

Linking microcredit, technology, and breastfeeding promotion in Bauchi State, Nigeria

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Infant feeding behaviors in Nigeria

- 7% of Nigerian infants 4-5 months are exclusively breastfed (EBF)
- Water is commonly given during the first days of life and throughout breastfeeding
- Complementary foods are introduced early – 20% at 0-1 months of age
- Rates of EBF & early breastfeeding initiation are lowest in NE



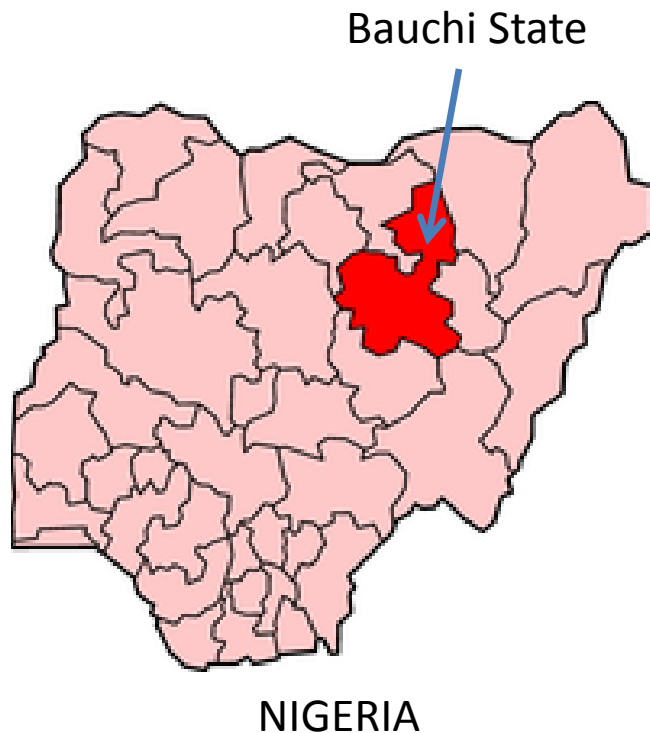
Reference: Nigeria Demographic and Health Survey 2008

Microcredit program as a platform

- 5-6 women join together and guarantee each others' loans
- 4-6 of these small groups meet with their credit officer monthly to:
 - repay their loans
 - learn business development techniques



Project site



- Bauchi State
 - Bauchi, Ganjuwa, and Dass local government areas (LGAs)
- Implemented by Partners for Development with 4 local microcredit organizations
 - Rahama, Gerewa, Wurno Kowanaka, and WODASS

Intervention components

- 7 monthly BF learning sessions during microcredit meetings
- 2x/week cell phone voice and text messages to reinforce key BF messages
- 1x/month presentation of song or drama related to cell phone messages



Overview of study design

- Cluster-randomized controlled intervention trial
- Baseline survey - during pregnancy
- Final survey - when infants >6 months
- Data on implementation process
- Quality of intervention survey
- Qualitative data about cell phone use and changes in social norms



Study objective and hypothesis

Objective:

- To test the effect of an integrated microcredit and breastfeeding promotion intervention on exclusive breastfeeding to 6 months

Hypothesis:

- Increase the proportion of women who EBF to 6 months by 15% in the intervention compared to the control group

Study outcomes

Main outcome:

- Exclusive breastfeeding to 6 months

Selected secondary outcomes:

- Breastfeeding initiation within one hour of delivery
- Use of non-breastmilk fluids in first three days of life (pre-lacteal feeds)

Study participants

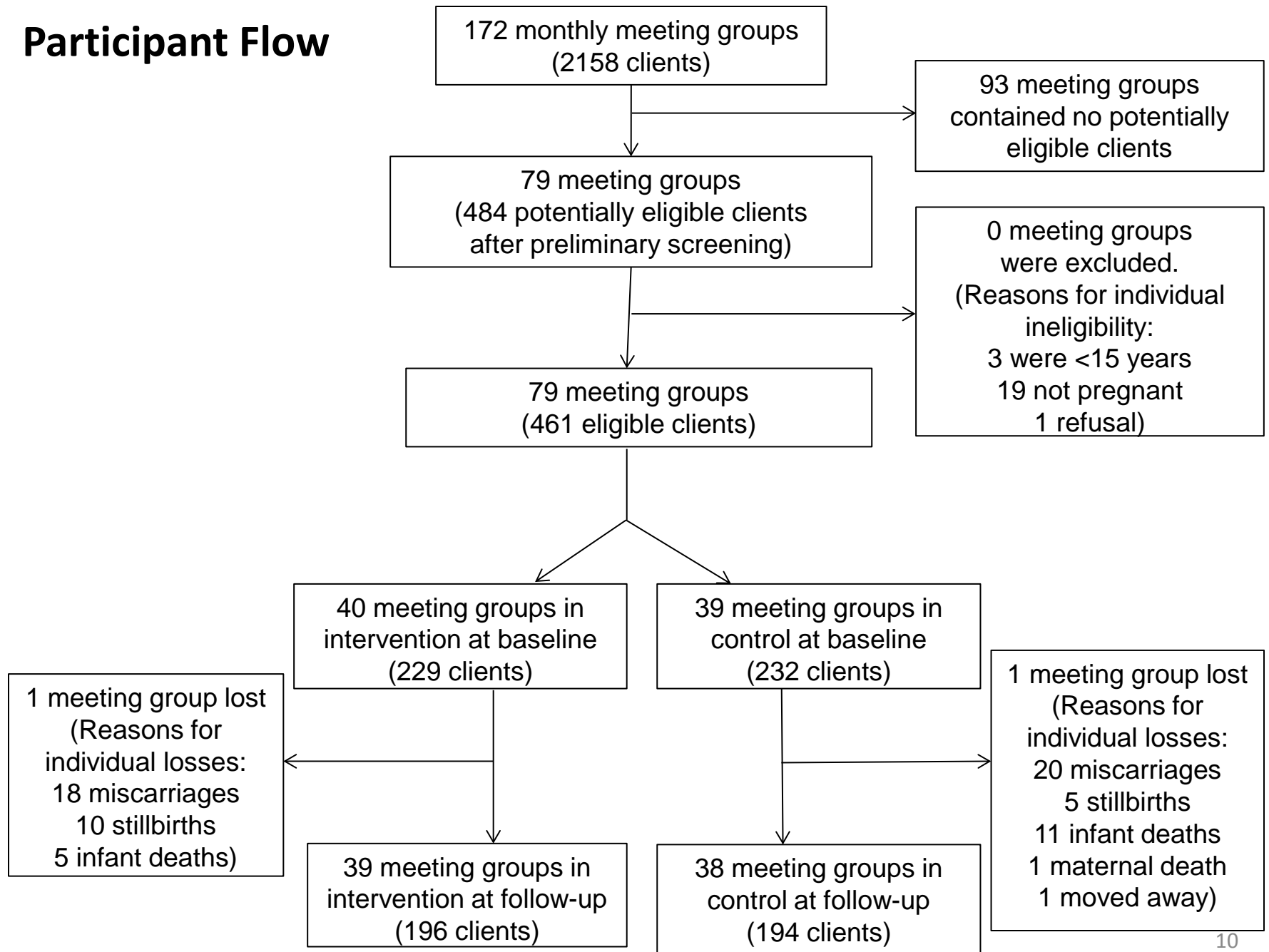


Eligibility criteria:

- Microcredit clients of 4 local partners
- Pregnant
- 15-45 years

All eligible women invited to participate

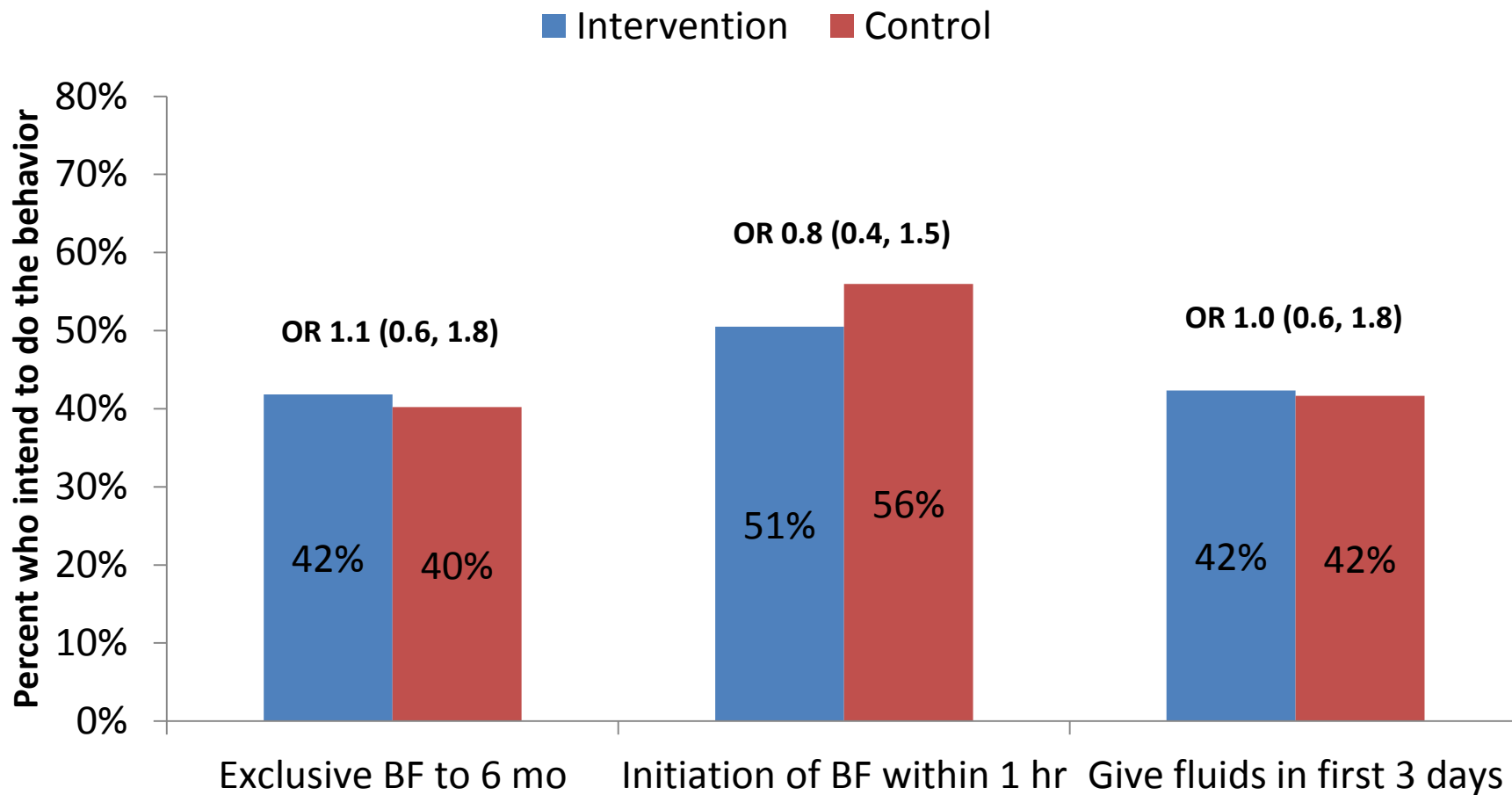
Participant Flow



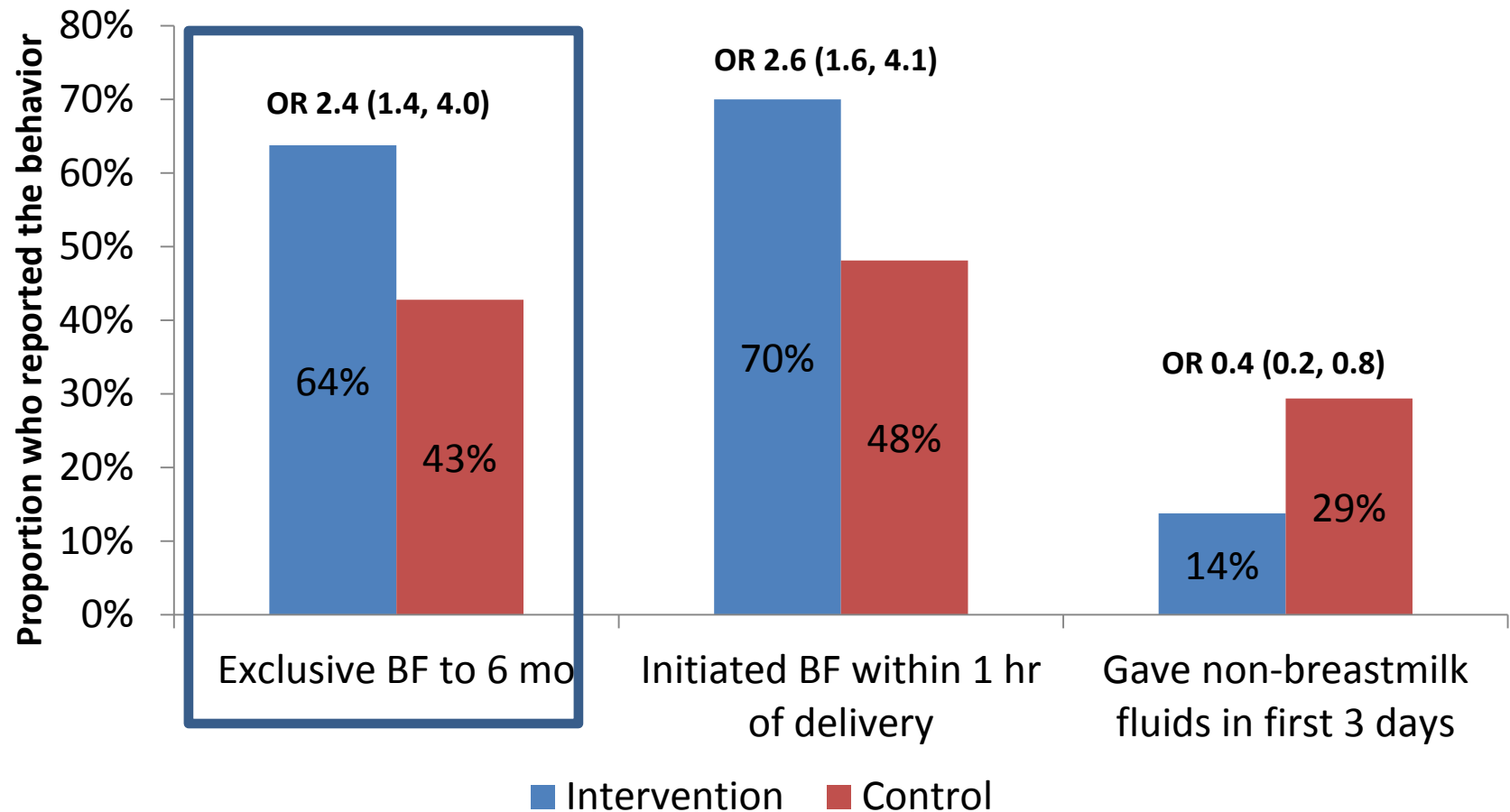
Background characteristics (n=390)

Characteristic	Intervention	Control
Mean age (years)	25.4 ± 5.7	25.8 ± 5.7
Mean years of education	6.3 ± 4.8	6.2 ± 4.6
Mean parity	4.1 ± 2.4	4.5 ± 2.4
Mean # children < 5 years	1.8 ± 0.6	1.9 ± 0.6
% married	97	100
% with co-wives	56	51
Mean # household items	7.8 ± 2.9	7.4 ± 3.0
Mean # rooms in household	4.9 ± 2.7	4.7 ± 2.7

Feeding intentions at baseline



Feeding behaviors measured post-intervention



Client participation



- 69% of intervention clients attended all 7 BF learning sessions
- 96% of cell phones received all text and voice messages
- 85% of small groups presented a song or drama at least once per month

Cell phone use

- 6% of women surveyed were responsible for group phone
- 61% of women live <10 min from person with phone
- 64% said that sharing a phone worked well or very well



Challenges and Limitations

Challenges:

- Many clients had no cell phone
- Security issues

Limitations:

- Assessment schedule allowed us to capture exclusive breastfeeding only at 6 months
- Research design did not allow analysis of independent effect of intervention components



Conclusions and implications

- An integrated microcredit and BF promotion intervention was successful at changing BF practices
- Using a group cell phone was feasible
- Cell phones prompted participants to meet, discuss the messages, and develop songs/dramas
- The scaling up of this type of intervention should be tested in existing microcredit programs in Nigeria

Acknowledgements



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