is taken to scale, CRP's tasks can be taken up by the implementer's resource persons such as a Community Mobilizer (CM) or a Community Nutrition Resource Person (CNRP)*

Behaviors

FEEDING

The jump in men's participation in feeding was pronounced. The 32% point increase observed among women in intervention villages was significantly greater than the 14% increase observed in comparison villages (a difference-in-difference of 17% points). Men too reported an increase in their participation in feeding.

% WOMEN WHOSE HUSBANDS REGULARLY SHARE RESPONSIBILITY OF FEEDING CHILD (6-23 MONTHS)

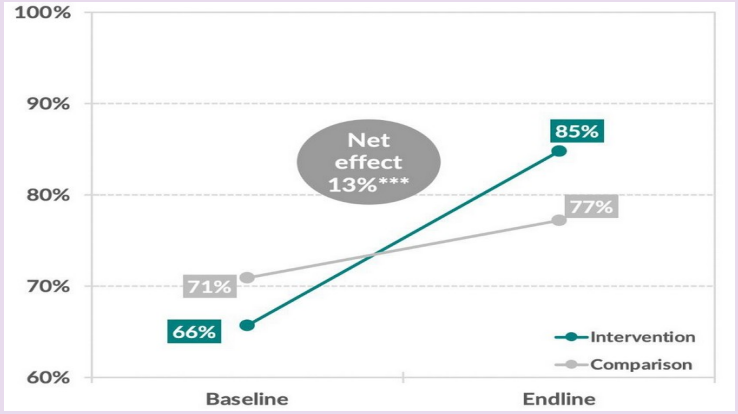


[1] Difference-in-difference of 13% points in men in the intervention villages reporting they regularly share responsibility of feeding the child, relative to the comparison villages

"Earlier, only I looked after the children. My husband used to get irritated if he had to look after them. But now he plays with them, shows them affection and feeds them if they have not eaten."

Woman participant

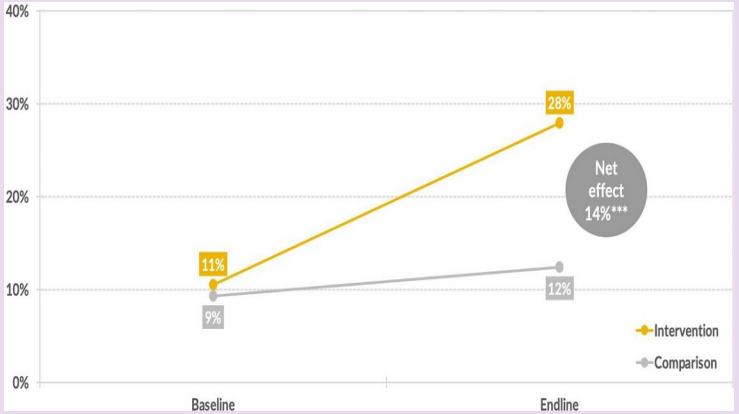
% MEN WHO REGULARLY SHARE RESPONSIBILITY OF FEEDING CHILD (6-23 MONTHS)



MOTHER'S DIETARY DIVERSITY

In addition to children's nutrition intake, there were also improvements in mothers' nutrition. The percentage of mothers (of children aged 6-23 months) eating 5 or more food groups increased by 17% in intervention villages, compared to a 3% increase in comparison villages, indicating a net effect of 14%.

% MOTHERS OF CHILDREN (6-23 MONTHS) WHO GET FIVE OR MORE FOOD GROUPS EVERYDAY



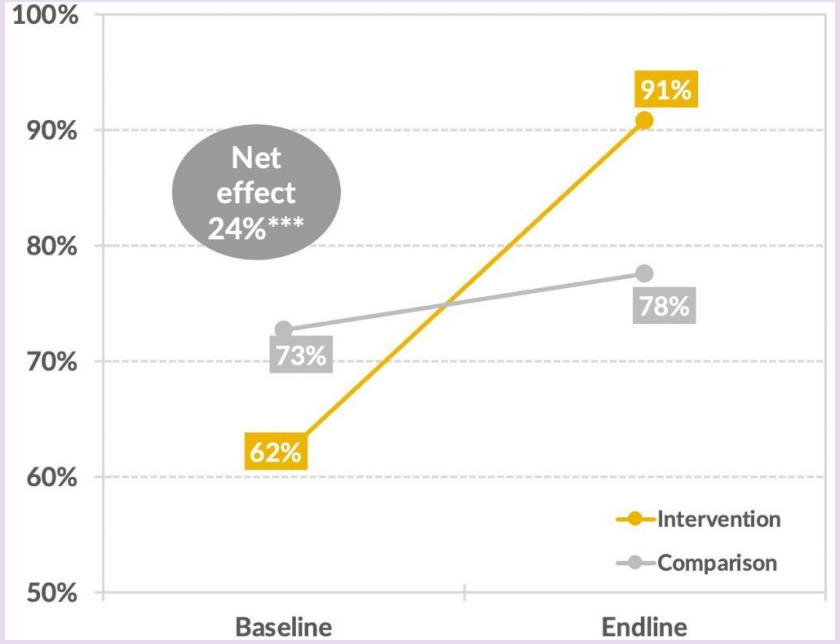
For all the outcomes described in this section, **further testing and data collection is needed to understand their sustainability** beyond the program's conclusion.

Communication and decision-making

INTER-SPOUSAL COMMUNICATION

Nonetheless, gender-related outcomes like inter-spousal communication increased. Women discussing their children's food needs with their husbands increased in the intervention villages, with a positive a difference-in-difference of 24% points compared to the control villages. Further, there was a 17% point increase in women in intervention villages reporting they discussed daily expenses with their husbands (a nearly 10% point difference-in-difference)

% WOMEN WHO DISCUSSED CHILD'S FOOD NEEDS WITH THEIR HUSBANDS IN THE LAST THREE MONTHS

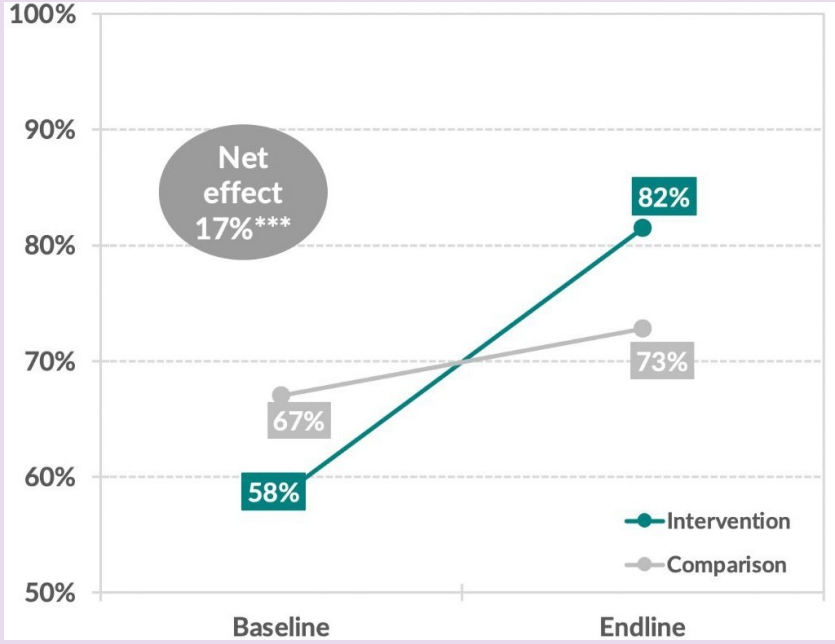


[1] The increase in women in comparison villages reporting that they discussed daily expenses with their husbands was 8% points.

Men reported a similar improvement, suggesting that both men and women felt a greater comfort in discussing daily expenses as a result of the program.

Qualitative evidence supported this finding - for instance, one man described how he and his wife had a better relationship as a result of the program, saying, "We used to to quarrel a lot, now we cooperate with each other. Earlier, we were only concerned about work but now along with work we also pay attention to our children's diet."

% MEN WHOSE WIVES DISCUSSED CHILD'S FOOD NEEDS WITH THEM IN THE LAST THREE MONTHS



Summary of findings

1. **Minimum dietary diversity (MDD):** Women in intervention villages reported a 30% point increase in MDD for children (aged 12-23 months) and men reported 25% points, significant compared to the 15% point increase reported by women in comparison villages and the 12% reported by men.

2. **Mother's dietary diversity:** The percentage of mothers (of children aged 6-23 months) eating five or more food groups increased by a net of 14%.

3. **Men's involvement in nutrition:** **Women in the intervention villages reported a net increase of 5% points in their husbands providing enough funds to meet their children's food requirements, compared to those in the comparison. There was a net increase of 20% points in men reporting they "always" or "sometimes" discussed or participated in food preparation in intervention villages, relative to comparison villages. Finally, there was a net increase of 18% points found among women in intervention villages saying their husband's participated in feeding, relative to comparison villages.**

4. **Knowledge:** Awareness among mothers about the minimum dietary diversity for children (aged 6-23 months) increased by a net of 34% among those exposed to program interventions compared to those not exposed. The net increase reported by men was 22% points.

   Spousal communication: Couple's communication about child nutrition increased by 24% among the couples exposed to the program, compared to those not exposed.

6. **Program features**

   Calendar usage: Women were much more likely to fill the tracking calendar than men, but regardless of who put the stickers, women and men reported similarly (44% and 45%) on "always" or "often" discussing what to put on their calendar with their spouses.

   Watching of videos: Participants who watched all 5 videos were more likely to meet MDD requirements for their children.

   Tote bag: Use of the tote bag was linked with program behaviours and outcomes- 47% of men and 59% of women who used the tote bag had children meet MDD, compared to 38% of men and 46% of women who didn't.

7. **Enabling environment:** In joint families, in-laws were receptive to information on improving their grandchildren's nutrition and shifting household roles, and some changed their purchasing decisions accordingly.

8. **Impact of COVID-19:** Loss of income in the early stages of the pandemic impacted baseline MDD rates in both comparison and intervention villages, and recovery before the endline survey explains improvements in the comparison village. The depletion of savings during COVID-19 means that some families might still have a hard time adopting new habits that involve re-allocation of budgets. Yet, the fear of disease has parents prioritising their children's health.