



EVALUATION OF THE PSYCHOSOCIAL IMPACTS OF BABY FRIENDLY SPACES FOR ROHINGYA REFUGEE MOTHERS AND THEIR MALNOURISHED INFANTS LIVING IN COX'S BAZAR, BANGLADESH

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Background

Evaluate the effectiveness of the Baby Friendly Space (BFS) program among trauma-affected Rohingya mother-child dyads admitted in ACF Integrated Nutrition Centers in Cox's Bazar refugee camps.



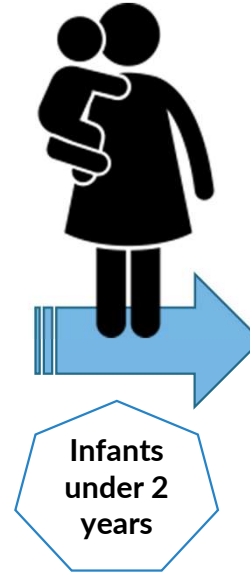
Lack of evidence of low-intensity psychosocial programs for maternal mental health

Assess the risk poor maternal mental health poses to child growth and development

Assess acceptability and feasibility of maternal and child psychosocial program in low-resource contexts

The intervention: BFS in Nutrition

Nutrition
treatment
admission
and Follow
ups



Group
discussion on
child care
practices

Breastfeeding
counselling

Relaxation

BABY FRIENDLY
SPACES

Play
&
stimulation

Baby
bathing and
massaging

Individual
psychological
counselling
sessions



5 MODULES of ACTIVITIES

1. Psychosocial stimulation integrated in nutrition
2. Psychosocial stimulation through baby massage and hygiene
3. Psychosocial stimulation in baby play
4. Psychosocial stimulation through breastfeeding
5. *Individual MHPSS session*

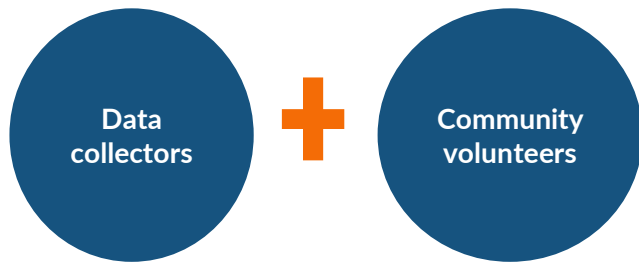
8 Weeks



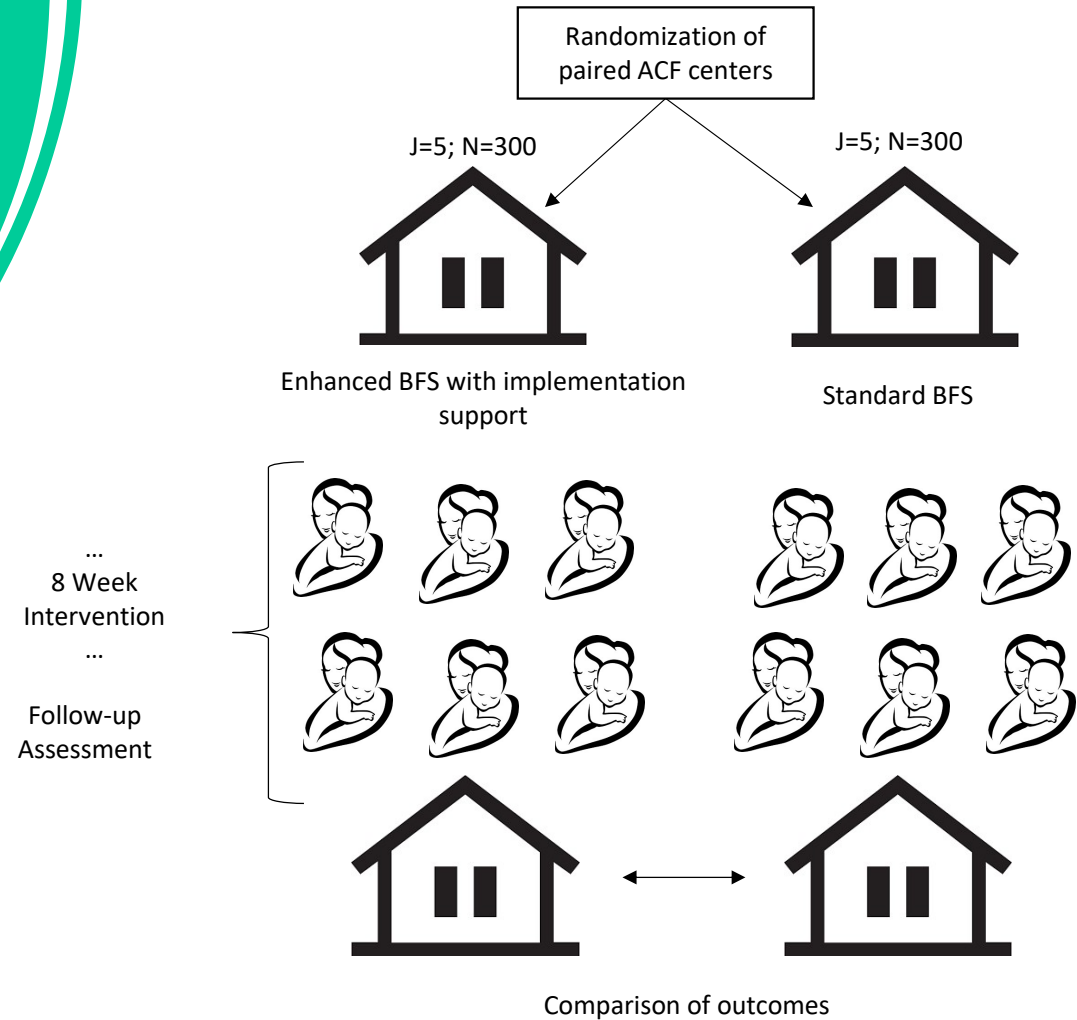
Study design



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Impact Evaluation



This study received ethical approval from the Institutional Review Board of the Institute of Health Economics (IHE-IRB) in Bangladesh (#IHE-IRB/DU/2021/33/Final).

Mothers and children related outcomes

WHO Gross motor milestones

Weight
Height
MUAC

child psychosocial stimulation

Mothers' psychosocial outcomes

Psychological distress
($\alpha=0.90$)

Myanmar-wide International Depression Symptom Scale (IDSS) & Kessler 6 (14-item)

Functioning
($\alpha=0.81$)

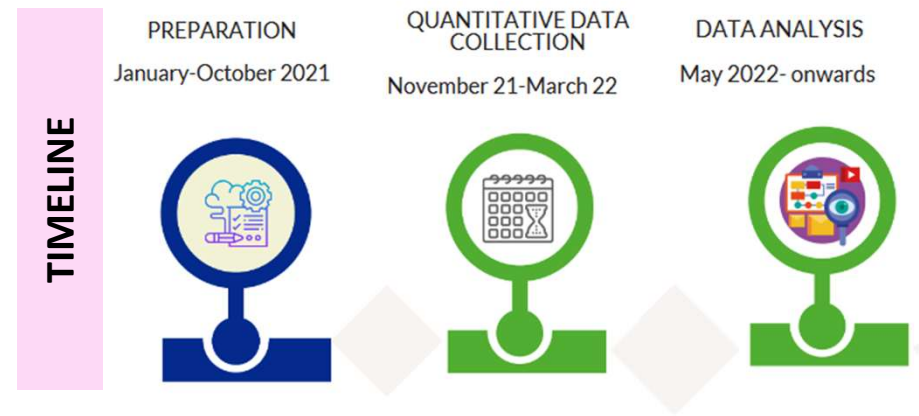
WHO Disability Assessment Schedule 2.0 (WHODAS)

Subjective well-being
($\alpha=0.85$)

Personal well-being index (PWI) adapted (6-item)

Positive Coping
($\alpha=0.81$)

Brief COPE adapted (10-item)



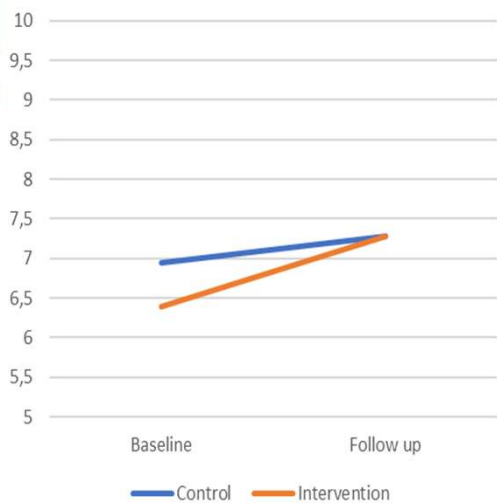
Results - mothers



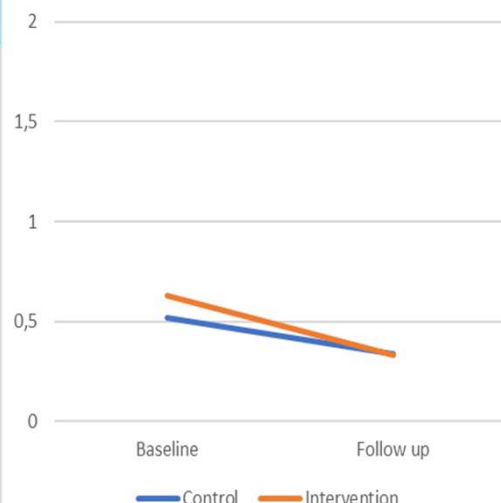
Baseline demographic characteristics by group

	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)

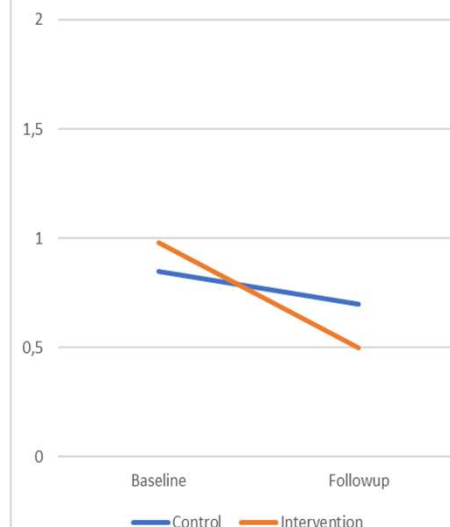
Subjective Well-Being



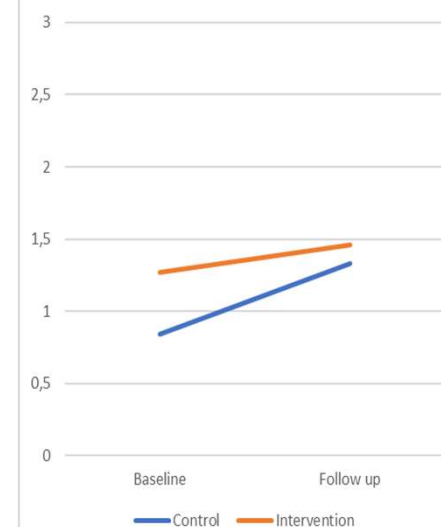
Functional Impairment



Psychological distress



Positive coping



Results - mothers



Difference-of-differences analysis* under corrected estimation procedures**

	MLE Estimation		REML Estimation		Kenward & Roger adjustment	
	B (SE)	p-value	B (SE)	p-value	B (SE)	p-value
Psychological 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

*Ref: Group A

**As recommended in McNeish and Stapleton, 2016: "First, with continuous outcomes especially, REML estimation is universally preferable to FML for unbiased variance component estimation...Second, one can use the Kenward-Roger adjustment (Kenward and Roger 1997) to guard against the inflated type-I error rate that results from underestimated fixed-effect standard errors." (p. 309-310)

Results - children

Child development & child psychosocial stimulation (Between-Group Comparisons at T2, Controlling for T1 Scores)

	Response Range	Control	Intervention	Beta ¹ (SE)	p-value
		Mean, SD	Mean, SD		
Gross motor milestones ²	0-5	3.16 (1.74)	2.88 (1.84)	-.14 (.20)	.488
In the past 2 weeks, how often have you:					
played with your child?	0-3	2.51 (.71)	2.10 (.66)	-.37 (.24)	.124
chatted or played with your child during daily routines?	0-3	2.27 (.86)	2.05 (.73)	-.22 (.31)	.490
positively guided your child's behavior?	0-3	2.15 (1.14)	1.90 (.94)	-.25 (.36)	.480
felt positively towards your child?	0-3	2.61 (.72)	1.83 (.88)	-.81 (.28)	.003
felt negatively towards your child?	0-3	0.35 (.77)	0.79 (.91)	0.45 (.33)	.180
felt neutral or nothing towards your child?	0-3	1.34 (1.24)	.92 (1.15)	-.41 (.60)	.488

¹Multilevel models regressing T2 score on Group and T1 score

²Also adjusts for child age

Child nutritional status

One-third of the children admitted to treatment are not acutely malnourished (20% not even stunted)

Many SAM cases treated as MAM, while many more MAM treated as SAM

2 months after admission, the nutrition status reached depends on nutrition status upon admission



Conclusion

1

- **Our preliminary 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.

2

- **The nutritional status of children** should be carefully supervised in order to provide optimal treatment for SAM and MAM children as per protocol
- Despite some improvements, changes related to **child psychosocial stimulation** outcomes remains lower than expected

3

- **Due to multiple environmental constraints, COVID-19 pandemic, ongoing changing and shifting reality of program, and loss of funding for BFS program**, implementing real-world evaluation is challenging and further research is necessary to complement our findings



Next steps



2022-2023

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



Thank you for your attention!

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*One mother quoted: “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”.*