

Demand-side interventions improve adherence to iron and folic acid supplements in pregnancy

Tina G. Sanghvi¹, PhD, Senior Technical Advisor, Maternal, Infant, Young Child and Adolescent Nutrition, Alive & Thrive

Co-authors: Phuong Hong Nguyen², Thomas Forissier¹, Sebanti Ghosh¹, Maurice Zafimanjaka¹, Tamirat Walissa¹, Zeba Mahmud¹, Sunny Kim²

Abstract # IMNHC1486

Conflict of Interest Disclosure

The authors declare no conflict of interest.



PHOTO CREDIT: ALIVE & THRIVE



Background

Recommendation

Daily IFA supplementation for:

- Fetal growth and development
- Prevent neural tube defects
- Maternal blood volume expansion
- Replacement of blood loss during childbirth
- Post-partum recovery

Adherence is universally low and maternal anemia is high

WHA target: ↓ 50% by 2025

OBJECTIVES OF THIS PRESENTATION

- To document IFA adherence strategies for ANC services
- To draw lessons from Bangladesh, Burkina Faso, Ethiopia and India

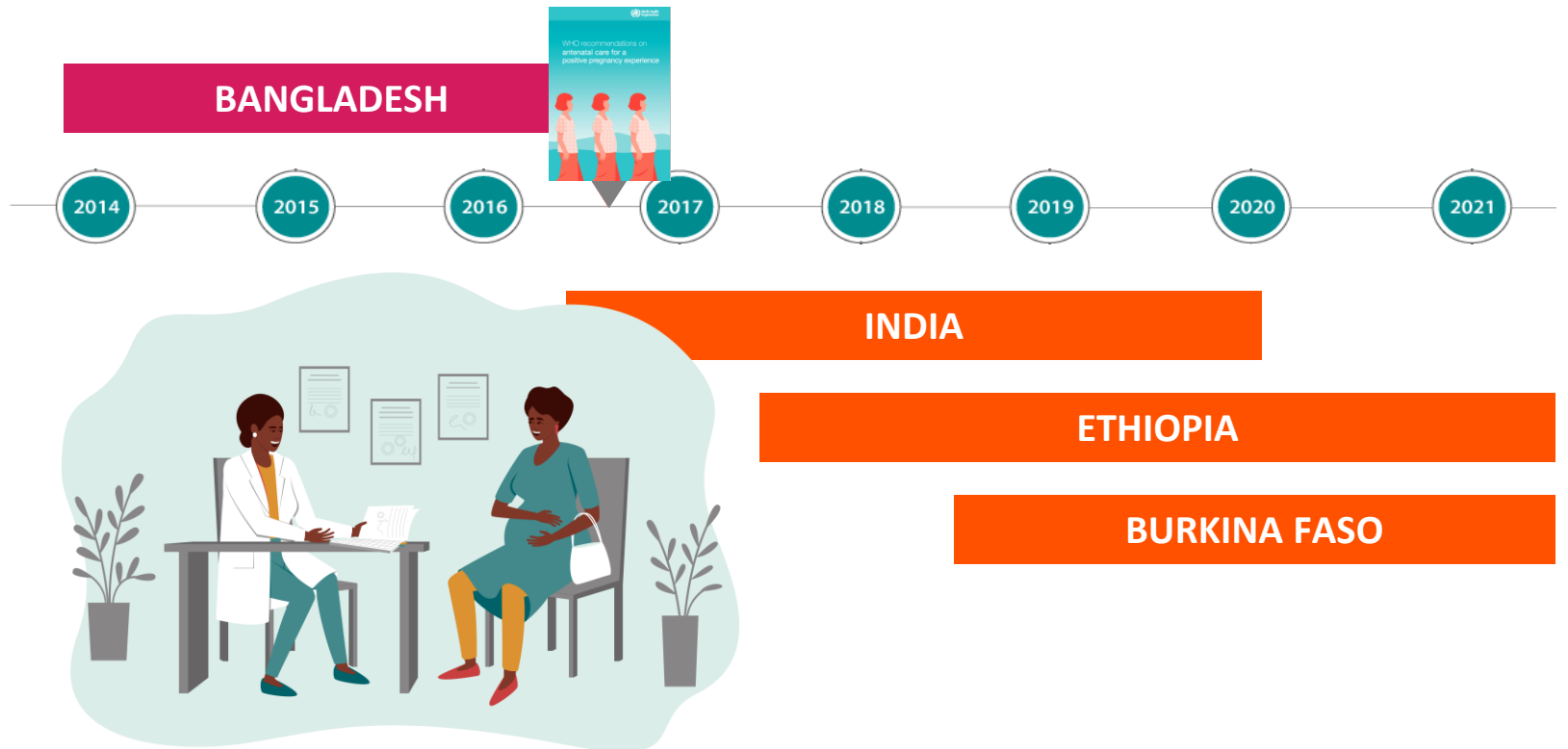


Methods

Implementation Research

Four studies assessed the impact of IFA adherence strategies as part of implementing a broader package of nutrition interventions delivered through large scale ANC platforms

TIMELINE | 2014-2021



Methods

Situational Analysis

Health systems assessments:

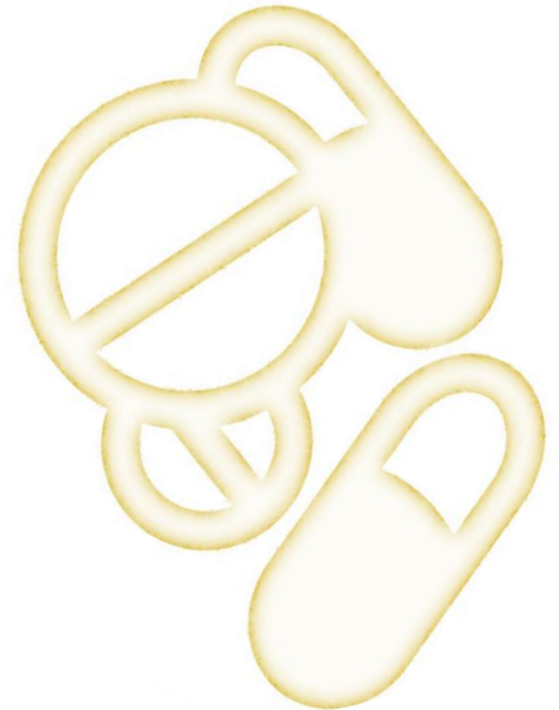
- Policies, protocols, tools
- Supply chain
- ANC service sites, coverage
- Health worker KAP

Formative studies:

- Qualitative, multivariate analysis
- Community, family, individual level factors

IDENTIFY BARRIERS TO IFA ADHERENCE

- Gaps in **knowledge + misinformation**
(among pregnant women and health workers; norms)
 - How many and when to take IFA
 - Where to get refills
 - Benefits/risks of taking/not taking IFA
- Negative experiences with **side effects**
- **Forgetting** to take tablets daily
- Poor **access** to an optimal IFA product
 - Quality of IFA tablets vary
 - Cost of tablets
 - Community vs facility-based distribution
 - Supply chain gaps



Methods

What influenced the intervention design?

- Gaps and opportunities in current ANC services
- Social Ecological Model
- Theory of Reasoned Action
- Theory of Planned Behavior
- Health Beliefs Model
- Other long-term oral drug therapy adherence strategies

THE INTERVENTION

- 1) IFA adherence counseling and access to supplies
- 2) Counseling family members to support pregnant women
- 3) Community awareness raising in support of timely ANC and IFA protocols
- 4) Health systems strengthening to enable the above

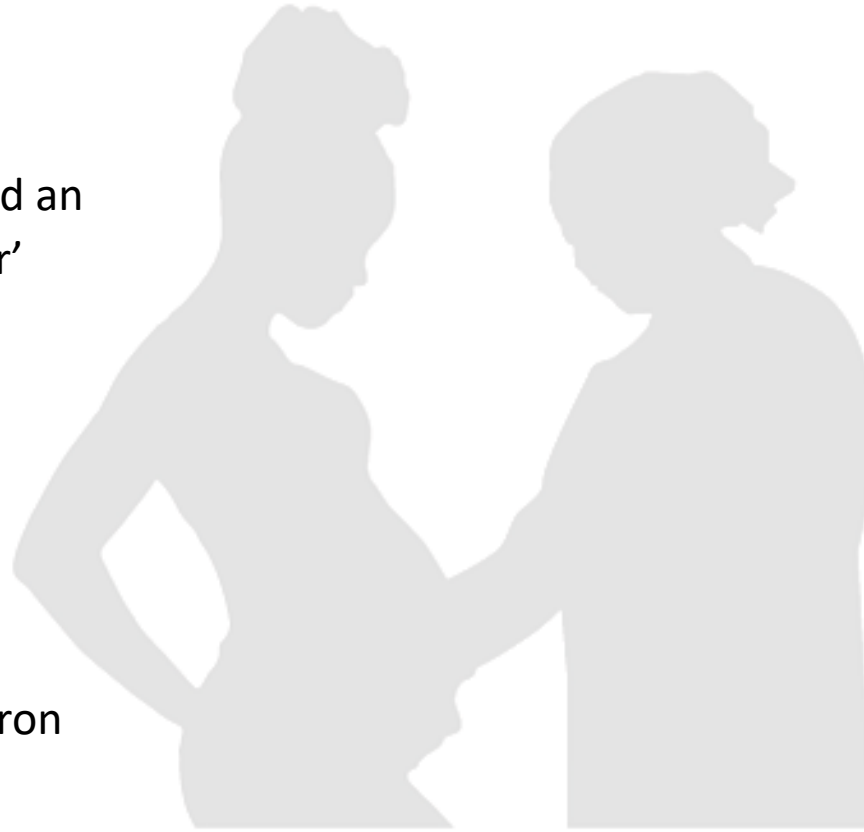


Methods

PRIORITY BEHAVIORS

Pregnant Women

- Timely ANC visits—considered an important ‘gateway behavior’
- Seek family support for procuring supplies and services; for reminding about daily supplement
- Manage side-effects
- Reduce dietary inhibitors of iron absorption



ANC providers and CHWs

- Deliver tailored counseling, IFA supplies through facility and community contacts, screen and refer severe anemia cases
- Track IFA distributed and consumed by individual PW
- Counseling topics: IFA protocol, benefits for mother and child, manage side effects; self-confidence
- Generate family support
- Raise community awareness



Methods

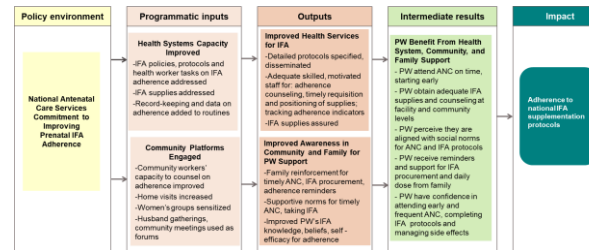


PHOTO CREDIT: ALIVE & THRIVE

SYSTEM STRENGTHENING INPUTS

- Advocacy for prioritizing maternal nutrition and IFA
- Service delivery adjustments; community linkages
- Protocols, supplies, task allocation, materials, tools
- Training of health workers and supervisors, monitoring

Program Pathway for Improving IFA Adherence



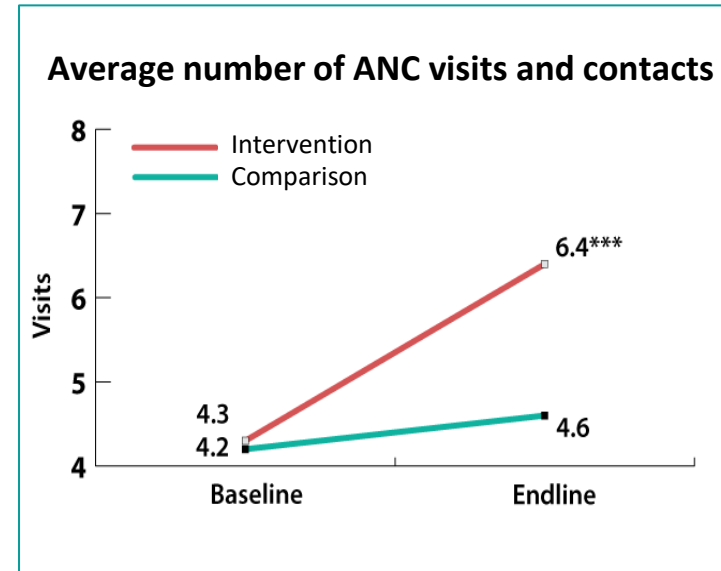
Results

What Improved

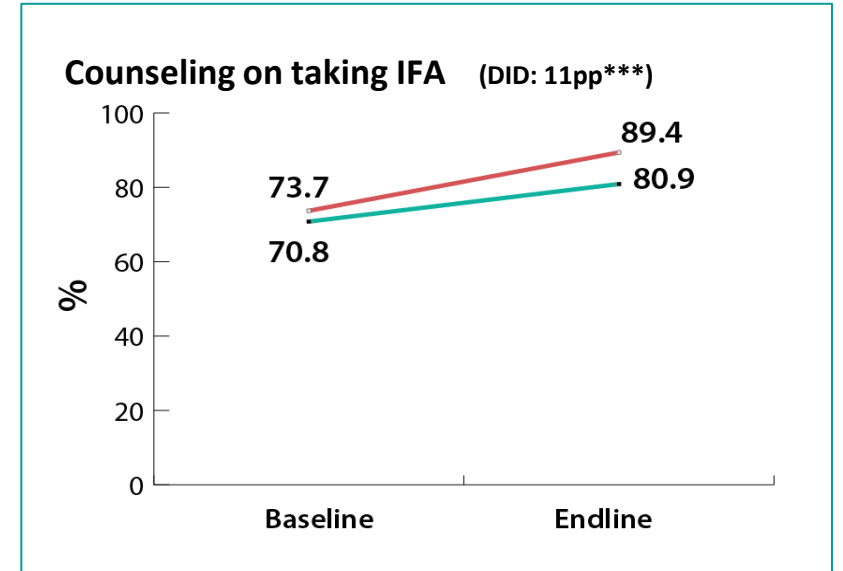
- More ANC contacts
- Access to unrestricted free IFA supplies
- Knowledge, beliefs, self-efficacy, perceived norms
- Family support to obtain IFA and remember daily doses

DELIVERY OF THE INTERVENTION

Burkina Faso



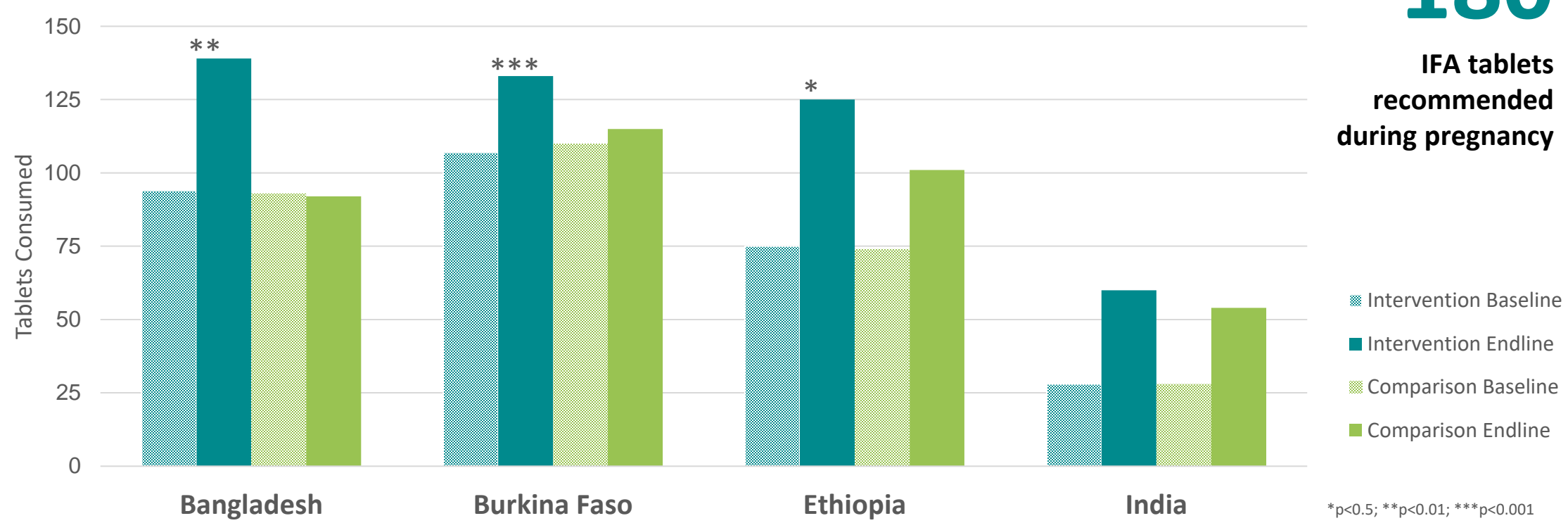
India



Results

IMPROVED ADHERENCE TO IFA PROTOCOLS

Number of IFA tablets consumed during pregnancy



Source: External RCT evaluations, IFPRI

Conclusion



PHOTO CREDIT: ALIVE & THRIVE

- Combining service delivery with demand-side approaches was effective in improving IFA adherence in four LMICs
- Behaviors of ANC providers, pregnant women, families were influenced by their knowledge, belief in IFA benefit/risks, perception of social norms, self-efficacy
- The socio-ecological environment can enable or act as a barrier; can be shaped through ANC

Recommendations for the Field



PHOTO CREDIT: ALIVE & THRIVE

TO ENABLE IFA ADHERENCE BY PREGNANT WOMEN

- **National:** Clear policies, prioritize anemia/IFA, track indicators, product specifications, **accessible ANC services**
- **System level:** Free supplies, robust **supply** chain, expand ANC sites and use CHWs, track distribution and adherence
- **Facility:** **Allocate workload** and supplies to ensure pregnant women have IFA supplies, **counseling, family contacts**
- **Community:** **Groups, home visits**, expand access to supplies, engage opinion leaders

Recommendations for the Field

PLANNING PROGRAMS

- Formative studies to understand adherence barriers
- Interventions based on behavioral science
- Tracking access, coverage and adherence with an equality lens
- Listening to PW and frontline workers; agility, flexibility and ongoing adaptive management



PHOTO CREDIT: ALIVE & THRIVE



Thank you!

Acknowledgements: Alive & Thrive's funding by the Bill & Melinda Gates Foundation and Govt. of Canada. We are grateful to the Ministries of Health and their maternal health, ANC and nutrition departments for partnering with us; and to IFPRI and their national collaborating institutions for the external evaluations.

Resources: Attend our Technical Panel to discuss issues in-depth and receive links to our materials.

When and Where: *May 11 at 10:45 am, in Room Protea.* We would like to learn about your experiences also.

