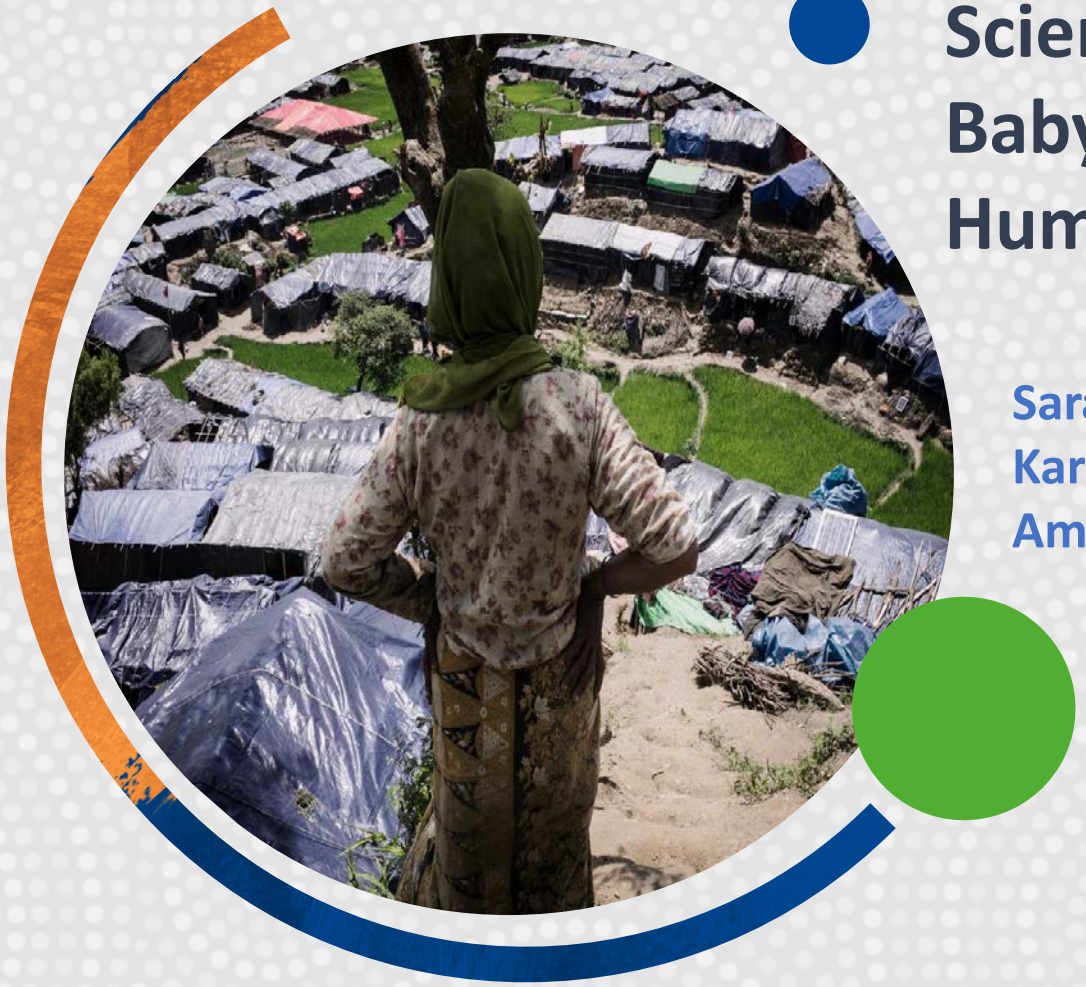
USAID'S HEALTH EVALUATION AND APPLIED RESEARCH DEVELOPMENT (HEARD) PROJECT



Scientific Evaluation of Psychosocial Impacts of Baby Friendly Spaces in a Low-Resource Humanitarian Setting- Cox's Bazar, Bangladesh

Sarah Murray, PhD, Johns Hopkins University
Karine Le Roch, PhD, Action Contre la Faim
Amanda Nguyen, PhD, University of Virginia

11/4/2022

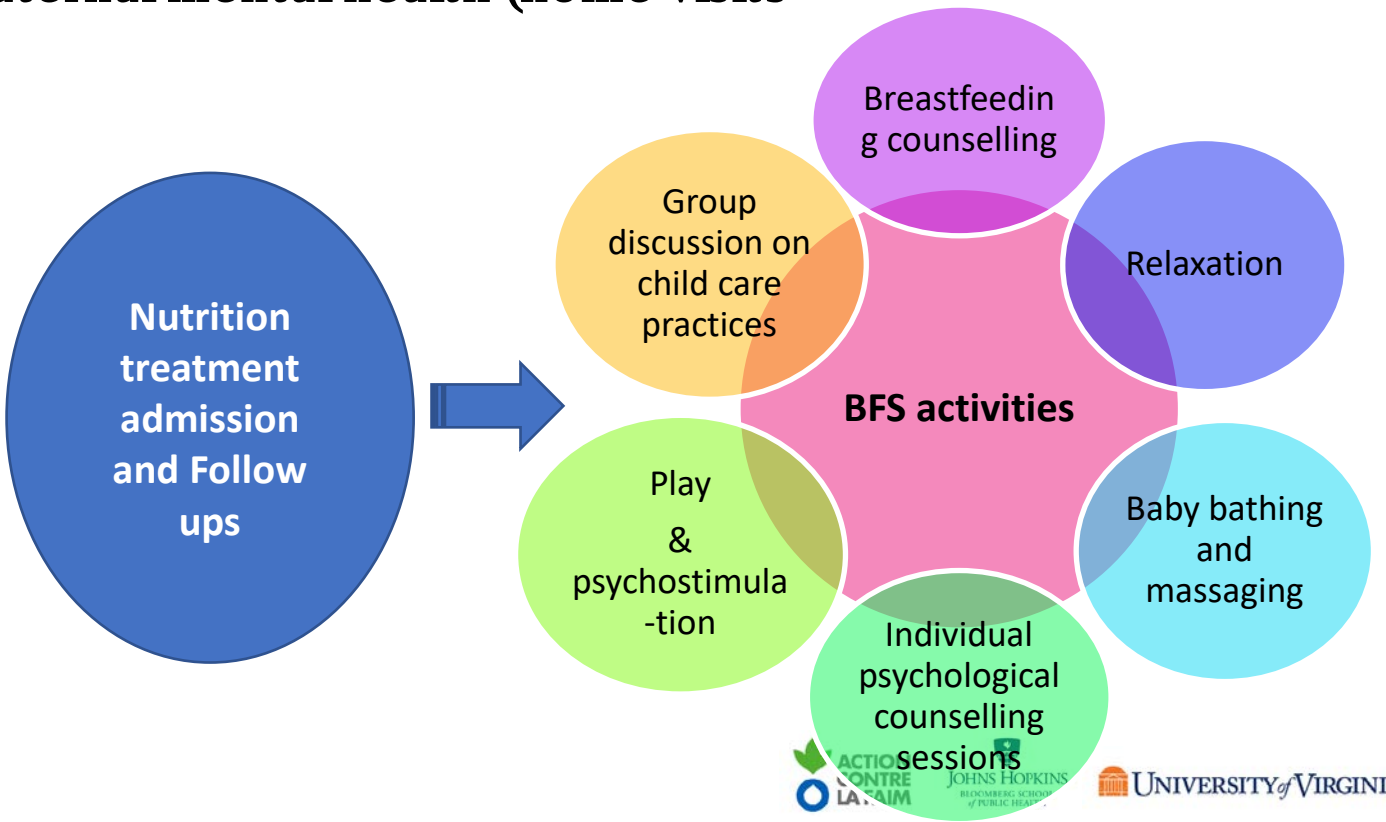
hsr 2022 SEVENTH GLOBAL SYMPOSIUM ON HEALTH SYSTEMS RESEARCH
SÉPTIMO SIMPOSIO MUNDIAL SOBRE INVESTIGACIÓN EN SISTEMAS DE SALUD

Overall Goal

Evaluate the effectiveness of the BFS program for improvement of maternal psychosocial wellbeing and child development among trauma-affected Rohingya mother-child dyads attending ACF Integrated Nutrition Centers (INCs) in Cox's Bazar.

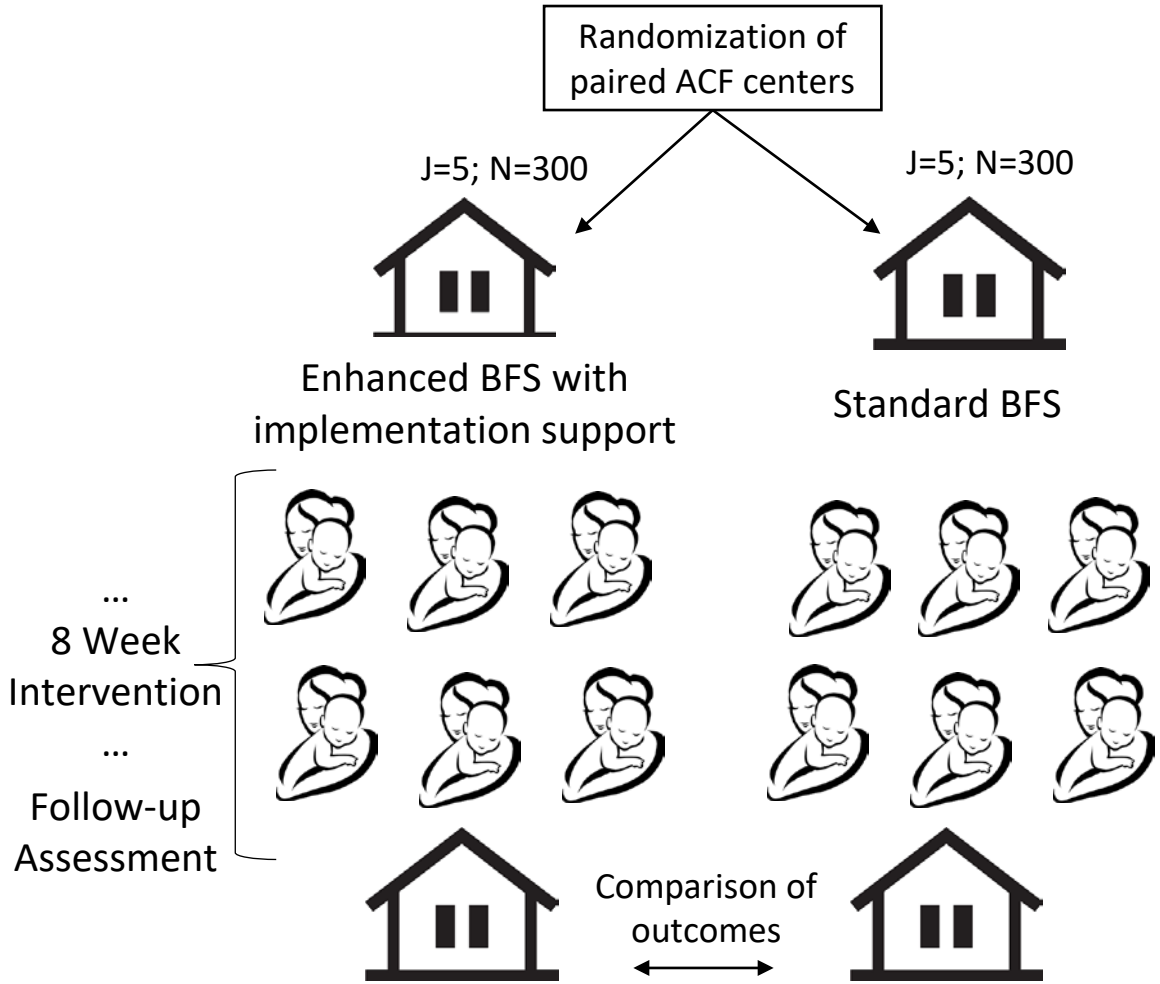
Baby Friendly Spaces in Nutrition

- Promote **breastfeeding & child care practices;**
- Develop and reinforce **mother/ caretaker-child bonding**;
- Allow mothers and children for **quality time;**
- Offer activities to support **maternal mental health (home visits and referrals as needed).**



Study Design

Impact Evaluation



Parallel Implementation Research

Beneficiaries

1) reach and effectiveness at the participant level
2) "downstream" impacts of the intervention on fathers and families

Organizational Stakeholders

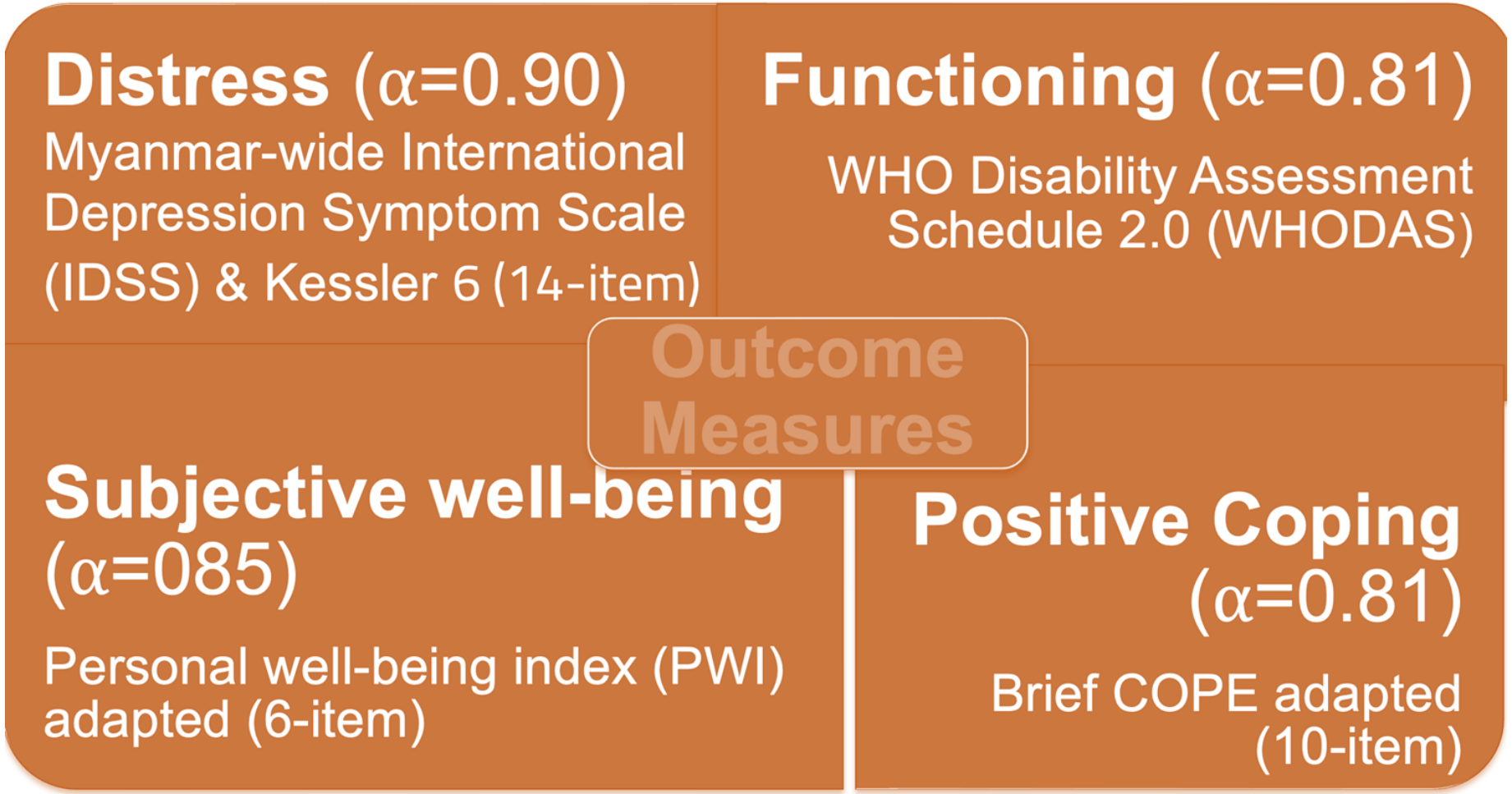
3) adoption, implementation, and maintenance at the staff, organization, and policy level

Host community

4) Necessary modifications for delivery to host community

ACTION CONTRE LA FAIM · JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH · UNIVERSITY of VIRGINIA

Trial Psychosocial Outcomes



ACTION CONTRE LA FAIM · JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH · UNIVERSITY of VIRGINIA

Training and supervision activities

Retrained 15 BFS workers and worked with consultant to develop new supervision systems

Developed flexible program manual

Conducted 425 fidelity observations of BFS activities in both standard (n=252) and enhanced (n=173) INCs

Surveyed 52 Psychosocial workers, Psychologists and SPOs to understand how COVID has impacted their activities

ACTION CONTRE LA FAIM
JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH
UNIVERSITY of VIRGINIA

Study Population

Baseline demographic characteristics by group	Control (n=298)	Intervention (n=302)
No formal education, no. (%)	244 (81.9)	202 (66.9)
Married, no. (%)	283 (95.0)	292 (96.7)
Family eats meat <1 per month, no. (%)	48 (16.1)	94 (31.1)
Pregnant, no. (%)	32 (10.7)	34 (11.3)
Age in years, mean (sd)	25.0 (4.8)	25.4 (5.0)
Years lived in refugee camp, mean (sd)	5.3 (3.8)	6.1 (4.4)
No. of children, mean (sd)	3.1 (1.6)	3.3 (1.8)
Child's age in months, mean (sd)	11.7 (4.5)	11.1 (4.4)

ACTION CONTRE LA FAIM
JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH
UNIVERSITY of VIRGINIA

Implementation Findings

BFS Participant Reported Implementation Measures			
D&I Domain	**Standard BFS mean (SD)**	**Enhanced BFS mean (SD)**	**T-test p-value**
Adoption	2.41 (0.43)	2.34 (0.41)	0.04
Acceptability	2.64 (0.36)	2.59 (0.41)	0.08
Feasibility	2.22 (0.50)	2.29 (0.46)	0.07
Reach	2.31 (0.46)	2.15 (0.65)	<0.001
Community awareness	2.20 (0.85)	2.45 (0.56)	<0.001
Reasonable wait time	2.13 (0.63)	2.28 (0.61)	<0.001

Provider Reported Implementation Measures

All D&I domains as reported by providers were similar for standard and enhanced BFS

- Scores generally high across adoption, acceptability, appropriateness, climate and leadership.
- Slightly lower for scores overall for feasibility and reach (but still high)
- Enhanced BFS PSWs reported spending fewer hours overall providing BFS activities and more time on other tasks than those in the standard BFS group

ACTION CONTRE LA FAIM JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH UNIVERSITY of VIRGINIA

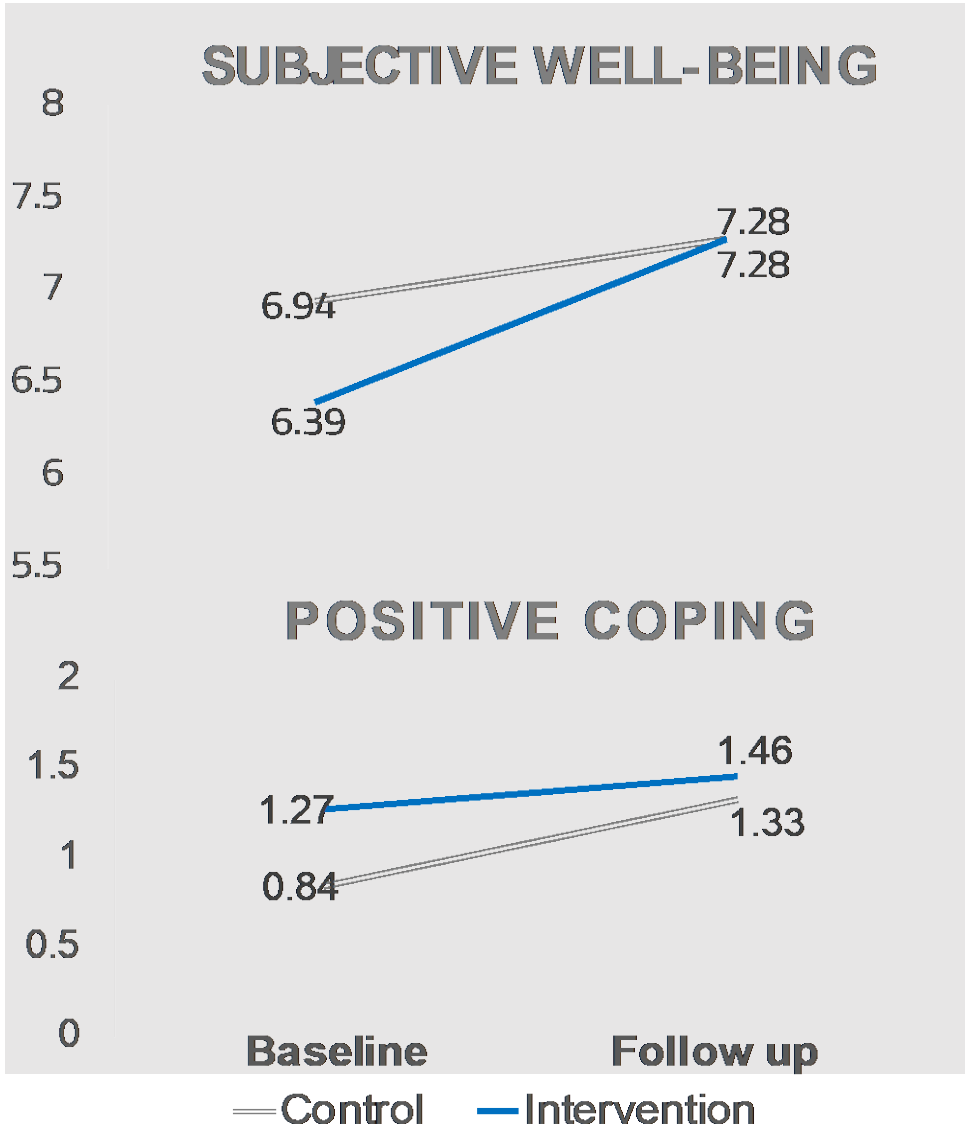
Implementation Findings: Fidelity

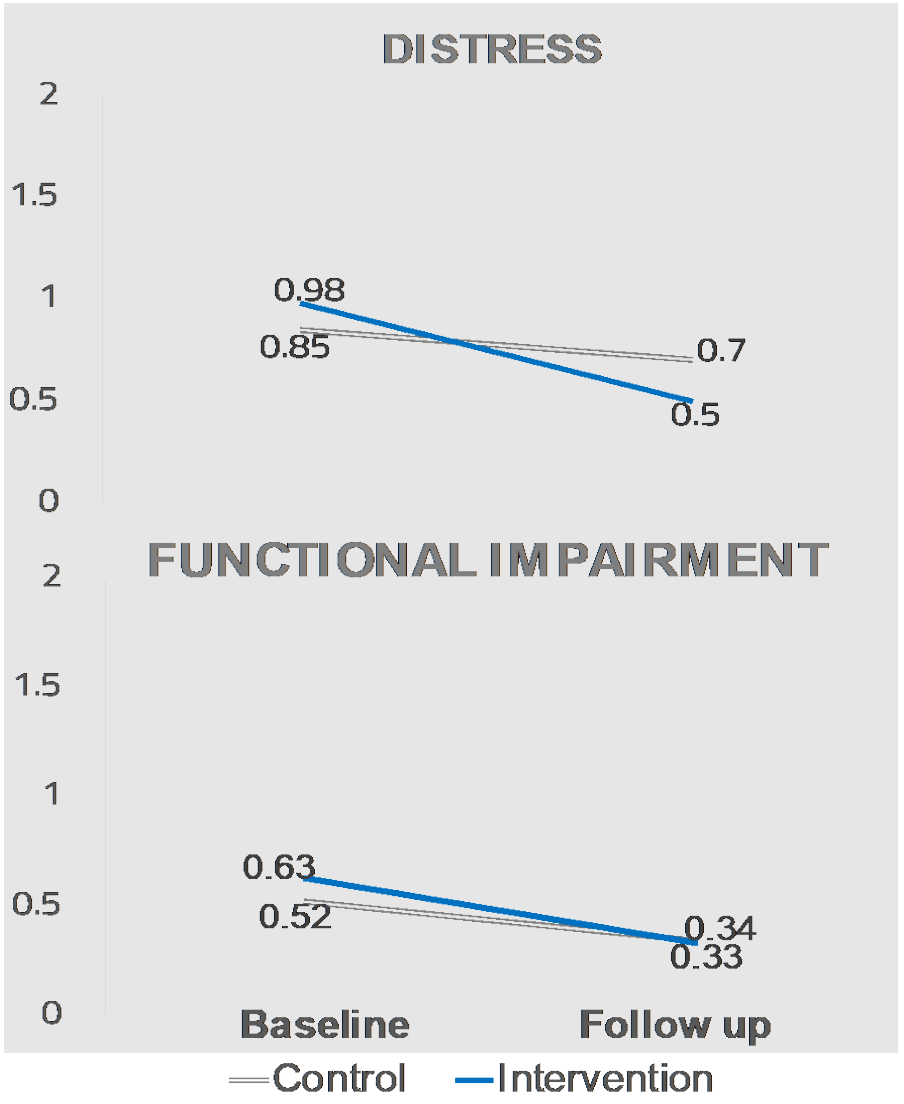
Overall take away

- Fidelity varied widely across different components, with some very high and some very low adherence.
- There tended to be better adherence to procedures in group vs. individual sessions and for some specific activities across domains, for enhanced vs. standard BFS

ACTION CONTRE LA FAIM
JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH
UNIVERSITY of VIRGINIA

Quantitative effectiveness results





Quantitative effectiveness results

Mixed Effects Linear Regression difference-of-differences analysis[1] of change in primary and secondary outcomes over time under corrected estimation procedures[2]

	MLE Estimation		REML Estimation		Kenward & Roger adjusted	
	B (SE)	p-value	B (SE)	p-value	B (SE)	p-value
Distress	-.30 (.16)	.058	-.30 (.18)	.090	-.30 (.18)	.129
Functional Impairment	-.10 (.12)	.393	-.10 (.14)	.446	-.10 (.14)	.468
Subjective Well-Being	.58 (.28)	.038	.58 (.31)	.063	.58 (.31)	.101
Positive Coping	-.32 (.29)	.276	-.32 (.33)	.329	-.32 (.33)	.358

[1]Ref: Control group; including cluster as a random effect

[2]As recommended in McNeish and Stapleton, 2016 to use REML estimation for unbiased point estimates and Kenward & Roger (1997) adjustment of standard errors for inflated type 1 errors when mixed model has small number of clusters

ACTION CONTRE LA FAIM · JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH · UNIVERSITY of VIRGINIA

"We can take good care of our child by learning these good things from here. ***If our children are happy, then we are happy also****. Maybe mothers who face problems that I have shared before* ***come to BFS for mental peace****. Apa (the psychosocial worker) talks with them softly, respectfully.* ***They feel relief*** *to share their feeling with Apa. They (the Apas) say, 'Don't argue with your husband, you can share with us if you have any problem with your husband.* ***You can tell us everything. We are here to listen to you****.'" (Mother attending BFS)*

Summary

Our results indicate that with supervision and implementation support, integrating manualized psychosocial support activities with nutrition services holds potential for reducing distress and improving subjective well-being of conflict affected mothers of malnourished children, but results were weaker for improving functioning and positive coping.

Acknowledgments

We are grateful to our team in Bangladesh: Action Against Hunger HEARD research project staff, program staff, Pauline Bubendorff, the support team and all the Rohingya community volunteers, and all study participants.

We acknowledge support from the Health Evaluation and Applied Research Development Project funded by the United States Agency for International Development (USAID) under cooperative agreement AID-OAA-A-17-00002. The project team includes prime recipient University Research Co., LLC (URC) and sub-recipient organizations. The information provided is not official U.S. Government information and does not represent the views or positions of USAID or the U.S. Government. For more information, please visit iscollab.org.