



Barrier Analysis of Nutrition Behaviors Among Syrian Refugees (Lebanon, Jordan & Turkey)

After 5.5 years of conflict in Syria, around 6.5 million people have been displaced and there is still no clear end to the fighting. Neighboring countries opened their borders to those fleeing the violence, but are increasingly struggling to provide basic services and accommodation. International Medical Corps and partners have been involved in the Syrian refugee response since the onset of the crisis, promoting MNCHN programming, however it is clear that many barriers remain to adoption of specific behaviors. International Medical Corps was awarded a TOPS Microgrant to lead a Barrier Analysis (BA) training of partners and assessments in five regions of Lebanon, Jordan's Azraq refugee camp, and northern and southern Turkey (Istanbul and Gaziantep). In each country 3 MNCHN behaviors were assessed to determine the facilitators and barriers to behavior adoption among the displaced Syrian population in order to lend evidence to inform program activity design and advocacy.

Approach: BA is an adapted case control study using a mixed methods approach, including a purposively selected sample of 45 "Doers" and 45 "Non-Doers" of a specific behavior. Significant differences between "Doers" and "Non-Doers" are noted based on p-values (<0.05 for difference in odds ratios) or percentage point differences greater than 15 (even if not statistically significant).

Results:

Lebanon: studied behaviors and results

- 1) Mothers of children ages 0-6 months exclusively breastfeed (EBF), 2) Pregnant women attend 1 antenatal care visit during their first trimester, 3) Mothers of children ages 6-23 months feed them meals each day containing foods from at least 4 of the 7 food groups (MDD, minimum dietary diversity).

Exclusive Breastfeeding				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Self-Efficacy (Easier)				
Economic savings	D	20%	0.015	
Positive feelings toward breastfeeding/ bonding	D	20%	0.009	
Maternal Nutritional status/ health	ND	-12%	0.034	
Perceived Self-Efficacy (Difficult)				
Stress and Crowding in home	ND	-16%	0.016	
Maternal health/ nutrition issues/ lack of calcium	ND	-31%	0.000	
Baby is very sick/ hospitalized	ND	-21%	0.002	
Positive Consequences: What are the advantages?				
Prevents diarrhea	D	22%	0.003	
Negative Consequences: What are the disadvantages?				
Baby weight low, baby will not grow	ND	-14%	0.030	
Social Norms: Who approves?				
Mother-in-law	D	19%	0.050	
Father-in-law	D	20%	0.009	
Father	D	16%	0.037	
Social Norms: Who disapproves?				
Husbands	ND	-12%	0.034	
Severity: How serious would it be if your baby became malnourished?				
Very serious	ND	-16%	0.072	
Action Efficacy: Likelihood of baby diarrhea if practicing EBF				
Somewhat likely	ND	-26%	0.007	

MDD				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Positive Consequences: Advantages				
Baby satisfied, has energy, sleeps well	ND	-18%	0.038	
Perceived Negative Consequences: Disadvantages				
Baby gastro-intestinal problems	ND	-16%	0.072	
Perceived Self-Efficacy: Difficult				
Lack of time (work, childcare)	D	17%	0.010	
Perceived Access				
Very difficult	ND	-35%	0.000	
Somewhat difficult	D	39%	0.000	
Reminders				
Very difficult	ND	-15%	0.027	
Perceived Susceptibility to Malnutrition				
Very likely	ND	-32%	0.000	
Not likely at all	D	28%	0.003	
Perceived Action Efficacy: Likelihood of malnutrition if diet is diverse				
Not likely at all	D	20%	0.033	
Perceived Divine Will				
No	D	23%	0.019	

ANC				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Self-Efficacy (Easier)				
Availability of money to pay for services	ND	-26%	0.005	
Mother's health problems lead her to attend ANC	D	20%	0.010	
Curiosity/worry of mother about baby's health	D	20%	0.003	
Perceived Self-Efficacy (Difficult)				
Lack of time (childcare, breastfeeding, etc)	ND	-17%	0.047	
Positive Consequences: What are the advantages?				
Check up on mother's health	ND	-16%	0.092	
To receive advice/education from doctor	D	12%	0.039	
Access to prescription and needed medication	D	24%	0.017	
Knowing the gender of the baby	ND	-14%	0.022	
Social Norms: Who approves?				
Husband	D	30%	0.001	
Access				
Very difficult	ND	-18%	0.054	
Reminders				
Somewhat difficult	ND	-22%	0.021	
Not difficult at all	D	30%	0.004	
Perceived Risk: Likelihood of you having a serious complication due to not attending ANC				
Somewhat likely	D	17%	0.073	

Jordan: studied behaviors and results

- 1) Mothers put the newborn to the breast within 1 hour of delivery, 2) Pregnant women attend 1 ANC visit during their 1st trimester, 3) Mothers of children 6-23 months feed an iron-rich food to their children at least 3 times per week.

Early Initiation of Breastfeeding				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Self-Efficacy (Easier)				
Natural birth/not C-section	ND	-28%	0.000	
Medical staff give baby to mother	D	33%	0.000	
Mother healthy, not sick (anemia/hypertension)	ND	-15%	0.027	
Mother's desire/emotional trigger	D	20%	0.026	
Previous experience/knowledge of benefits	D	12%	0.012	
Perceived Self-Efficacy: Difficult				
No difficulties	D	28%	0.001	
lack of Support from staff	ND	-15%	0.016	
Anesthesia/C-section/Unconscious	ND	-21%	0.007	
Breast pain	D	20%	0.006	
No milk production	D	10%	0.026	
Negative Consequences: What are the disadvantages?				
No disadvantage	ND	-16%	0.082	
Social Norms: Who approves?				
Mother	ND	-27%	0.008	
Mother-in-law	ND	-19%	0.039	
NGO/Save the Children	D	20%	0.026	
Father	ND	-10%	0.030	
Access				
Very difficult	ND	-17%	0.015	
Somewhat difficult	ND	-21%	0.009	
Not difficult at all	D	36%	0.000	
Reminders				
Very difficult	ND	-13%	0.049	
Not difficult at all	D	19%	0.042	
Risk: How likely to get the problem?				
Very likely	D	18%	1.000	

Iron rich food				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Self-Efficacy: Difficult				
Voucher is not enough / doesn't include these foods	ND	-17%	0.060	
Lack of iron-rich foods in market	ND	-13%	0.024	
No difficulties	D	22%	0.000	
Poor quality / dirty food (in the mall)	ND	-10%	0.024	
Positive Consequences: What are the advantages?				
Improve baby's health	ND	-23%	0.018	
Improve growth & development	D	58%	0.000	
Social Norms: Who approves?				
Husband	D	17%	0.062	
Mother	D	14%	0.046	
Perceived Severity: How serious would it be if the child became anemic?				
Very serious	ND	-18%	0.055	
Somewhat serious	D	20%	1.000	

ANC				
Determinants	Doers or Non-Doers	% Point Diff.	p-value	
Perceived Self-Efficacy (Easier)				
Availability of meds	D	8%	0.04	
Doctors at borders	ND	-11%	0.02	
Positive Consequences: What are the advantages?				
Confirm pregnancy	D	15%	0.03	
Access				
Very difficult	ND	-23%	0.01	
Not difficult at all	D	20%	0.04	

Turkey: studied behaviors and results

1) Adolescent mothers of children ages 0-5 months EBF, 2) Adolescent mothers of children 6-23 months feed an iron-rich food to their children at least 3 times per week, 3) Pregnant adolescents consume an additional meal daily during pregnancy.

Exclusive Breastfeeding			
Determinants	Doers or Non-Doers	% point Diff.	p-value
Perceived Self-Efficacy (Easier)			
Mother's good nutrition	D	18%	
Produce enough milk	D		0.036
Baby is satisfied	D		0.024
Perceived Self-Efficacy (Difficult)			
Not producing enough milk	ND	16%	
Baby is not satisfied	ND		0.057
Baby not able to suckle	ND	17%	
Positive Consequences: What are the advantages?			
Improved baby development and cognition	ND		0.057
Negative Consequences: What are the disadvantages?			
Not enough to satisfy baby	ND	15%	
Social Norms: Who approves?			
Mother-in-law	D	22%	
Husband	ND		0.000
Mothers	ND	15%	
Risk: Likelihood of baby becoming malnourished or getting diarrhea?			
Somewhat Likely (diarrhea)	ND	15%	
Not likely at all (malnourished)	ND		0.043
Action Efficacy: Likelihood of baby diarrhea/ malnourished if practicing			
Not likely at all (diarrhea)	D		0.003

Iron Rich Food			
Determinants	Doers or Non-Doers	% Point Diff.	p-value
Perceived Self-Efficacy: Easier			
Mother is psychologically well	D		0.014
Having a child older in age (easier weaning)	ND		0.002
Perceived Self-Efficacy: Difficult			
Not knowing what iron rich foods are	ND		0.002
Child is sick	D		0.019
Positive Consequences: What are the advantages?			
Good health/ nutrition and cognition for child	D		0.008
Immunity/ no need for medications	D		0.024
Good growth and development	ND		0.031
Better bonding with child	ND		0.031
Social Norms: Who approves?			
Husband	D		0.022
Mother-in-law	ND		0.015
Access: How difficult is it to get iron rich food?			
Somewhat Difficult	D		0.005
Very Difficult	ND		0.011

Extra Meal			
Determinants	Doers or Non-Doers	% Point Diff.	p-value
Perceived Self-Efficacy: Easier			
Mother is hungry/ has an appetite	D		0.021
Family encouragement/ support	D	16%	
Food always available in the house	D		0.048
Having enough money to buy food/ afford for	ND		0.050
Mother not sick after every meal	ND		0.043
Perceived Self-Efficacy: Difficult			
Mother is in bad psychological state/ stressed	ND		0.043
Mother is sick after every meal	ND		0.048
Positive Consequences: What are the advantages?			
Healthier for baby/ provides immunity	D	16%	
Mother is not tired after eating/has more energy	D	27%	
Healthier for mother/ more vitamins	ND		0.010
Social Norms: Who approves?			
Mother-in-law	ND	15%	
Access: How difficult is it to get an extra meal?			
Not Difficult at all	D	16%	
Action Efficacy: Eating extra meal ensure healthy baby?			
Yes	ND	16%	

Summary of Recommendations

- Care Groups or peer support groups are recommended across all country settings to address a number of barriers to breastfeeding practices, ANC access, and diets.
- Innovative approaches needed to ensure access to diverse diet/ iron-rich foods → these could include micro-gardening, changes to the voucher program, or sessions and updated SBCC material on “eating well on a budget”
- Advocacy is needed on...
 - Incorporation of BA evidence-based messaging into National Breastfeeding Campaign
 - Adoption and uptake of the Baby Friendly Hospital Initiative
 - Changes to food voucher program (specifically in Azraq camp)
 - Ensuring female gynecologists available for ANC
- Transportation systems are needed to access ANC → potentially bicycles with a cart in Jordan, other modes of shared transportation, or mobile clinics delivering ANC and integrating key IYCF messages
- Visuals developed and posted:
 - Medical staff giving baby to mother for early breastfeeding initiation after birth
 - What happens during each ANC visit – including the first visit (with a focus on pre-natal tests)
 - Example meal plans (based on 24-hour recalls, focus groups, or Cost of the Diet data)
 - Food safety when preparing infant foods
 - What is an iron-rich food
- Training for CHWs on key messages and referral according to each behavior’s findings; ensure male CHWs are recruited
- Training of medical staff on key messages to deliver according to each behavior’s findings
- Organize behavior change promotion activities among “key influencers” identified through this formative research