

Webinar

Engaging Family
Members for Improved
Maternal and Child
Nutrition in Low- and
Middle-Income
Countries

June 24, 2020



### **Presenters**











## And thank you to the co-authors

- Juliet K McCann, Cornell University
- Emily Gascoigne, University of North Carolina
- Diana Allotey, University of North Carolina







### And thanks to the librarians at Cornell University and University of North Carolina!

- Jamie Conklin and Mary White, Health Sciences Library at UNC Chapel Hill
- Kate Ghezzi-Kopel, Cornell University

## **Background**

- Family members are key
- Nutrition programs have engaged family members in different ways for a long time
- But there are still many questions, including effectiveness of approaches
- Two reviews discussed in this webinar begin to answer these questions, and systematically build the evidence base



## Why These Reviews?

 Holistically explore interventions to engage family members in maternal and child nutrition interventions

## I. Scoping review

How have interventions engaged family members?

# 2. Mixed-methods review

Does engaging family members *impact* nutrition and support outcomes?









# **Scoping Review**

## **Scoping Search Strategy and Criteria**

**Participants**: Pregnant and lactating women, mothers of children <2, male partners, fathers, grandmothers, or other family member

**Concept**: Social and behavioral interventions to:

- Improve one or more behaviors related to maternal nutrition or infant and young child feeding from birth to 2 years
- Deliberately sought to engage fathers, grandmothers, or other family members

**Context:** Low- and middle-income countries

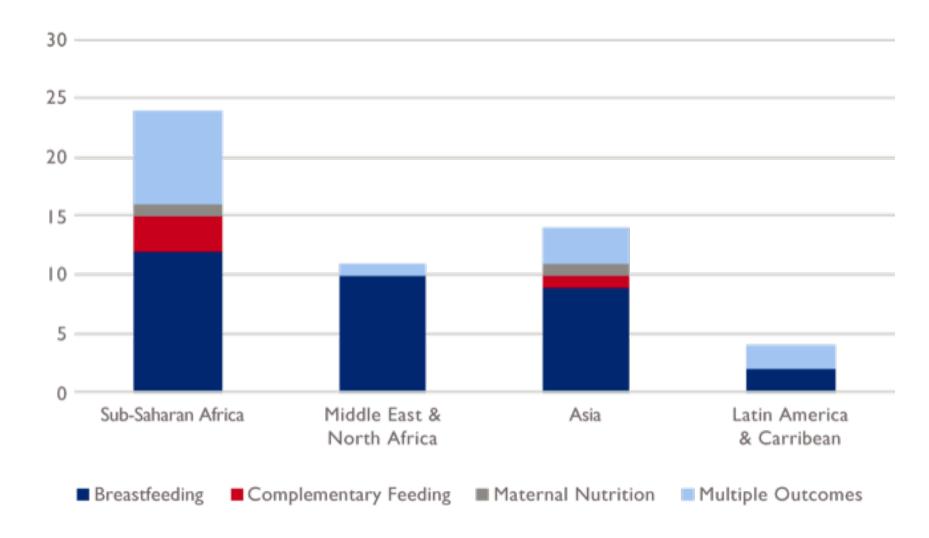
**Studies**: No restrictions on study design or dates; must be in the peer-reviewed literature

Searched 5 databases (August 2018 - March 2020)

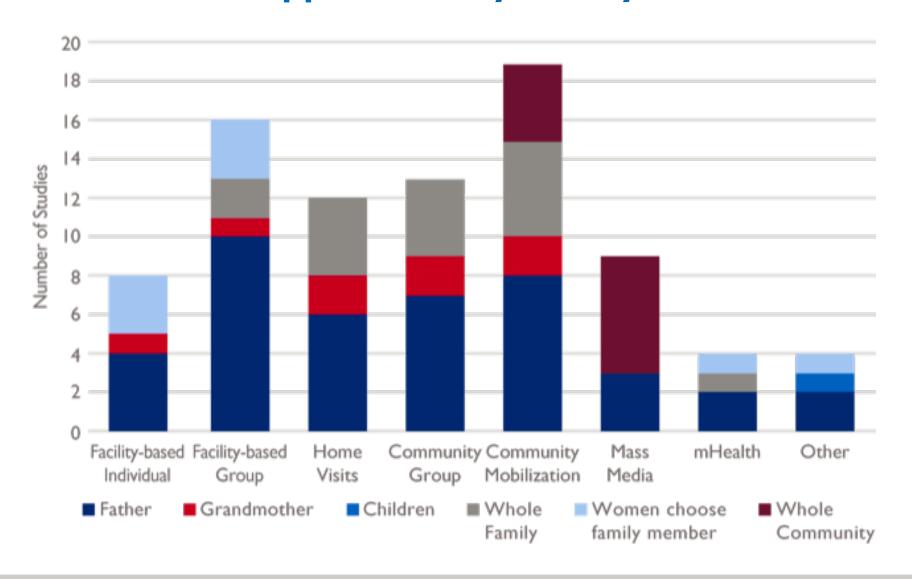
Records identified through

Additional records identified

## **Nutrition Topic by Geographic Region**



## Intervention Approaches by Family Member



## **Examples of interventions**

### **Community mobilization**

 Bangladesh: community meetings with fathers and community leaders, community theater<sup>1</sup>

### **Community groups**

 Malawi: Intergenerational discussion groups reflect on gender norms, decision making, caregiving, and crop and dietary diversity<sup>2</sup>

### Home visit

• Ethiopia: heath and agriculture development agents jointly visited mothers and fathers to promote nutrition and agriculture<sup>3</sup>

#### **mHealth**

 Senegal: Infant feeding recommendations sent through phone voice messages to mothers and fathers<sup>4</sup>

1 Nguyen et al 2019, 2 Bezner Kerr et al 2019, 3 Salasibew et al 2019, 4 Downs et al 2019

## **Scoping Review**

- Many studies reported the importance and role of family, but did not include family in their intervention (excluded)
- Most studies did not report formative research or present the theoretical basis for their intervention
- Number of studies reporting engaging family members in maternal and child nutrition has increased dramatically since 2010





## **Mixed Methods Review**

## What is a mixed methods review?

Systematic review that includes quantitative, qualitative and mixed methods studies

Based on search strategy described for scoping review

### Mixed methods review of the subset of studies that included:

- Comparison of interventions with and without family engagement (16 studies), or
- 2. Qualitative data on participants' experiences and changes they attributed to the intervention (13 studies)

Quantitative and qualitative results summarized separately

## **Mixed Methods Review Questions**

- What are the impacts of engaging family members in behavioral interventions on quantitative nutrition and support outcomes?
- How have people responded to these interventions (qualitative)?
- What are the implications for how to design and implement interventions to engage family members to support nutrition?





## **Quantitative Comparative Studies (16)**

Focus Behaviors	Fathers	Grandmother s	Either/both
Multiple nutrition behaviors		1	
Maternal Nutrition	1		
Exclusive breastfeeding (EBF) (0-6 months)	9	2	2
Complementary feeding			1

• Relatively few <u>comparative</u> studies of family engagement interventions designed to test causal relationships

## Impacts: Fathers' Support for Breastfeeding

- Increased early initiation (3 of 4 studies)
- Positive impacts on EBF at 4-6 mos (7 of 9 studies)
  - Less effect at I-2 mos. (already high in some studies)
- Widespread impacts on fathers' knowledge & awareness
- Fathers reported providing more support:
  - Encouragement
  - Providing food for mother
  - Not buying formula
- Analysis in 2 studies showed that mothers who reported more support had higher EBF





# Engaging Fathers to Support Breastfeeding in Vietnam

- Multi-channel community-based intervention focused on fathers' roles, including home visits and support groups for men
   —Mobilized community to encourage fathers to participate
- Improved fathers' knowledge gaps related to early initiation, EBF benefits, etc. in intervention group
- Mothers reported more initiation within I hr (OR=7.64) and less prelacteal feeding (OR=4.43)
- Higher EBF at 6 months, but rates still low

# Lessons Learned on Design and Implementation

- Most focused on couples during first pregnancy
- Fathers wanted information and appreciated inclusion
  - Over-emphasis on helping with chores can backfire



## Counsel couples together or separately?

- Together can be positive for couple communication and planning
- Attendance rates of men tended to be low, when reported
- Uncomfortable for women without a spouse attending
- Separate men's groups may facilitate discussion and peer support, depending on culture

## **Grandmothers' Support for Breastfeeding**

2 studies with adolescent mothers, combining hospital-based counseling and postnatal home visits

- **Brazil:** Aimed to reduce negative effect of grandmothers. Improved duration of EBF but most effective for mothers who did not live with grandmothers.
- Thailand: Increased EBF duration, mothers' knowledge and perceived support.

### Lessons learned:

- Reach grandmothers and mothers together for at least part of the intervention
- Focus on problem solving (not just education) and address misinformation

DeOliveira et al. 2012; Bootsri and Taneepanichskul, 2017

# **Engaging Fathers and/or Grandmothers to Support Breastfeeding**

### 2 studies

China: antenatal counseling, home visits when fathers and grandmothers were home, phone/text follow-up 2-6 months

 positive impacts of family-centered intervention arm on EBF in the first 6 mo, knowledge and perceived family support

Uganda: HIV-positive pregnant women on antiretroviral therapy

• EBF rates not significantly different for intervention arm including family members and peer mothers vs standard PMTCT services

#### Lesson learned:

- Consider asking mothers from whom they would like support
- Follow-up matters

Ke et al., 2018; Namale-Matovu et al., 2018

## Other MIYCN outcomes

### **Multiple nutrition outcomes**

 Engaging grandmothers in Senegal in participatory communication and empowerment education associated with improvements in multiple nutrition outcomes (Aubel et al., 2004)

#### **Maternal nutrition**

- Counseling, husband forums, community mobilization to engage fathers in Bangladesh
- Support from fathers increased and was linked to women consuming more iron and calcium supplements and food groups (Nguyen et al., 2018)



# **Engaging Fathers and Grandmothers to Support Complementary Feeding Practices in Kenya**

Peer-mentored dialogue groups (biweekly x 6 mos) for fathers or grandmothers on child feeding, social support, communication, gender

Similar positive impacts on support and some complementary feeding practices for interventions focused on fathers or grandmothers

#### Lessons learned:

- Work directly with family members to tackle sensitive issues like gender and family dynamics
- Fathers vs grandmothers? Not either/or, but both!

Mukuria at al, 2016; Thuita et al 2015; Martin et al. 2015

# What are the impacts of engaging family members in behavioral interventions?

- Impacts on nutrition practices were generally positive, especially for EBF, but not all studies found differences
- Positive impacts on family member knowledge and support practices
- A few studies confirmed that mothers felt more supported and
   2 linked support to improved nutrition practices
- Studies on maternal nutrition and complementary feeding are promising but too few to draw conclusions
- Due methodological flaws of some studies, results must be interpreted with caution



# **Qualitative Synthesis**

## **Qualitative Synthesis**

 Aimed to describe the experiences of mothers and family members who participated in interventions to engage family members in MIYCN



- 12 of 13 studies conducted in sub-Saharan Africa
  - Used community- and facility-based activities
  - Themes grouped into 2 categories
    - I. Participant experiences/Changes that mothers and family members attributed to the intervention
    - 2. Program implications for engaging family members

## Changes attributed to the intervention

- Improved knowledge and practices for maternal and child nutrition and nutritionsensitive practices
- Increased instrumental, emotional, and informational support
- Strengthened relationships and communication in families



## **Participant Experiences**

## Almost all mothers appreciated the increased support

"Before each woman did her own work. Now, when a woman is pregnant they ask other women in the family to help out...Now they [grandmothers] understand us better and that's why we feel closer to them. -Mother (Aubel et al 2004, Senegal)

### Family members enjoyed being more involved

"I support my wife by giving her more time to be with our baby. I do all household chores . . . I am feeling happier." -Father (Matare et al 2019, Tanzania)

### A few mothers reported overbearing partners

"He learned it here, he's a know-it-all. I want to give the baby meatballs; he doesn't want me to,...Sometimes I wish that he hadn't gone to the course." - Mother (Sahip & Turan 2007, Turkey)

## **Program Implications**

Including family members is acceptable and feasible

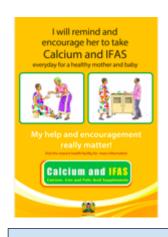
"I think it is a very good idea to let husbands get involved in this kind of activity because as a family we are [both] supposed to be responsible for our child's health." -Mother (Flax et al, Malawi)

Using participatory facilitation techniques

 Used stories to promote discussion (Aubel et al 2004, Senegal; Bezner Kerr 2019)

Challenges to sustainability

"When the curriculum ended, people became lazy to meet and continue with these gardens. If you could ask people to come you would get that attendance is very low, so even though we have knowledge and land, we still did not continue with this." (DeLorme Kenya)



# Support for Prenatal Supplementation in Kenya

- Pregnant women in Kenya counselled to choose "adherence partner" to help remember to take IFA & calcium supplements
- Most women chose someone, often spouse
- Most received reminders, encouragement and felt the support helped them adhere

I want my husband to continue [helping me]. He reminds me if I have forgotten, brings them to me, gives me heart, and when he sees I have given up, he encourages me to continue...You know if someone loves and cares, he will help remind you about something concerning your life.

- 26-year-old multigravida

### **Conclusions**

- The weight of evidence favors inclusion of family members in interventions, with attention to building family support in ways that fit each cultural context.
- More rigorously designed and implemented research would be useful to continue to build the evidence base.
  - Including additional nutrition topics (maternal nutrition, complementary feeding
  - Including nutrition-sensitive interventions, gender-transformative approaches, and measurement of process indicators to assess implementation and explore impact pathways.



# **Program Considerations**

## Considerations for Designing and Implementing a Program or Intervention to Engage Family Members



I. FORMATIVE RESEARCH



2. GENDER ANALYSIS



3. STRATEGY DESIGN AND IMPLEMENTATION



4. MEASUREMENT CONSIDERATIONS.

## **Questions?**

Please type your questions in the chat box

## **Further Reading**

Martin, SL., McCann, JK., Gascoigne, E., Allotey, D., Fundira, D., & Dickin, KL. "Mixed-methods systematic review of behavioral interventions in low- and middle-income countries to increase family support for maternal, infant, and young child nutrition during the first I,000 days." *Current Developments in Nutrition* (in press) doi: 10.1093/cdn/nzaa085

Martin, SL., McCann, JK., Gascoigne, E., Allotey, D., Fundira, D., & Dickin, KL. "Engaging fathers, grandmothers, and other family members in maternal and child nutrition: A scoping review of social and behavioral interventions in low- and middle-income countries." *Maternal & Child Nutrition* [Pending Publication.]

Dickin, KL., McCann, JK., Gascoigne, E., Allotey, D., Fundira, D., & Martin, SL. "Systematic Review of Behavioral Interventions to Increase Family Support for Maternal and Child Nutrition in Low- and Middle-Income Countries." Poster Presentation at: American Society for Nutrition 2020; June I - 4; virtual.



#### **USAID ADVANCING NUTRITION**

IMPLEMENTED BY:
JSI Research & Training Institute, Inc.
2733 Crystal Drive
4th Floor
Arlington, VA 22202

Phone: 703-528-7474

Email: info@advancingnutrition.org Internet: advancingnutrition.org USAID Advancing Nutrition is the Agency's flagship multi-sectoral nutrition project, addressing the root causes of malnutrition to save lives and enhance long-term health and development.

This presentation was produced for the U. S. Agency for International Development. It was prepared under the terms of contract 7200AA18C00070 awarded to JSI Research & Training Institute, Inc. The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the U.S. Government.