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Memorandum

20 September 2017

To: Ms

Ms Gulshan Ara

Principal Investigator of research protocol # PR-17083

Nutrition and Clinical Services Division (NCSD)

From: Professor Saria Tasnim

Chairperson

Ethical Review Committee (ERC)

Sub: Research protocol # PR-17083

Thank you very much for submitting your research protocol # PR-17083, titled "Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in SHIMA working area" for consideration in its August ERC meeting held on 14 September 2017. After review and discussion, the Committee made following observations on it:

- a) Page 10: It is not clear why the author did not consider sharing the findings with GoB despite the findings is of national importance. It would be nice if the author also consider preparing a policy brief and mark the relevant section "Yes".
- b) Page 20, Exclusion criteria: the item 1-4 does not seem to be the exclusion criteria, in fact these criteria are already represented in the inclusion criteria, please remove these from the list of exclusion criteria.
- c) Page 21: It is not clear whether the author is using 7 union or 6 union (3+3). Please clarify.
- d) Page 22: A copy of the materials on "BCC on child feeding practices" should be submitted to the ERC before it is used with the participants.
- e) English and Bangla consent form does not match. Please check translation.
- f) Bangla consent form is full of typos, please correct those. Please work on the terminologies and use descriptive language to explain terminologies to make sure that these are meaningful to participants. Many section of the Bangla consent form seems to be too difficult for understanding by the target population. Should be rephrased and simplified.
- g) Consider removal of "যে কোন" from "যে কোন তথ্য জানতে পারবেন" in the Risk and benefit section of Bangla consent form.

Dhaka 1212

Bangladesh

- h) "ভবিষ্যতে তথ্যের ব্যাবহার" and "ক্ষতিপুরন" section of the consent form are wrongly written. Should be revisited.
- i) Parental consent is required to collect data from the child. However no such form is attached. Please attached one or add a section with check boxes in consent form to indicate the consent for self and for the child.
- j) Questionnaire B1.4: It is not clear whether it is "Out of Shivaloya" or "out of the 6 selected unions"?
- k) Questionnaire D2.2: Why "Chakma" is in the coding category?
- Questionnaire: There are some questions that invades privacy of the participants. Please make sure that interviewers are adequately trained to appreciate the delicacy of the matter and collect data in a sensitive manner.

Please modify the protocol addressing the above observations and submit a revised version of the protocol for consideration of the Chair.

Thank you.

Cc: Senior Director, NCSD



04 October 2017

To:

Professor Saria Tasnim

Chairperson

Ethical Review Committee (ERC)

From: Ms Gulshan Ara

Ms Gulshan Ara Gulfm Ara
Principal Investigator of research protocol # PR-17083

Nutrition and Clinical Services Division (NCSD)

Sub: Research protocol # PR-17083

> Thank you very much for submitting your research protocol # PR-17083, titled "Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in SHIMA working area" for consideration in its August ERC meeting held on 14 September 2017. After review and discussion, the Committee made following observations on it:

> Page 10: It is not clear why the author did not consider sharing the findings with a) GoB despite the findings is of national importance. It would be nice if the author also consider preparing a policy brief and mark the relevant section "Yes".

Responses: We have updated our dissemination plan as per your kind suggestions.

b) Page 20, Exclusion criteria: the item 1-4 does not seem to be the exclusion criteria, in fact these criteria are already represented in the inclusion criteria, please remove these from the list of exclusion criteria.

Responses: The list of exclusion criteria has been updated.

c) Page 21: It is not clear whether the author is using 7 union or 6 union (3+3). Please clarify.

Responses: The study site has been changed from Shibhaly to Harirampur after consultation with the donor (CIFF) and implementing partner (brac). However, the number of unions remains same. Out of 13 unions in Harirampur, 3 unions do not fulfil our criteria. Therefore from the remaining 10 unions, we will randomly select 3 unions for intervention and 3 unions for control arm. This information now has been added in the protocol (Page 19,21).

d) Page 22: A copy of the materials on "BCC on child feeding practices" should be submitted to the ERC before it is used with the participants.

Responses: BCC materials are under preparation. It will submitted later on.

e) English and Bangla consent form does not match. Please check translation.

Responses: We have revised both English and Bangla consent forms (Page 57-68)

Bangla consent form is full of typos, please correct those. Please work on the terminologies and use descriptive language to explain terminologies to make sure that these are meaningful to participants. Many section of the Bangla consent form seems to be too difficult for understanding by the target population. Should be rephrased and simplified.

Responses: We have revised Bangla consent form completely (Page 60-62 & 66-68)

g) Consider removal of "যে কোন" from "যে কোন তথ্য জানতে পারবেন" in the Risk and benefit section of Bangla consent form.

Responses: We have revised Bangla consent form completely (Page 61 and 67)

h) "ভবিষ্যতে তথ্যের ব্যাবহার" and "ক্ষতিপুরন" section of the consent form are wrongly written. Should be revisited.

Responses: We have revised Bangla consent form completely (Page 61 and 67)

i) Parental consent is required to collect data from the child. However no such form is attached. Please attached one or add a section with check boxes in consent form to indicate the consent for self and for the child.

Responses: It has been revised as per suggestion (Page 66-68)

j) Questionnaire B1.4: It is not clear whether it is "Out of Shivaloya" or "out of the 6 selected unions"? Responses: It has been revised (Page 69 and 89)

k) Questionnaire D2.2: Why "Chakma" is in the coding category?

Responses: It has been revised (Page 70)

l) Questionnaire: There are some questions that invades privacy of the participants. Please make sure that interviewers are adequately trained to appreciate the delicacy of the matter and collect data in a sensitive manner.

Responses: We will inform the technical team regarding this privacy issues and train the data collection team adequately to maintain privacy.

Please modify the protocol addressing the above observations and submit a revised version of the protocol for consideration of the Chair.

Thank you.

Attachment 1 (FACE SHEET)		***	Date: 29/08/17						
ETHICAL RE	VIE	N C	COMMITTEE, ICDDR,B						
Principal Investigator: Gulshan Ara Protocol Number: 1 7 0 8 3 Protocol Title: Impact of nutrition interventio (counselling, food voucher for recipe, WASH fortification) on growth and feeding practice two years children in SHIMA working area	and hor	der	Trainee Investigator (if any): Yes No Student Investigator (if any): Yes No Student Investigator (if any):						
Check the appropriate box to answer to each of the following (If Not Applicable write NA)									
 Source of population: (a) Ill participants (b) Non-ill participants (c) Minor or persons under guardianship (d) Others		No ⊠ □ ⊠	5. Will informed consent be obtained from (a) Study participants (b) Parent or guardian or next to kin (if study participants are minor and/or under guardianship) (c) Participant aged 11 – 17 years (Assent)						
Does the study involve: (a) Physical risk to the participants (b) Social risk to the participants (c) Psychological risks to participants (d) Discomfort to participants (e) Invasion of participants' privacy (f) Disclosure of information damaging to participants or others 3. Does the study involve: (a) Use of records (hospital, medical,			 6. Will precautions be taken to protect anonymity of study participants 7. Check documents being submitted herewith to Committee: Umbrella proposal - Initially submit an overview (all other requirements will be submitted with individual research protocol) Research protocol should include: Abstract Summary Consent form for study participants 						
death or other) (b) Use of fetal tissue or abortus (c) Use of organs or body fluids (d) Use of stored biological specimens (e) Use of already collected data			Consent form for parent or guardian or next to kin Assent form for participant under guardianship Questionnaire* * If the final instrument is not ready at the time of submission of the protocol for review by the ERC,						
 4. Are participants clearly informed about: (a) Nature and purposes of the study (b) Procedures to be followed including alternatives used (c) Physical risk (d) Sensitive questions (e) Benefits to be derived (f) Right to refuse to participate or to withdraw from the study 			the following information should be included in the abstract summary. Issues to be covered in the questionnaire or interview which could be considered either sensitive or which would constitute an invasion of privacy. The final questionnaire must be approved by the committee before its use.						
(g) Confidential handling of data (h) Compensation and/or treatment where there are risks or privacy is involved in any particular procedure									
We agree to obtain approval of the Ethical Revier participants before making such changes.	w Comm	nittee	for any changes involving the rights and welfare of study						
Principal Investigator	Traine	ee inv	estigator Student investigator						

Student investigator



Research Protocol No:

PR-17083

Research Protocol Title:

Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding

practices of under two years children in SHIMA working area

Principal Investigator:

Gulshan Ara

Authorition and Clinical Services Division (NCSD) Tel: Extn.# 2336; E-mail: gulshan.ara@icddrb.org

ABSTRACT SUMMARY

- 1. Study population: The period from birth to two years of age is the "critical window" for the promotion of optimal growth, health, and development. Insufficient quantities and inadequate quality of complementary foods, poor child-feeding practices and high rates of infections have a detrimental impact on growth. Even though the importance of CF is established, children < 2y are being fed complementary foods with poor nutrient quality, particularly in resource poor countries like Bangladesh. Approximately 36% under 5 children are stunted in Bangladesh. Only 23% of children age 6-23 months is fed appropriately based on recommended infant and young child feeding (IYCF) practices. The routine diet of the population including children is mainly plant based and lacks adequate protein and other essential nutrients. Hygiene is also an issue as only 21% of rural households use soap and water during hand washing. icddr,b has designed an integrated package of services consisting of - complementary feeding counselling, home fortification with micronutrient powder and tailor-made WASH counselling which will be supported by food voucher to feed the children homemade snack following a recommended recipe. The overall goal of this study is to develop and evaluate an intervention strategy which should improve appropriate complementary feeding practice as well as other corresponding practices like sanitation and hygiene in
- 2. Potential risks and benefits: This study poses no more than minimal risk to its participants. The recipe that will be promoted (shuji firni or halua) is routinely used in

the community and will subsequently reduce the burden of child undernutrition

specifically stunting.

the community. However, addition of egg might change the flavor and consistency of the new recipe. Therefore, we will conduct an accessibility trial at the beginning of the intervention study with 50 mother-children dyads (who will not participate in the main intervention trial) to test the acceptability of the new recipe. Also, we will provide routine micronutrient powder (MNP) to the children which might have few common side effects like constipation, diarrhoea for ingredients like iron in the MNP. However, mothers will be thoroughly counselled regarding management of such common side effects. They will also be provided the contact number of the principal investigator in case of any unforeseen side effects. The information that we will obtain from this survey would have broader impact, guiding the development of policies and programs related to improve maternal and child nutrition among families from disadvantaged rural families, and would contribute to improve the maternal and child health and nutrition services in Bangladesh and elsewhere.

- 3. **Safety procedure:** There is no added safety procedure to be taken for the participants for conducting this proposed study.
- 4. Safeguarding confidentiality and protecting anonymity: Confidentiality will be strictly maintained by coding each subject.
- 5. Consent: Signed informed consents will be obtained from the study participants.
- 6. Formal interview: The proposed study includes structured interview process.
- Use of records/samples: The information collected from this study may be shared with other researchers if needed, but we will strictly maintain your confidentiality and privacy.

The consent form includes the information specified in item 2,3,4,5 and 7 as well as the approximate time required for participation in the activity.



Memorandum

28 August 2017

To:

Shafiqul Alam Sarker, MD, PhD

Chairperson

Research Review Committee (RRC)

From: Ms Gulshan Ara

Spelster Ara Principal Investigator of research protocol # PR-17083

Nutrition and Clinical Services Division (NCSD)

Sub: Response to comments of research protocol # PR-17083

Thank you for submitting your research protocol # PR-17083 titled "Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in SHIMA working area" for consideration of the RRC and present it before the Committee in its August meeting held on 10 August 2017. This is to inform you that after review and discussion, the committee made the following observations on the protocol:

The proposed study could have started with specific hypotheses as per specific objectives. These hypotheses would have been helpful for statistical analysis of data and to draw conclusions.

Response- Specific hypotheses now have been added in the protocol as per suggestion. (page: 15)

It is a common practice to label the abbreviations at the starting point. The researcher seems to miss that. For example, on page 15 the abbreviations LAZ and WAZ came out of the blue. A list of abbreviations should be prepared and attached with the revised protocol.

Response- A list of abbreviations has now been attached with the revised protocol. (Page:32-33)

There are many activities involved in this research, but a detailed time c) line/schedule is missing. This is very much needed for running project activities smoothly.

Response- A detailed timeline/schedule now has been added in the protocol for better clarification. (page: 31)

Observation of the household and the behaviorr of its members is a part of methodology in this research. Such activity involves the risk of invasion of privacy. What steps would be adopted by the researcher to deal with that factor which has ethical implication? The research protocol needs to endorse that.

Response- The observation will take place only after taking written consent of the participating mother. A study staff will describe the details of the study and mothers will be requested to participate voluntarily. It would be made absolutely clear that she can refuse to answer to any or all of the questions and also refuse to give permission for any observation.

e) How will the investigators ensure that the study product will be taken only by the enrolled child, not by other siblings of the selected child?

Response- In a community based trial (where food based approach will be promoted), it is difficult to ensure that the given food item will be fully consumed by the study participants and there will be no sharing with other family members especially with siblings. Perhaps, any ethical issue could be raised if we strictly maintain the proposed food consumption by the study participants. We acknowledge the ethical concern regarding sharing of study product and therefore we have calculated the monthly requirement of food items in such way that another sibling could be occasionally fed. Moreover, we will ensure adequate training of the field staff (brac shaystho shebika/ Pushti kormi) who will actually motivate the mothers and perform the behavioral change communication (BCC) in the community. The way such messages are conveyed to mothers is crucial for the success of the trial and we will monitor and evaluate the quality of the message delivery randomly throughout the trial period.

f) It is not clear whether it is an individual or cluster randomized study.

Response- This is a cluster randomize trial where unions will serve as cluster and will be selected randomly as intervention or control arm.

g) Are the investigators going to do difference in different analysis?

Response- Yes as we will have information of both intervention and control arm at baseline and endline, difference in differences analysis will be done. This now has been included in the data analysis part of the protocol. (page:31)

h) The questionnaires for survey look very lengthy. Can it be cut short so that fatigue factor does not influence free flow of information?

Response- The questionnaire has been revised following the suggestion and the length has been reduced without compromising the quality of the data. (page: 63-104)

i) Questions included in the questionnaire should be rationalized in terms of study objective(s). Asking irrelevant questions is a burden and wasting participants' time and would not be fair and ethical which also has implications on quality of data. The PI should be careful while finalizing the questionnaire.

Response- The questionnaire has been revised following the suggestion and the length has been reduced by omitting irrelevant questions without compromising the quality of the data. In addition, it should be mentioned that



Memorandum

16 August 2017

To:

Ms Gulshan Ara

Principal Investigator of research protocol # PR-17083

Nutrition and Clinical Services Division (NCSD)

From: Shafiqul Alam Sarker, MD, PhD

Chairperson

Research Review Committee (RRC)

Sub: Research protocol # PR-17083

Thank you for submitting your research protocol # PR-17083 titled "Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in SHIMA working area" for consideration of the RRC and present it before the Committee in its August meeting held on 10 August 2017. This is to inform you that after review and discussion, the committee made the following observations on the protocol:

- a) The proposed study could have started with specific hypotheses as per specific objectives. These hypotheses would have been helpful for statistical analysis of data and to draw conclusions.
- It is a common practice to label the abbreviations at the starting point. The b) researcher seems to miss that. For example, on page 15 the abbreviations LAZ and WAZ came out of the blue. A list of abbreviations should be prepared and attached with the revised protocol.
- There are many activities involved in this research, but a detailed time line/schedule is missing. This is very much needed for running project activities smoothly.
- Observation of the household and the behavior of its members is a part of methodology in this research. Such activity involves the risk of invasion of privacy. What steps would be adopted by the researcher to deal with that factor which has ethical implication? The research protocol needs to endorse that.
- How will the investigators ensure that the study product will be taken only e) by the enrolled child, not by other siblings of the selected child?
- It is not clear whether it is an individual or cluster randomized study. f)
- Are the investigators going to do difference in different analysis? g)
- The questionnaires for survey look very lengthy. Can it be cut short so that h) fatigue factor does not influence free flow of information?

- i) Questions included in the questionnaire should be rationalized in terms of study objective(s). Asking irrelevant questions is a burden and wasting participants' time and would not be fair and ethical which also has implications on quality of data. The PI should be careful while finalizing the questionnaire.
- j) Figure (page-21): In intervention group under baseline assessment there are 2 boxes indicating 2 subgroups needs correction.
- k) Bangla version of the data collection tools is missing.
- Mobile number of the principal investigator or her representative should be given on the consent form, not the PABX and extension number, so that the potential study participants can contact if needed. Contact address and phone number of IRB Coordinator should also be corrected.

You are, therefore, advised to address each of the above mentioned observations of the committee and submit the revised version of the protocol for consideration by the chair.

Thank you once again.

Cc: Division Director, NCSD.

icddr,b				RF	C APP	LICA	ΛTΙ	ON F	ORM
RESEARCH PROTOCOL									
Number: PR-17083	FOR OFFICE USE O	NLY							
Version No. 3.00	RRC Approval: Yes No						No	Date:29/08/2017	
Version date: 08.29.2017	ERC Approval:				Yes			No	Date:
	AEEC Approval:				Yes		1	No	Date:
	External IRB Appro				Yes		1	No	Date:
	Name of External II	RB:							
Protocol Title:* (maximum 250 characte	ers including space)	ʻlmpa	ct of nu	tri	tion ir	ter	/er	ntion	counselling, food
voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh"									
Short Title: (maximum 100 characters including space) Nutrition intervention integrated with food voucher to improve child growth and feeding practices									
Key Words:* Nutrition intervention, fo	od voucher, child fe	eding	g, growth	٦,	WASH				
Name of the Research Division Hosting	the Protocol:*								
Maternal and C						al and Child Health Division (MCHD) ory Sciences and Services Division specify)			
Has the Protocol been Derived from an	Activity:* No		Yes (¡	ple	ase pr	ovic	le f	follov	ving information):
Activity No. :									
Activity Title:									
PI:									
Grant No.: Budget	Code:	c	tart Dat	٥.					End Date:
Grant No Budget	coue.	3	itait Dat	С.					Liid Date.
icddr,b Strategic Priority/ Initiative (SP all that apply) Reducing maternal and neonatal machine Controlling enteric and respiratory Preventing and treating maternal and malnutrition	ortality infections		emerg Achievi Examin climat	ging ing ing e d	g infec univer g the h change	tion sal ealt	s hea h c	alth c	merging and re- coverage quences of n-communicable
Research Phase (4 Ds):* (check all that a	apply)								
☑ Discovery☑ Development		☑ Delivery☑ Evaluation of Delivery							
Anticipated Impact of Research:* (chec	k all that apply)								
 Knowledge Production Capacity Building 	r r 177	\boxtimes	Informi Health a Econom	an	d Heal	th S	ect	tor Be	enefits

Which of the Sustainable Development Goal This Protocol Relates to?:* (che	eck all that apply)
 End poverty in all its forms everywhere End hunger, achieve food security and improved nutrition and promoders. Ensure healthy lives and promote well-being for all at all ages. Ensure inclusive and equitable quality education and promote lifelonges. Achieve gender equality and empower all women and girls. Ensure availability and sustainable management of water and sanitat. Ensure access to affordable, reliable, sustainable and modern energy. Promote sustained, inclusive and sustainable economic growth, full a decent work for all. Build resilient infrastructure, promote inclusive and sustainable industance in a sustainable in the sustainable in the	g learning opportunities for all ion for all for all nd productive employment and strialization and foster innovation ainable for sustainable development as, sustainably manage forests, alt biodiversity loss t, provide access to justice for all
Does this Protocol Use the Gender Framework:* (Please visit: http://www.icddrb.net.bd/jahia/Jahia/pid/684 for Gender Alanysis Tool with instructions)	complete Gender Analysis Tool)
Will this Research Specifically Benefit the Disadvantaged (economically, soc otherwise):	ially and/or
Does this Protocol use Behaviour Change Communication:	∑ Yes ☐ No
Gulshan Ara (Should be icddr,b staff):* Sex Female Male (Position, phone no, extension no, cell, and email address): Assistant Scientist Office: +880-2-9827001-10 Ext-2336 Cell: +8801925902383 Email: gulshan.ara@icddrb.org Do you have ethics certification? No Yes (please attach in your CV below) Do you have RBM training certification? No Yes (please attach the certificate with CV below)	Primary Scientific Division of the PI: Nutrition and Clinical Services Division

Co-Principal Investigator(s) Internal: Sex Female Male	
Research Investigator Office: +880-2-9827001-10 Ext-2284 Cell: +8801753327222 Email: sanin@icddrb.org Signature or written consent of Co-PI: (electronic signature or email or any sort of written consent) [if more than one, please copy and paste this row for additional Co-PIs] Do you have ethics certification? No Yes (please attach in your CV below)	Primary Scientific Division/ Programme of the Co-PI Nutrition and Clinical Services Division Approval of the Respective Senior Director/ Programme Head
Do you have RBM training certification? No Yes (please attach the certificate with CV below)	(Signature)
Cell no. +8801713044799 Extension no. 2300 Email address: tahmeed@icddrb.org Address (provide full official address, including land phone no(s), extension remail address).	o. (if any), cell phone number, and
Signature or written consent of Co-PI:	
(electronic signature or email or any sort of written consent)	
	Primary Scientific Division of the Co-I Approval of the Respective Senior Director/ Programme Head

Co-Investigator(s) – External: Sex	Female Male	
Address (provide full official address,	including land phone no(s), extension	no. (if any), cell phone number, and
email address):		
Signature or written consent of Co-I: _		
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Student Investigator(s) - Internal: Se	C Female Male	Students Affiliation
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Signature or written consent of Stude		
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Collaborating Institute(s): Please prov	ide full official address	
Country	Bangladesh	
	Shabukta Malik	
Contact person	Shabukta Malik	
Department	brac Health Program	
(including Division, Centre, Unit)		
Institution	brac	
(with official address)	brac Centre	
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Discounts and	Dhaka-1212, Bangladesh	
Directorate		
(in case of GoB i.e. DGHS)		
Ministry (in case of GoB)		
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Contribution l										
						Contrib	ution			
Members' Na	ame	Research	Study	Protocol	Respond	Defendi	Developi	Data	Data	Manuscri
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Study Population: Sex, Age, Special Group and Ethnicit	У
Research Subject:	Special Group:
Human	Pregnant Women
Animal	Fetuses
Microorganism	Prisoners
Other (specify):	Destitutes
Other (speeny).	Service Providers
Sex:	Cognitively Impaired
Male	CSW
Female	Expatriates
Transgender	Immigrants
	Refugee
Ago	= -
Age:	Others (specify):
0 – 4 years	Falls and action as
5 – 10 years	Ethnicity:
11 – 17 years	No ethnic selection (Bangladeshi)
18 – 64 years	Bangalee
65 +	Tribal group
	Other (specify):
NOTE: It is icddr.b's policy to include men, women, ch participation of humans, unless there is strong ju	ildren and transgender in its research projects involving astification(s) for their exclusion.
	Language:
Consent Process: (Check all that apply)	
	Bangla
Written	English
│ <u>○</u> Oral	Other (specify:
Audio	
Video	
None	
Project/Study Site: (Check all that apply)	
Chakaria	Bianibazar (Sylhet)
Bandarban	Kanaighat (Sylhet)
Dhaka Hospital	
Kamalapur Field Site/HDSS	Jakigonj (Sylhet)
Mirpur (Dhaka)	Other community in Dhaka Name: Harirampur, Manikgonj
Matlab DSS Area	<u> </u>
Matlab D33 Area Matlab non-DSS Area	Other sites in Bangladesh
	Name: Multi-national Study
Matlab Hospital	Name of the country
Mirzapur Mirzapur	

Pro	ject/Study Type: (Check all that apply)					
	Clinical Trial (Hospital/Clinic/Field)* Community-based Trial/Intervention Cross Sectional Survey Family Follow-up Study Longitudinal Study (cohort or follow-up) Meta-analysis Programme Evaluation	Programme (Umbrella Project) Prophylactic Trial Record Review Secondary Data Analysis Protocol No. of Data Source: Surveillance/Monitoring Systematic Review Other (specify):				
	pte: International Committee of Medical Journal Editors (ICI project that prospectively assigns human participants to i cause-and-effect relationship between a medical intervent. PI of the RRC- and ERC-approved Clinical Trials should pro (Research Administration) for registration and uploading https://register.clinicaltrials.gov/). They should also provide event of amendment/modification after their approv	ntervention a tion and a he vide necessai into relevant de relevant ir	nd compariso alth outcome ry informatio websites (usu aformation to	on groups to study the ". n to IRB Secretariat ually at the		
Bio	logical Specimen:					
a)	Will the biological specimen be stored for future use?	Yes	☐ No	Not applicable		
b)	If the response is 'yes', how long the specimens will be preserved?		_ years			
c)	What types of tests will be carried out with the preserved specimens?	Not applica	able			
d)	Will the consent be obtained from the study participants for use of the preserved specimen for other initiative(s) unrelated to this study, without their re-consent?	Yes	☐ No	Not applicable		
e)	Will the specimens be shipped to other country/countries? If yes, name of institution(s) and country/countries.	Yes Name	□ No	Not applicable		
f)	If shipped to another country, will the surplus/unused specimen be returned to icddr,b? If the response is 'no', then the surplus/unused specimen must be destroyed.	Yes	☐ No	Not applicable		
g)	Who will be the custodian of the specimen at icddr,b?	Not applical	ole			
h)	Who will be the custodian of the specimen when shipped outside Bangladesh?	Not applicat	ole			
i)	Who will be the owner(s) of the specimens?	Not applical	ole			
j)	Has a MoU been signed with regards to collection, storage, use and ownership of specimen? If the response is 'yes', please attach a copy of the MoU If the response is 'no', appropriate justification should be provided for not signing a MoU.	Yes	□ No	⊠ Not applicable		

Proposed Sample Size: Sub-group (Name of subgroup e.g. Men,	Women) and N	umber					
Name	Number	Name			Numbe	er	
(1) Mother-child(<2y) pair	410	(3)					
(2)		(4)					
		Total sample	e size		410		
Determination of Risk: Does the Resear	ch Involve (Ched	ck all that apply	·)				
Human exposure to radioactive age	-	,	•				
Foetal tissue or abortus?		☐ Human e	xposure to infecti	ious agent	s?		
Investigational new device?		_	tional new drug?				
Specify:			lata available via	public			
Existing data available from Co-inve	estigator?	archives/sour		P			
	.		ical or diagnostic	clinical spe	ecimen		
		only?	and an energy of the				
			ion of public beha	aviour?			
		=	itment regime?				
Will the information be recorded in such a manner that study participants can be identified from the information directly or through identifiers linked to the study participants? Does the research deal with sensitive aspects of the study participants' sexual behaviour, alcohol use or illegal conduct such as drug use?							
Could information on study participan	ts, if available to	people outsid	le of the research	team:			
a) Place them at risk of criminal or civi	l liability?				Yes	No	
						\boxtimes	
b) Damage their financial standing, replaced to stigme diverse etc.	outation or emp	loyability, or so	cial rejection, or		Yes	No	
lead to stigma, divorce etc.?							
Do you consider this research: (check or	ne)						
Greater than minimal risk	No more than	minimal risk	Only part	of the diag	nostic t	est	
Note: Minimal Risk: The probability and not greater than those ordinarily encour psychological examinations or tests, e.g. for research purposes is no greater than	tered in daily lif the risk of draw	e or during the ing a small amo	performance of rount of blood fror	outine phy n a health	ysical, y individ	lual	
Risk Group of Infectious Agent and Use DNA							
a) Will specimens containing infectious	agent he collect	ted? Ves	. □ No	Not	annlica	hle	

b)	Will the study involve amplification by culture of infectious agents?	Yes	☐ No	Not applicable
c)	If response to questions (a) and/or (b) is 'yes', to which Risk Group (RG) does the agent(s) belong? (Please visit http://www.icddrb.net.bd/jahia/Jahia/pid/684 to review list of microorganism by Risk Group)	RG1	RG2	RG3
d)	Does the study involve experiments with recombinant DNA?	Yes	☐ No	Not applicable
	es the study involve any biohazards materials/agents or mir GR4)? Yes No	croorganisms	of risk group) 2, 3, or 4 (GR2, GR-
_	the response is 'yes'] I, (print name of the PI) affirm the ocedures for biosafety of the hazardous materials/agents or			•
Sig	nature of the Principal Investigator		•	Date

Dissemination Plan: [please explicitly describe the plans for dissemination, including how the research findings would be shared with stakeholders, identifying them if known, and the mechanism to be used; anticipated type of publication (working papers, internal (institutional) publication, international publications, international conferences/seminars/workshops/ agencies. [Check all that are applicable]

Dissemination type	Res	ponse	Description (if the response is a yes)
Seminar for icddr,b scientists/ staff	No	× Yes	The study results and methodology of the trial will be shared in seminars at icddr,b. The challenges faced during the implementation of the project and the strategies to overcome them will also be shared.
Internal publication	No	Yes	
Working paper	No	Yes	
Sharing with GoB (e.g. DGHS/ Ministry, others)	No	Yes	The study result will be shared with GoB (e.g. DGHS/ Ministry, others)
Sharing with national NGOs	No	Yes	The study result will be shared with the implementing NGO (brac)
Presentation at national workshop/ seminar	No	× Yes	Results will be presented in seminars related to food fortification, child feeding practices and childhood malnutrition in Bangladesh
Presentation at international workshop/ conference	No	× Yes	Results will be presented in seminars/workshops related to food fortification, child practices and childhood malnutrition in international forums
Peer-reviewed publication	No	Yes	A manuscript will be developed for publication
Sharing with international agencies	No	Yes	Findings and recommendations will be shared with the international agencies concerned for the improvement of childhood malnutrition
Sharing with donors	No	Yes	Final report will be shared with the donor group
Policy brief	No	Yes	
Other			
Other			

•								
Funding:								
Is the protocol fully funded?	∑ Yes			☐ No				
If the answer is yes, please provide	1.	1. brac						
sponsor(s)'s name	2.							
Is the protocol partially funded?	Yes			☐ No				
If the answer is yes, please provide	1.							
sponsor(s)'s name	2.							
If fund has not been identified:								
Is the proposal being submitted for funding?	Yes No							
If yes, name of the funding agency	1.							
	2.							
Conflict of interest: Do any of the participating investigat relationship (e.g. stockholder) with the product or device to be studied or serve	e sponsor	of the proje	ct or manu	ıfacturer				
No Yes (please submit a wri	tten staten	nent of disclo	sure to the	Executiv	e Director, icd	dr,b)		
Proposed Budget:								
Dates of Proposed Period of Support		C	Cost Requir	ed for th	e Budget Perio	d (\$)		
(Day, Month, Year - DD/MM/YY)					Indirect	Total		
(bay, Worth, real bb/Will, rry		Years	Direct		Cost	Cost		
Beginning Date : 01/08/2017		Year-1	1422		28449	170695		
		Year-2	1372	267	27453	164721		
End Date : 30/09/2018		Year-3						
		Year-4						
		Year-5						
		Total	2795	513	55903	335416		

Certification by the Principal Investigator:

I certify that the statements herein are true, complete and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. I agree to accept the responsibility for the scientific conduct of the project and to provide the required progress reports including updating protocol information in the NAVISION if a grant is awarded as a result of this application.

I also certify that I have read icddr, b Data Policies and understand the PIs' responsibilities related to archival and sharing of research data, and will remain fully compliant to the Policies. (Note: The Data Policies can be found here: http://www.icddrb.org/who-we-are/data-policies)

Signature of PI

Approval of the Project by the Division Director of the Applicant:

The above-mentioned project has been discussed and reviewed at the Division level.

Dr. Tahmeed Ahmed Name of the Division Director

Signature

25.7.2-17 Date of Approval

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 $\hfill \Box$ Check here if appendix is included

Project Summary

[The summary, within a word limit of 300, should be stand alone and be fully understandable.]

Principal Investigator: Gulshan Ara

Research Protocol Title: "Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh"

Proposed start date: 15 September, 2017 Estimated end date: 30September, 2018

Background:

1. Burden:

The period from birth to two years of age is the "critical window" for the promotion of optimal growth, health, and development. Insufficient quantities and inadequate quality of complementary foods, poor child-feeding practices and high rates of infections have a detrimental impact on growth. Approximately one-third of children less than five years of age in developing countries are stunted, and large proportions are also deficient in one or more micronutrients. An estimated six per cent or six hundred thousand under-five deaths can be prevented by ensuring optimal complementary feeding (CF) only.

2. Knowledge gap:

Even though the importance of CF is established, children < 2y are being fed complementary foods with poor nutrient quality, particularly in resource poor countries like Bangladesh.

3. Relevance:

Approximately 36% under 5 children are stunted in Bangladesh. Only 23% of children age 6-23 months is fed appropriately based on recommended infant and young child feeding (IYCF) practices. The routine diet of the population including children is mainly plant based and lacks adequate protein and other essential nutrients. Hygiene is also an issue as only 21% of rural households use soap and water during handwashing. An intervention package including CF counselling, WASH and micronutrient powder (MNP) could be potential option for optimizing complementary feeding practice in rural Bangladesh.

Hypothesis:

An integrated intervention package (CF counselling, food voucher for recipe, WASH and micronutrient powder) will improve child growth in terms of length and complementary feeding practice in the selected intervention area from rural Bangladesh compared to control area.

Primary objective:

- 1. To improve nutritional status (length for age Z-score or LAZ) of the children (6-12 mo) through *food voucher* to promote improved recipe and intervention package (CF counselling, WASH and micronutrient powder) with 12 months of intervention period.
- 2. To improve young child feeding practices following counselling

Secondary objective:

- 1. To assess feasibility of promoting improved recipe through *food voucher* to improve nutritional status (LAZ) of the children (6-12 mo)
- 2. To assess acceptability of newly developed recipe for children (6-12 mo) among mothers

Methods:

This will be a community based cluster randomized trial. Group I (intervention) will receive a package of intervention (child feeding counselling, WASH and micronutrient powder) along with food voucher to support feeding their children a homemade snack following a newly developed recipe (suzi firni for <1 year, suzi halua for >1 yr) and Group II (Control) will receive usual health meassages. Baseline and endline survey will be conducted. Growth Monitoring Promotion (GMP) will be done monthly to monitor the growth of the children and utilization of food voucher. Data on child feeding, morbidity and anthropometry (length and weight) will be collected monthly.

Outcome measures/variables:

- 1. Difference in mean LAZ of the children between intervention and control group at endline
- 2. Difference in mean weight for age Z-score (WAZ) of the children between intervention and control group at endline
- 3. Difference in proportions of mothers in terms of correct knowledge and practice on complementary feeding

Description of the Research Project

Hypothesis to be tested:	
Does this research proposal involve testing of hypothesis: No	Xes (describe below)

The hypothesis of this proposal would be:

An integrated intervention package (child feeding counselling, food voucher for recipe, WASH and micronutrient powder) will improve child growth (difference of 0.4 in mean LAZ) and feeding practices in the selected intervention area from rural Bangladesh compared to control area.

Specific hypotheses:

Hypothesis 1- There will be difference of 0.4 SD in LAZ between intervention and control group following 12 months of intervention period

Hypothesis 2- There will be a difference of at least 15% regarding minimum acceptable diet between intervention and control group following 12 months of intervention period

Hypothesis 3- The compliance of food voucher system will be at least 60% in the intervention arm at the end of intervention period

Hypothesis 4- The mean consumption of new recipe (shuji) during the acceptability test would be at least 40% of the amount offered

Specific Objectives:

The objectives of the study are:

- 1. To improve nutritional status (Length for age Z-score) of the children (6-12 mo) through intervention package (CF counselling, recipe through food voucher, WASH and micronutrient powder) with 12 months of intervention period
- 2. To improve child feeding practices (improved dietary diversity)
- 3. To assess the compliance of food voucher system to promote dietary diversity of children
- 4. To assess the acceptability of newly developed improved recipe for children (6-12 mo) among a subgroup of mothers

Background:

Almost half of all under-five deaths globally can be attributed to undernutrition (1). It is also associated with growth faltering (i.e. deficit in height or stunting), micronutrient deficiencies, delayed cognitive development and morbidity (2). It is estimated that about 165 million children in many low- and middle-income countries are stunted (1) which is a manifestation of chronic undernutrition. Stunting is one of the leading causes of the global burden of disease in childhood and 80% of this burden is endured by the developing countries (3). Prevalence of stunting peaks during the first 24 months of life as a result of suboptimal breast feeding and complementary feeding practices and further aggravated by recurrent infections (4). However, even with optimum breastfeeding children will become stunted if they do not receive sufficient quantities of quality complementary foods after six months of age (2). An estimated 6% or six hundred thousand under-five deaths can be prevented by ensuring optimal complementary feeding only. Therefore, improving infant and young child feeding (IYCF) practices has been identified as a fundamental intervention to deal with the suboptimal nutritional status of children less than five years of age in resource-limited countries (5).

Improved feeding of children under two years of age is particularly important because they experience rapid growth and development, and vulnerable to illness. However, in many countries less than a fourth of infants 6-23 months of age meet the criteria of dietary diversity (DD) and feeding frequency appropriate for their age (6). Appropriate complementary foods can be readily consumed and digested by the young child from six months onwards and provides nutrients - energy, protein, fat and vitamins and minerals - to help meet the growing child's needs in addition to breastmilk. Child's nutrition is, to a larger extent, determined by his or her food intake and exposure to diseases. There is evidence that financial incentives increase food consumption and improve nutritional status of newborns and infants. Findings from an evaluation of the Colombian Familias en Acción and Mexican Oportunidades Conditional Cash Transfers (CCT) programs showed increase in food expenditure (11% in Mexico & 15% in Columbia), and improved nutritional status among the beneficiaries (7). The Oportunidades evaluation also found a large decline in rural infant mortality; increased growth of children and a lower prevalence of stunting (8, 9). A systematic review concluded that conditional cash transfer programs are effective in increasing the use of preventive services and sometimes improving health status. (10). Child undernutrition in poor countries has strong linkage to disease burdens such as diarrhea and respiratory infections but more recently an association has been identified to environmental enteric disorder (EED), a subclinical condition characterized by chronic damage of gut leading to malabsorption of nutrients and low level immune system stimulation that ultimately diverts resources away from growth and development (11-13). Both EED and diarrhea are strongly associated with elevated exposure to fecal matter. However, the vast majority of water, sanitation and hygiene (WASH) interventions and strategies have placed primary emphasis on toilet construction and related hygiene and water measures, such as handwashing (14-16). In contrast, there is little indication that WASH or health and nutrition programs regularly include any significant emphasis on reducing

exposure to animal feces as well (17). Likewise nutrition-sensitive livestock interventions, which are increasingly popular in the developing world because of the importance of animal-sourced foods for child nutrition (18, 19) pay little or no attention to the health hazards associated with exposure to livestock feces.

According to the Lancet Series on Maternal and Child Undernutrition, effective targeted nutrition intervention when implemented at scale during the window of opportunity period (pregnancy and up to the 24 months of child birth), are able to cut down undernutrition-related mortality and disease burden by 25% (20). The recommended interventions include promotion of breastfeeding, behaviour change communication strategies to improve complementary feeding practices, supplementation and food fortification to improve micronutrient status, health interventions to reduce infectious diseases among infants and young children, and the effective management of severe acute malnutrition.

Bangladesh has achieved significant improvement regarding few core indicators of IYCF practice like early initiation of breastfeeding, exclusive breastfeeding under six months, introduction of solid, semi-solid and soft foods, and consumption of iron-rich or iron-fortified foods (21). Despite such achievement, 36% children under age 5 are stunted, 14% are wasted, and 33% are still underweight. According to the Bangladesh demographic and health survey (BDHS) 2014, only 23% of children aged 6-23 months are fed a minimum acceptable diet (MAD) that is, they are given milk or milk products and foods from the recommended number of food groups and are fed at least the recommended minimum number of times (22). The poorest of the population are doing even worse and there is an urgent need for more effective safety nets and programmes targeted at these people. Unfortunately, the country has lacked a coordinated national strategy on social protection, and few programmes are directed specifically at children. Evaluation of Char livelihood programme from Bangladesh indicated that women who earned money from the chars livelihoods programme reported spending more on nutrient-rich food such as eggs, meat, fish, pulses, green leafy vegetables, milk and fruit. Their children are 7 mm taller on average than non-beneficiaries, 210 g heavier and the circumference of their mid-upper arm is 1.39 mm greater. However, fewer programmes have shown limited impact on children, because the money households receive is too little to provide better food, enable access to healthcare (7, 23). In view of such context, Bangladesh was one of the 3 countries other than Vietnam and Ethiopia where a 5-year (2009-2014) project named Alive and Thrive (A&T) was implemented to combat global child undernutrition through the promotion of appropriate infant and young child feeding (IYCF) practices. This program implemented large-scale interventions and policy awareness initiatives to address the behavioural, social and policy barriers to optimal IYCF practices in these three countries. The endline report of A&T submitted by The International Food Policy Research Institute (IFPRI) showed significant improvements in infant and young child feeding practices, including complementary feeding. However, these reported improvements in behaviour did not result in a reduction in stunting significantly from control area which was the main outcome of the program. One of the assumptions of why this programme did not translate into stunting impact is that these changes were marginal,

and not sufficient to impact stunting. A second assumption is that the self-reported behaviour change was not verified and may be over-reported instead of actual practice. Recently a formative research namely SHIMA (Shishu o Ma) funded by Children's Investment Fund Foundation (CIFF) was carried out in ten ex-Alive & Thrive areas by brac who was the implementing partner in the original A&T program. The objective of the project was two folds: firstly to conduct a formative research to understand the child feeding practices, behaviours and identify the gaps and explore a local recipe of complementary food for children. Secondly on the basis of the findings of the formative research to design and test an intervention that might bring changes in nutritional behaviours of the children and mothers. The study revealed that most of the mothers had knowledge of the appropriate feeding behaviours (breastfeeding, frequency and diversity) but it was unclear whether they were apparently adopting it or not. Mothers were found to be less concerned about the nutritional value of the foods those were fed during complementary feeding. Family foods that were fed to the children are less diversified. Furthermore, animal food consumption was not adequate particularly among the undernourished children. It was also evident that poor sanitation and hygiene practice of the mothers and care givers were prevalent as most of them were found to be less conscious about using soap for hand washing after defecation and before feeding to the children. Therefore it was decided to develop an intervention package to reduce these gaps in complementary feeding practice as well as hygiene which will be supported by food voucher to selected participants. Considering long term experience in implementing IYCF and behaviour change communication (BCC) intervention study, CIFF and brac have assigned icddr,b to develop an integrated intervention package. Consequently icddr,b has designed an integrated package of services consisting of – complementary feeding counselling, home fortification with micronutrient powder and tailor-made WASH counselling which will be supported by food voucher to feed the children homemade snack following a recommended recipe. The overall goal of this study is to develop and evaluate an intervention strategy which should improve appropriate complementary feeding practice as well as other corresponding practices like sanitation and hygiene in the community and will subsequently reduce the burden of child undernutrition specifically stunting.

Research Design and Methods

Study design

We will use a *cluster randomized study design with cross-sectional surveys at baseline and endline* to examine the effect of an integrated intervention package consisting of BCC, food voucher system to feed the children homemade snack following a recommended recipe, MNP and tailor-made counselling on hand washing and food safety to improve child growth and feeding practices. The effect of the intervention package will be compared to a control group which will be an adjacent area (see diagram) with similar population demography receiving usual health messages. The primary outcome assessment will be done through comparing differences in nutritional status of the children (<2y) among intervention and control groups. Also the change in knowledge, attitude and practice (KAP) regarding child feeding practices among mothers from intervention and control groups will be assessed.

Study site and participants

The study will be conducted in Harirumpur sub-districts of Manikgonj. The study area is selected purposively in consultation with brac considering transportation and logistical issues. The Harirumpur sub-district has 13 unions and out of these, 3 unions will be selected randomly for intervention and the 3 unions will serve as control group (Control Group I). Random allocation of the intervention will be performed by a scientist from icddr,b who will not be involved with this study.

brac has community volunteers known as Shasthya Shebikas (SSs) who has catchment area of 250-300 households and maintain a register that contains information of all under two children who receive services from SS. Furthermore, brac has a program targeting vulnerable households (Targeted Ultra Poor or TUP) who are too poor to access the benefit from traditional development interventions. This program focuses on improving the economic and social situation of extremely deprived women and their households. The mothers in this program live in extreme poverty, where they struggle to meet their minimal dietary requirements and face difficulty to reach mainstream, anti-poverty programmes like microfinance. All the households with such poverty level (following brac's Other Targeted Poor criteria) and with children 6-12 months of age will be identified and listed using the register of the SS and survey. Then from the intervention unions, 205 mother-children pair will be randomly selected for intervention. Using a similar approach for recruitment, 205 mother-children pair who will receive standard maternal and child health care programs, will be identified in the control unions.

Recruitment and inclusion/exclusion criteria

"Unions" on the sampling frame will be eligible for the study if they do not have any other infant feeding interventions currently being implemented either from the government or non-government sectors. Any such programs will be identified by contacting local officials in the Union Councils. Both brac and icddr,b will contact Upazila (sub-district) Nirbahi Officer (UNO) of Harirumpur in person to obtain their written approval for the study before the "unions" are allocated to a treatment group or study recruitment of subjects begins.

Criteria of other targeted poor (OTP) household

- 1. The household depends on seasonal or irregular income
- 2. Including homestead, ownership of maximum 30 decimals of land
- 3. Unable to make productive or effective use of NGO or other financial institute's loans in the past
- 4. Could not afford meat or egg in any meal in past two days

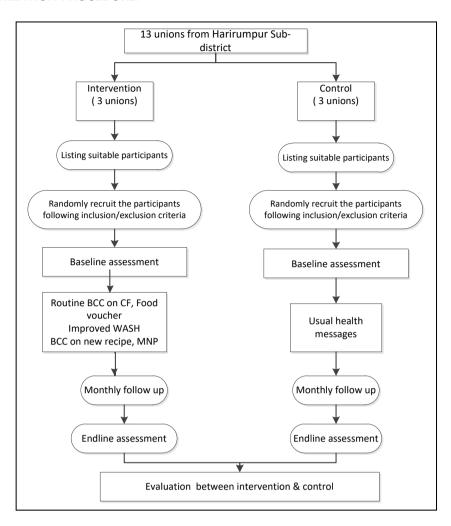
Inclusion criteria for study participants

- 1. Households having under two years children (6-12 mo during enrolment)
- 2. Household listed as poor household following above mentioned criteria
- **3.Not** involved with any government/non-government microfinance programme
- 4. Not participants of any IYCF programme

Exclusion criteria for study participants

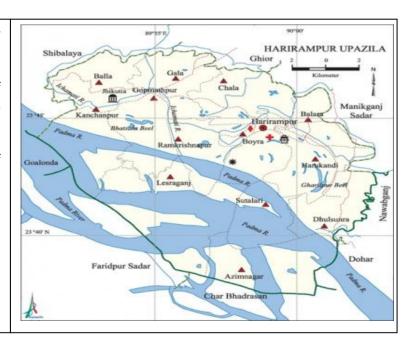
1. Children with Severe Acute Malnutrition (SAM) or LAZ < -3SD of reference as per guideline

RANDOMIZATION PROCEDURE:



Sampling scheme:

The proposed field area for the study Harirumpur sub-district under Manikgonj district. It has 13 unions, 196 mouzas and 238 villages. Main source of income is agriculture (54.54%), ownership of agricultural land owner 49.13 % and 50.87 % population is landless. All unions have access to electricity. Thirty one percent of dwelling households use sanitary latrine. Six unions of Harirumpur will form the sampling frame for the study.



Components of the intervention package

The intervention package includes-

- 1. BCC on child feeding practices
- 2. Food voucher to support feeding of a homemade snack (suzi Firni/Halua) and the recipe will be demonstrated to the mothers by SS and Pushti kormi (PK) in group sessions
- 3. Regular WASH messages PLUS new messages on risk and management of poultry faeces
- 4. Home-based fortification with MNP

Description of the intervention package

Development of Behaviour Change Communication (BCC) materials:

Behaviour change communication (BCC) is an interactive process of any intervention with individuals, communities and/or societies (as integrated with an overall programme) to develop communication strategies to promote positive behaviours which are appropriate according to the context. This in turn provides a supportive environment that enables people to initiate, sustain and maintain positive and desirable behaviour. SSs and PK will use existing harmonized BCC tools (child feeding counselling packages including flip chart, videos) to inform mothers regarding optimum child feeding practice. However, considering the objectives of the proposed study some additional materials will be developed. The major topic of the BCC materials will be promotion of newly developed recipe and WASH. Adequate and clear message will be delivered to the mother regarding the new recipe so that it should be treated as snack only and must not replace any major meal of the day.

Food voucher conditional on practicing recommended recipe:

Each of the mothers of under two years children (6-12 mo) will receive voucher as coupon or piece of paper that can be exchanged for goods. The Vouchers will allow the mothers to purchase commodities for Suzi recipe from the participating vendors without using of cash. Participating vendors will be selected according to predetermined criteria. A mother will be given a voucher equivalent to a certain amount of cash which she can spend at any pre-approved vendor. A voucher will have to be spent out within a certain time period before becoming invalid ("redemption period") to maintain compliance which will be monitored by research staff. It is expected that this type of voucher will offer us to have control over the purchase of items and its use, because of the programmatic reason we need to restrict purchases to a specific, identified food commodity to feed the children.

brac will provide monthly food voucher equivalent to BDT, 1100 (proposed) to feed prescribed snack recipe to their children in order to ensure daily consumption of some animal source protein and added energy along with their regular diet. The sole purpose of the food voucher is to improve dietary diversity of the children in the intervention areas. The amount of food voucher is estimated on monthly basis considering associated cost of buying all the ingredients for cooking of "Suzi firni/ halua" which should be consumed two times per day as snacks. Some of them, however, may have internal arrangement of serving this proposed food from their own capacity; in such case they will be suggested/encouraged to spend this food voucher to exchange nutritious complementary food especially animal protein for their children.

Monthly feeding history, morbidity as well as anthropometric data of the children will be collected by the data collection tream of icddr,b. If it is reported that someone among the children from intervention group is not gaining weight in subsequent months, investigators will try to find out the valid reason. If required, the children will be referred to the local government, NGO or private hospital for further follow up for better diagnosis.

Table: Estimated cost of the newly developed recipe

Estimated cost of milk suji with egg		
Ingredients	Cost in BDT/Month	
Milk (1000gm)	580	
Suji (1000gm)	60	
Egg (30@10Tk)	300	
Oil (500 ml)	55	
Sugar (1000 gm)	70	
Monthly (BDT)	1065	

Home fortification:

The SS will distribute one-month supply of micronutrient powder (MNP) during home visits once at a time in the intervention group. A zip-lock bag will be provided to every mother to store the empty sachets to ensure compliance. Mothers will be asked to add MNP with complementary food. SS will demonstrate mothers to mix MNP with main meal by dividing the meal into two parts and mix the whole sachet of MNP with one portion and feed the MNP mixed part of food first and then the next portion. By using counselling card, they will provide instruction to feed MNP mixed food within half an hour to avoid metallic taste and also inform to use one sachet for one child. A child will be given at least 10 sachets at every month followed by 60 sachets in six months and 120 sachets in a year.

Child WASH: Hygienic practices and hand washing will be one of the major areas to counsel mother in terms of hand washing before food preparation, before and after child feeding and defecation. Frontline workers (SS & PK) will advise the mothers and caregivers to maintain personal hygiene e.g. cutting nails, use of footwear, washing hand before preparing food and feeding their children for prevention of infection and worm infestations during their routine visits. The SS and PK will provide tailored messages on hand washing focusing

on sanitation and clean environment specially protecting child from **ingestion of poultry feces**, safe disposal of **child feces**, **safe drinking water** (collection, transport, storage, treatment). To inform and educate mothers regarding the hazardous effect of ingestion of poultry faces and subsequent environmental enteropathy, materials will be developed namely "**CHILD WASH**". Till date no such BCC material is reported in the country; therefore existing BCC materials on WASH used by government, development partner, local and international NGOs and used in other countries will be reviewed by IYCF experts and BCC martial specialist. According to their comments and opinions, draft BCC materials will be designed by a contracted agency. The draft materials will be tested in the field to find out its comprehensibility, clearness of the content by the mothers and caregivers in community setting. Pilot testing will not include the households those are included in the original study. Necessary changes will be done on the basis of feedback from field testing. The SS and PK will receive training on these newly developed materials so that they can deliver the message clearly and concisely to encourage mothers to adopt the practice. The control group will receive regular WASH messages focusing on hand washing and use of safe water.

Table: Key messages of "WASH for child" intervention

Disposal all feces in latrine including children's feces

Washing of hands with soap after fecal contact and before preparing, eating or feeding food

Keep the children in clean protected area where s/he cannot access dirt/ feces during play and meal time

Safe drinking water (collection, transport, storage and treatment)

Capacity building of the front line worker's of brac:

brac will use its extensive network of frontline health workers to provide service to the mothers of children (6-12 mo) on child feeding practices.

- Shasthya Shebikas (SS) are the community volunteers who provide health and nutrition services to the women and children in the community
- Pushti-Kormi (IYCF Promoter); an additional cadre is solely dedicated for nutrition activities
- Programme organizers (PO) oversee the field activities. They supervise the activity of SSs and PKs at field level

Once the BCC materials are finalized, icddr,b will organize 1 week intensive training for the SSs, PKs on breastfeeding (BF) counselling, age appropriate complementary feeding (CF) and managing BF and CF related difficulties. Along with these topics, special focus will be given on the newly developed recipes ("Shuzi firni/halua"). Team members from icddr,b and brac will organize and conduct hands on training for all field staffs engaged with this project by using the national IYCF basic training module. Along with the CF counselling

training, tailor-made messages on sanitation and hygiene will be also emphasized. On regular basis, one day special refresher training will be conducted in every four months interval for every SS and PK on the special topics of recipes and CF practices and gaps found from their regular counselling and home visit and monitoring report.

Home visits by SS and PK

Scheduled home visits are carried out by SS and PK. SS registers all children 0-2 years in her area and visits at least once a month to counsel and demonstrate techniques of continuation of breastfeeding up to 24 months. During this study, special emphasis will be given on CF in terms of new recipes (Suzi firni/ halua), homemade complementary food, appropriate amount and frequency of complementary foods and consumption of protein from animal source according to age for children 7-24 months. Mothers will be advised to utilize the voucher to purchase ingredients for proposed recipe to feed her child by following any of the recipes according to her convenience. Importance will be given on hygiene and handwashing practice as well. Fortnightly courtyard session will be organized by SS and PK with a group of 10-12 mothers of study children for group counselling and practical demonstration of hand washing aid.

Table: Schedule of counselling visits and messages by SS/PK for both intervention and control group

	Month	Month	Month	Month	Month	Month	
Enrolment	7	8	9	10	11	12	Major messages to be delivered for
	8	9	10	11	12	13	intervention group
	9	10	11	12	13	14	
	10	11	12	13	14	15	 Introduction of CF
	11	12	13	14	15	16	 importance of CF
counselling	12	13	14	15	16	17	• Consistency,
visit by	13	14	15	16	17	18	amount, frequency
SS/PK	14	15	16	17	18	19	continuation of BF Diotage diversity
	15	16	17	18	19	20	Dietary diversityResponsive feeding
	16	17	18	19	20	21	Feeding difficulties
	17	18	19	20	21	22	Food voucher*
	18	19	20	21	22	23	Recipe*
				Exit			• WASH*
			_	intervention	-		• MNP
		•		vill be given			 Sick child feeding
	_	•		ents of propo	sed recip	e	
		ooking meth		•			
	*Ta	ailor made V					
Total		12	visits / mc	nth/child			

Practical demonstration of introduction of new recipes:

SS/ PK will organize demonstration/ cooking session with participants of a group consisting of 10-12 mothers of the selected study children. They will teach the mothers how to cook "Pushtikor firni/ halua" for different age group children. The consistency and preparation will different for 6-12 months and >12 moths age group. Firni will be proposed for the younger children because of it's semi solid consistency. This consistence will be ideal for younger children to swallow. Halua will be recommended for older children as they should be able to consume solid.

Nutrient content of improved recipe

			Nut	rient cont	ent of Suzi fi	rni		
6-12 months	Amount (g)	Energy kcal	Protein (g)	Fat (g)	CHO (g)	Iron (mg)	Zinc (gm)	Vitamin A
Egg	50	70	7.25	4.5	0	0.75	1.18	82.5
Suzi	30	103	3.27	0.42	21.18	0.33	0.66	0
Milk powder	15	75	3.6	3.9	6.15		0.39	16
Oil	10	100		10	0	0	0	
Sugar	15	60			14.73			
		408	14.22	18.82	42.06	1.08	2.23	98.5
	% of DRI			•		•	•	•

	% of D	RI
СНО	51%	33% of energy
Protein	129%	17% of energy
Fat	63%	50% of energy

12-18			Nutrien	nt conten	t of Suzi h	alua		
months	Amount	Energy kcal	Protein (g)	Fat	CHO (g)	Iron (mg)	Zinc (gm)	Vitamin A
Egg	50g	70	7.25	4.5	0	0.75	1.18	82.5
Suzi	35	138	4.36	0.56	24.71	0.4	0.76	0
Milk powder	20	99	4.8	5.2	8.2		0.52	16
Oil	10	100	16.41	10	0	0	0	
Sugar	20	80			19.64			
		487	16.41	20.26	55.55	1.15	2.46	98.5

	% of DF	RI .
СНО	51%	38% of energy
Protein	111%	16% of energy
Fat	61%	46% of energy

Acceptability of the new recipe:

The acceptability of the new recipe will be conducted among 50 children and their respective mothers/caregivers. The mothers will be requested not to give/allow any food and breast milk during the preceding 2 hours of observed meal time on the day of feeding observation which will be done under the direct supervision of trained study staff (2 observations). The feeding episode will last for maximum 60 minutes. The mothers will be asked to spoon feed their children the pre-weighed diet until the child refuses to eat further. Children will be considered as refusing further intake if they move their head away from the food, cry, clamp the mouth or clinch the teeth, or become agitated, spit out the food or refuse to swallow. The amount of food actually ingested will be calculated by subtracting the left over from the offered amount. Preweighed napkins will be provided; any food that is regurgitated, vomited or spilled will be swabbed, weighed and subtracted from the amount offered.

Acceptability will be categorized as 'accepted eagerly' if they ate food readily, did not make a fuss, spit out, vomit or cry during the observed meal. Children will be categorized as 'accepted but not eagerly' if they ate the offered food but either made fuss, spit out, vomited or cried during the observed meal. The third category will be children who will not consume the offered food at all. Perception and assessment of organoleptic characteristics (color, smell, taste, texture, etc.) of the prepared recipe by the respective mother/caregiver will also be assessed by using the 9-point Hedonic scale.

Deworming programme: During the counselling SS/PK will be advising mothers to uptake regular deworming related free services from government.

<u>Intervention period:</u> 12 months to ensure there is sufficient time to measure the IYCF practices and child growth.

<u>Process evaluation:</u> To assess the fidelity of the program implementation, process evaluation will be carried out focusing on the program's operations, implementation, and service delivery. The process evaluation will identify the legibility of selecting study participants, implementation of voucher system, use of voucher, quality of the different awareness sessions carried out by SS and PK, satisfaction of the people involved in program implementation and probable challenges. Qualitative interviews, focus groups with the intervention recipients and family members (women, husbands, mothers-in-law), and implementers (i.e. project staff, SS/ PK/ PO, participating in the project) will be conducted.

Purpose of the evaluation:

To check the fidelity of the intervention package, identify bottlenecks during implementation and progress of the project as planned.

Audience of the evaluation process:

The main audience will be the implementing partner in the field (brac) and the donor (CIFF). The feedbacks received during evaluation process will be summarized and key points will be identified and shared with the stakeholders. This information will update them regarding progress and guide them to make any changes if necessary in the implementation design to achieve optimum result.

Information needed and process of data collection:

The information needed for process evaluation will depend on the intervention package. The intervention package contains-

- 1. Food voucher
- 2. New recipe
- 3. Nutrition activities (WASH, BCC)
- 4. MNP fortification

Table: Process evaluation matrix

Intervention item	Target	Information required	Data
	population		collection tool
Food voucher	Mothers with	1. Is the recipient eligible for food voucher?	Semi-
	children <12 mo	2. Is food voucher received timely by the recipient?	structured
		3. Is there any preferred mode of cash transfer/ food	questionnaire
		voucher by the recipient?	
		4. Is the food voucher used for the actual purpose?	
		5. Is there any challenges faced by either recipient or the	
		responsible authority who distribute the food voucher?	
New recipe	Mothers with	1. Do mothers receive training on the new recipe?	Semi-
	children <12 mo	2. Do mothers find the training helpful?	structured
		3. Can mothers follow the recipe in daily use?	questionnaire
		4. Can they use the cash properly to purchase items of the	
		recipe?	
WASH	SS, PK, Mothers	1. Is the materials for training easy to understand?	Direct
	with children	2. Do SS provide adequate information?	observation,
	<12mo	3. Are the time and place of the session suitable for the	exit interview
		participants?	of mothers
		4. Can participants ask question and clarify if needed?	
BCC	SS, PK, Mothers	1. Is the BCC materials easy to understand?	Direct
	with children <12 mo	2. Do SS provide all the information she was supposed to?	observation, Semi-
		3. Are the time and place of the session suitable for the	structured
		participants?	questionnaire
		4. Can participants ask question and clarify if needed?	
MNP fortification	SS, PK, Mothers	1. Do mothers find home based MNP fortification	Direct
	with children <12	easy to routinely practice?	observation,
	mo	2. Do SS/PK provide adequate information regarding	Semi-
		MNP fortification?	structured
		3. Challenges faced during MNP fortification	questionnaire

Timeline for data collection: Information regarding process evaluation will be collected once in every 2 months.

Measurements

1. Anthropometry:

Trained research assistants will collect anthropometric measurements (weight and height) monthly using established methods (24) and will record these measurements on both the research instruments and child growth chart for the mother to hold. These measurements will be standardized before and during the data collection. The 2006 WHO Growth Standard will be used to construct anthropometric indices and standard WHO recommended indicators will be used to assess stunting (Height-for-age <-2 Z), wasting (weight-for-height <-2 Z) and underweight (weight-for-age <-2 Z).

2. Infant feeding practices:

Standard questions about infant feeding practices used in the Bangladesh DHS surveys (25) will be used to monitor these patterns at the monthly data collection periods from enrolment up to 12 month of period. These will include questions about current breastfeeding status, current use of other liquids and solid foods, timing of introduction of other liquids or solid foods, use of bottles for feeding and information about who is providing advice about infant feeding amongst family and friends. Ten percent of the interviewer's scheduled visits will be monitored by one of the Senior Research Assistants or Principal Investigators or Investigators. The questionnaires will be checked daily, and if the information is incomplete or not clear, the supervisor will return to the home on the next day to complete the data form. Mother's reported infant feeding practice will be verified by a 4-hour observation period that will take place by unscheduled visits by Senior Research Assistants or Principal Investigators or Investigators.

3. Infant and maternal morbidity

Infant Morbidity

Illness histories such as diarrhoea, dysentery (blood and/or mucus), fever and cough, ear infection (purulent discharge) from ears will be obtained at monthly using 2-weeks' recall method. The questions asked will be based on the standard DHS infant morbidity recall questions but expanded to include questions about ear discharge.

Diarrhoea will be defined as an episode of the passage of three or more loose or watery stools within 24 hours. Presence of blood with stool will be defined as invasive diarrhoea. When a single episode of diarrhoea lasts for more than two weeks, it will be called persistent diarrhoea. Acute respiratory illnesses will be define as an episode of cough with reported fast and rapid breathing or difficulty breathing with or without fever.

Sample Size Calculation and Outcome (Primary and Secondary) Variable(s)

Clearly mention your assumptions. List the power and precision desired. Describe the optimal conditions to attain the sample size. Justify the sample size that is deemed sufficient to achieve the specific aims.

To observe a difference of 0.4 in mean LAZ between intervention and control group (-1.4 vs -1.8, standard deviation 1.2) after 12 months intervention period, using a two-tailed t-test, a power of 80%, a significance level of 5%, and design effect of 1.3, the sample size for one arm is calculated = 184 using following formula-

$\{(Z_{\alpha/2} + Z_{\beta})^2 \times 2\sigma^2\}/\delta^2 \times DEFF$
Where,
$Z_{\alpha/2} = 1.96$, $Z_{\beta} = 0.84$, $\sigma = 1.2$, $\delta = 0.4$
&
$DEFF = 1 + \lambda(n-1)$
Where,
λ= 0.005
n= 66

With 10% attrition, the final sample size for intervention or control arm is 205 so the total sample size will be 205*2= 410 mother—child pairs. All the estimates for sample size calculation were based on The Alive and Thrive Bangladesh Report 2011.

For acceptability trial, the sample size= 50 (Null hypothesis proportion 0.4 and true proportion 0.65, power 80%, 5% significance level, design effect of 1.3). The null hypothesis is, mean consumption of shuji during the acceptability test would be at least 40 percent of the amount offered. The sample size of 50 would therefore allow us to reject the null hypothesis with 80 percent power if the true means were at least 65 percent.

Data Analysis

Analyses will be conducted at the mother-infant dyad level, but will be adjusted for the community-cluster randomization. The primary analyses will compare the mean difference of LAZ in children after 12 months of intervention period using independent sample t- test and 95% confidence intervals for the group difference, adjusted for clustering. We will report the results for 2-sided 5% tests for the primary trial outcome. Secondary analyses will examine each outcome variable (minimum meal frequency, minimum dietary diversity, minimum acceptable diet, weight-for-age, maternal knowledge) taking account of the repeated measurements within children by using separate mixed models. We will use linear mixed models for continuous outcomes (e.g. length-for-age Z) and generalized linear mixed models for non-continuous outcomes (e.g. logistic mixed models for binary outcomes e.g. percentage with minimum dietary diversity). Models will include treatment group as a fixed effect, infants as a random effect to account for the repeated measurements, and community-cluster as a random effect to account for the cluster effect.

The models will be able to evaluate the impact of the interventions over time by testing for an interaction between time and intervention group. Analyses will be conducted to identify the baseline characteristics of mother-infant dyads who may benefit most from the intervention. Model assumptions will be checked and appropriate adjustments to the analysis will be made where necessary. STATA® software will be used for all analyses, with xtmixed command to fit linear mixed models and xtmelogit command to fit mixed-effects models for binary outcomes/responses. Also difference in differences analysis will be performed.

Time line for survey study

Months of studies

Works to be	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
accomplished																		
IRB Approval																		
Stakeholder meeting																		
Recruitment & Training																		
Enrolment, Intervention & Monitoring																		
Follow up																		
Data Collection																		
Data Entry																		
Data analysis																		
Report writing																		

Data Safety Monitoring Plan (DSMP)

Data will be checked on weekly basis by the investigators. The investigators will monitor the overall process of data collection actively by making anonymous visit to field sites. To assure quality control, randomly selected 5% participants will be re-interviewed and data will matched for any discrepancy. We will store the data collected as per Centre's policy and provide the data to the appropriate authority of the Centre after analysis and reporting.

Ethical Assurance for Protection of Human rights

A written informed consent from the participants will be obtained before interview/data collection. The study will ensure the participant's rights of not participating or withdrawing from the study at any point of time. Confidentiality regarding participant's identification and obtained information will be maintained.

Use of Animals

This protocol does not include use of animals.

Collaborative Arrangements

This evaluation project will be carried out in collaboration with brac who is the implementing partner organization of the SHIMA project.

Facilities Available

The project core team will comprise of staff members of icddr,b. The team will include clinicians and researchers who have vast experience in several research projects. Most of the core team members have a basic degree in medical science and some with doctoral. They also have substantial publications on various nutrition based research.

List of abbreviations

A&T- Alive and Thrive

BCC- Behavior change communication

BDHS- Bangladesh demographic and health survey

CF- Complementary feeding

CCT- Conditional cash transfers

CIFF- Children's Investment Fund Foundation

DD- dietary diversity

EED- environmental enteric disorder

GMP- Growth monitoring promotion

icddr,b- International centre for diarrhoeal disease research, Bangladesh

IFRPI- International Food Policy Research Institute

IYCF- Infant and young child feeding practices

Length for age Z-score-LAZ

MAD- minimum acceptable diet

MNP- Micronutrient powder

OTP- Other targeted poor criteria

PK- Pushti kormi

SHIMA- Shishu o Maa

SS- Shasthya Shebikas

TUP- Targeted Ultra Poor

WASH- Water, sanitation and hygiene

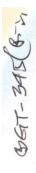
WAZ- weight for age Z-score

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Budget



Title: Improving Maternal and Child Nutrition in Bangladesh (SHIMA) Donor: BRAC through CIFF Duration: 18 Months April '17- September'18

2,657,694 427,950 118,400 7,676,261 19,157,040

26,984 17,016 2,354 280 46,633 115,269 40%

28,919 16,205 2,996 1,200 49,320 124,194 40%

4,472,217

					CO III TIROUTE					
Budget Line Items	Unit	Effort Rate	No. of Person	Duration in months	Y-1 (April- Dec'17)	Duration in months	Inflation	Y-2 (Jan- Sep'18)	Total	Total (BDT)
Personnel										
Gulshan Ara (PI)	2.853	100%	-	O	25,677	6	1.1	28,245	53,922	4,313,736
Tahmaad Ahmad (Co.Pl)	18 536	10%	-	6	16,205		1.1	17,016	33,221	2,657,694
Kazi Istiania Sanin (Co.I)	2 213	100%	1	o	19,917		1.1	21,909	41,826	3,346,056
Becarch Investigator/ Research Officer	1 273	100%	1	6	11,457	9	1.1	8,402	19,859	1,588,704
Field Staffs										r
Field Research Supervisor (TBD)	466	100%	5	7	16,310	7	1.1	17,941	34,251	2,740,080
Field Research Assistant (TBD)	394	100%	7	7	19,306		1.1	21,237	40,543	3,243,408
Data Management Assistant (TBD)	394	100%	-	4	1,576	7	1.1	3,034	4,610	368,784
Field Assistant	293	100%	-	7	2,051	8	1.1	2,578	4,629	370,352
Finance Manager	2 853	15%	-	7	2,996	2	1.1	2,354	5,349	427,950
Sub Total Personnel			SALE TO SERVICE	THE REAL PROPERTY.	115,495		STATE OF STREET	122,714	238,210	19,056,764
Travel										
International travel (dissemination of results)								2,000	2,000	160,000
Transport cost from Dhaka to field sites & TA for field		,								
staffs					4,000			3,000	2,000	260,000
Perdiem for investigators and field staff					2,500			2,000	4,500	360,000
Sub Total Travel	To the second				6,500		STATE OF STATE	7,000	13,500	1,080,000
IRB Application										
RRC and ERC Submission					1,200			280	1,480	118,400
Sub Total IRB submission					1,200			280	1,480	118,400
Supplies										
Stationery and office material					1,500			1,000	2,500	200,000
Communication charge (DHL, courier, internet, phone etc.	(c.)				700			200	1,400	112,000
Office rent and Utilities					2,000			400	2,400	192,000
Repair and maintenance					200			200	400	32,000
Accessories (Hard disk, pendrive, modem, voice										
recorder, camera etc.)					1,000			1,000	2,000	160,000
Gio-Germ 1003-GEL Products Experiment Kit (for										
Handwash Demo)	100		30		3,000				3,000	240,000
Sub Total Supplies					8,400			3,300	11,700	936,000
Capital expenditure									000	000 000
Laptop	1,800		2		3,600				3,600	200,000
Sub Total Capital					3,600	0			3,600	700,000
Printing and publication					000			700	700 7	07 000
Questionnaire/ Training materials					000			1 000	1 000	80,000
Publication	Section Section			Sa Pressure	600			1 624	2 224	177 920
Sub Total Fillining and Fublications										
Development of RCC Materials					6.000				6,000	480,000
Sub Total Sub contract		R. S. C.	Will State of the		6,000				6,000	480,000
Training and workshop										
Stakeholders Workshop										
Training of Staff					1,000				1,000	80,000
Honorarium for resource person					300				300	24,000
Training of SS/ SK					1,500				1,500	120,000
Sub Total Training and Workshop					2,800				2,800	224,000
Total Direct Costs					144,595			134,918	279,514	22,361,084
Indirect costs @ 20%					28,919			26,984	55,903	4,472,217
GRAND TOTAL COSTS					173,514			161,902	335,416	26,833,301

Indirect OH 20%
Built in OH
Tahmeed Ahmed (Co-Pi)
Finance Manager
RRC and ERC submission
Total OH
Total OH

Overhead Calculation:

48

Budget Justifications

Please provide one page statement justifying the budgeted amount for each major item, including the use of human resources, major equipment, and laboratory services.

Personnel:

Principal Investigator (PI): Principal Investigator will spend 100% of time and be responsible for overall design of the study, defending the proposal at institutional review committees, coordination with relevant persons and departments, developing the intervention tools, training of staffs, monitoring of quality and progress of the study, checking of data in the field, in data analyses and report writing.

Co-Principal Investigator (Co-PI): Co-Principal Investigator will spend 10% of time and be responsible to assist PI for overall design, defending the proposal at institutional review committees, coordination with relevant persons and departments, monitoring of quality and progress of the study and report writing.

Co-Investigator: Co-investigator will spend 100% of time and be responsible for assisting PI on study design, developing evaluation plan, defending the proposal at institutional review committees, monitoring the quality of the study, checking of data in the field, in data analyses and report writing.

Research investigator / Research Officer (RO): 1 Research investigator / Research Officer will be responsible to monitor the overall study. He/She will help in the training, field survey management and quality control. He/She will coordinate all teams working in the different field sites and make reports on progress and difficulties in the work sites. He/she will maintain liaison with investigators to conduct the survey, data analysis and report writing. He/she will also work on searching literature, organizational work within office, checking data entry, cleaning & drafting data tables and figures and data analysis and draft report writing.

Field Research Supervisor (FRS): 5 Field Research Supervisors will independently supervise quality of work of Field Research Assistants. S/he will be responsible for implementing the study and take immediate decision in emergency, coordination with PI, Co-PI, Co-I and RI/RO for field activities, editing and cross checking of the data in the field. One of the field research supervisor will be responsible for intervention area for monitoring and supervise of intervention.

Field Research Assistant (FRA): 7 Field Research Assistants will carry out fieldwork independently or jointly for collecting data at a satisfactory quality. S/he will be responsible quantitative data collection and collection of required oil samples from the field sites to the laboratories for testing.

Data Management Assistant (DMA): 1 Data Management Assistant will be responsible for data entry, coding and cleaning. S/he will analyze data as per data analysis plan. S/he will provide required support to the scientific staff and assure quality output on a regular basis as planned.

Field Assistant (FA): 1 He/she will assist FRAs for logistic support at field office as well as head office.

Office/Finance Manager: 1 person will be responsible for administering the finance smoothly.

Travel

International travel: A roundtrip of international travel (USD 2000/ BDT 160,000) is required for sharing the results with other national and international researchers.

Local travel: Local transport (USD 7000/ BDT 560,000) for implementing the field work (local field office to field site using local transport). This cost will cover the cost for field staff to travel daily from icddr,b to field sites. The entire investigator team will also regularly visit the field site.

Perdiem: This perdiem (USD 4500/BDT 360,000) will cover the accommodation cost for the investigators and field staff at field sites.

IRB approval: For RRC and ERC approval, USD 1480/ BDT 118,400 will be required.

Supplies:

USD 11, 700/BDT 936,000 has been allocated for office supply, communication, field office set up, office rent and utilities, training tools, repair and maintenance and consumable items for project.

Capital:

USD 3,600/BDT 288,000 has been allocated to purchase laptop for field staff.

Printing and publication:

A total amount of USD 2,224/BDT 177,920 will be required for printing of questionnaire and publications cost.

Sub contract:

An amount of USD of 6000/ BDT 480,000 has been allocated to develop BCC materials; we will hire consultant/agency for developing the BCC material, as it is an important component of this project.

Training and workshop:

A total of USD 2,800/ BDT 224,000 have been allocated for training of BRAC's health workers on IYCF counselling. The FRO, FRS, FRA, FA will also receive training on data collection technique and Intervention materials.

Indirect cost (20%): This cost will be covered for administrative cost for icddr,b.

Other Support

Describe sources, amount, duration, and grant number of all other research funding currently granted to PI or under consideration.

Not applicable.

Biography of the Investigators

Provide biographical data in the following format for all key personnel including the Principal Investigator. Copy the same format for each of them.

Note: Biography of the External Investigators may, however, be submitted in the format as convenient to them..

1. Name: Gulshan Ara

2. Present Position: Assistant Scientist, Nutrition and Clinical Services Division, icddr,b

3. Educational background: (last degree and diploma & training relevant to the present research proposal)

	Institution	Year
Degree	Master in Public Health Nutrition	2008
Degree	Master in Nutrition and Food Science	2002

4. Ethics Certification:

		If Y	'es	
		Issuing Authority	Registration No	Valid Until
No 🗌	Yes 🖂		892090	

Note: If the response is "no", please get certification from CITI or NIH before study initiation and submit a copy to the Committee Coordination Secretariat

5. List of ongoing research protocols/ activities

Protocol/ Activity	Role in the protocol/ activity	Starting date	End date	Percentage of
Number	(PI, Co-PI, Co-I)			time
PR-14014	PI	01/01/2010	31/12/2015	100%
PR-10001	Co-I	01/04/2014	31/12/2016	100%
PR-14104	PI	01/11/2014	30/04/2017	80%
PR-16075	PI	01/09/2016	31/08/2017	25%
PR-17002	PI	01/01/2017	30/06/2017	80%

6. Publications

Тур	pes of publications	Numbers
a.	Original scientific papers in peer-review journals	8
b.	Peer reviewed articles and book chapters	
c.	Papers in conference proceedings	
d.	Letters, editorials, annotations, and abstracts in peer-reviewed journals	
e.	Working papers	
f.	Monographs	

7. Five recent publications including publications relevant to the present research protocol

- ➤ <u>Ara G</u>, Melse-Boonstra A, Roy SK, Alam N, Ahmed S, Khatun UHF, Ahmed T. Sub-clinical iodine deficiency still prevalent in Bangladeshi s and pregnant women. Asian J Clin Nutr 2010;2:1-12.
- Swapan Kumar Roy, Farzana Bilkes, Khaleda Islam, <u>Gulshan Ara</u>, Phillip Tanner,Irena Wosk, Ahmed Shafiqur Rahman, Barnali Chakraborty, Saira Parveen Jolly and Wahjiah Khatun. Impact of pilot project

- of Rural Maintenance (RMP) on destitute women: CARE, Bangladesh: March 2008; Food and Nutrition Bulletin, vol. 29, no. 1; 67-75
- ➤ Roy S K, AM Tomkins, SM Akrauzzman, KE Islam, <u>Ara G</u>, W Khatun, S P Jolly. Impact of Zinc supplementation on subsequent morbidity and growth in Bangladeshi children with persistent diarrhoea. J Health Popul Nutr 2007 Mar;25(1):67-74
- ▶J.M. van den Broek, S.K. Roy, W.A. Khan, R. Biswas, B. Banu, <u>Ara G</u>, and B.Chakraborty. Risk factors for mortality in shigellosis: a case-control study among severely malnourished children in Bangladesh, J Health Popul Nutr 2005 sep;23(3):259-265.
- Roy SK., G J Fuchs, Z Mahmud, <u>Ara G</u>, S Islam, S Shafique, S S Akter, and Barnali Chakraborty. Intensive Nutrition Education with or without Supplementary Feeding Improves the Nutritional Status of Moderately malnourished Children in Bangladesh. J Health Popul Nutr 2005.dec 23(4):320-330

Biography of the Investigators

Provide biographical data in the following format for all key personnel including the Principal Investigator. Copy the same format for each of them.

Note: Biography of the External Investigators may, however, be submitted in the format as convenient to them...

- 1. Name: Dr Tahmeed Ahmed
- Present Position: Senior Director & Senior Scientist, Nutrition and Clinical Services Division, icddr,b,
 Professor of Public Health Nutrition, JPG School of Public Health University
- 3. Educational background: (last degree and diploma & training relevant to the present research proposal)

Degree Institution		Year
PhD University of Tsukuba, Japan		1996
MBBS, University of Dhaka		1983
Training Clinical training in Pediatrics, University of Tsukuba		1990-1992
	Hospital	
Training	Residential training in Pediatrics, Dhaka Shishu Hospital	1989-1990

4. Ethics Certification:

		If Yes		
		Issuing Authority Registration No Valid Until		
No	Yes	NIH	268656	Issued on 20 Aug 2009

Note: If the response is "no", please get certification from CITI or NIH before study initiation and submit a copy to the Committee Coordination Secretariat

5. List of ongoing research protocols/ activities

Protocol/ Activity	Role in the protocol/	Starting date	End date	Percentage of
Number	activity (PI, Co-PI, Co-I)			time
2008-020, Mal-ED	PI	Nov 2008	March 2014	60
PR-11049, JHU	PI	Sept 2010	Sept 2014	6.5
RUCFS				
PR-11005, RUTF	PI	June 2011	June 2013	20
PR-11063	Co-PI	March 2012	Sept 2015	5
WASH Nutrition				
120008	Co-I	July 2012	July 2014	5

6. Publications

Тур	es of publications	Numbers
1.	Original scientific papers in peer-review journals	147
2.	Peer reviewed articles and book chapters	19
3.	Papers in conference proceedings	25
4.	Letters, editorials, annotations, and abstracts in peer-reviewed journals	5
5.	Working papers	10
6.	Monographs	1

7. Five recent publications including publications relevant to the present research protocol

- **1.** Ahmed T, Choudhury N, Hossain I, Tangsuphoom N, Islam MM, de Pee S, Steiger G, Fuli R, Sarker SA, Parveen M, West KP, Christian P. Development and acceptability testing of ready-to-use supplementary food made from locally available food ingredients in Bangladesh. BMC Pediatr 2014 Jun 27;14:164.
- 2. Subramanian S, Huq S, Yatsunenko T, Haque R, Mahfuz M, Alam MA, Benezra A, DeStefano J, Meier MF, Muegge BD, Barratt MJ, VanArendonk LG, Zhang Q, Province MA, Petri WA Jr, Ahmed T, Gordon JI. Persistent gut microbiota immaturity in malnourished Bangladeshi children. Nature 2014 doi:10.1038/nature13421.
- 3. Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, Webb P, Lartey A, Black RE, The Lancet Nutrition Interventions Review Group (Bhutta ZA, Rizvi A, Das JK, Salam RA, Yousafzai A, Lassi ZS, Lenters L, McPhail C, Wazny K, Gaffey MF, Zlotkin S, Imdad A, Haider BA, Welch V, Martorell R, Black RE, Walker N, Tam Y, Ahmed T, and the Maternal and Child Nutrition Study Group (Black RE, Victora C, Walker S, Alderman H, Bhutta ZA, Gillespie S, Haddad L, Horton S, Lartey A, Mannar V, Ruel M, Webb P). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? Lancet 2013 Jun 6 [Epub ahead of print].
- **4.** Arnold BF, Null C, Luby SP, Unicomb L, Stewart CP, Dewey KG, Ahmed T, Ashraf S, Christensen G, Clasen T, Dentz HN, Fernald LC, Haque R, Alan E. Hubbard, Kariger P, Leontsini E, Lin A, Njenga S, Pickering AJ, Ram PK, Tofail F, Winch P, Colford J. Cluster-randomized controlled trials of individual and combined water, sanitation, hygiene, and nutritional interventions in rural Bangladesh and Kenya: The WASH Benefits Study design and rationale. BMJ Open 2013;3:e003476 doi:10.1136.
- 5. Chisti MJ, Graham SM, Duke T, Ahmed T, Ashraf H, Faruque ASG, Vincente SL, Banu S, Raqib R, Salam MA. A prospective study of the prevalence of tuberculosis and bacteraemia in Bangladeshi children with severe malnutrition and pneumonia including an evaluation of Xpert MTB/RIF assay. PLoS ONE 2014 Apr 2;9(4):e93776

Biography of the Investigators

Provide biographical data in the following format for all key personnel including the Principal Investigator. Copy the same format for each of them.

Note: Biography of the External Investigators may, however, be submitted in the format as convenient to them..

1. Name: Dr. Kazi Istiaque Sanin

2. Present Position: Research Investigator

3. Educational background: (last degree and diploma & training relevant to the present research proposal)

	Institution	Year
МРН	James P Grant School of Public Health, brac university	2011
MBBS	Dhaka Medical College and Hospital	2005

4. Ethics Certification:

		If Yes		
		Issuing Authority	Registration No	Valid Until
No 🗌	Yes	NIDA Clinical Trial		28/02/
	\boxtimes	Networks		2018
		National Institute of	651498	
		Health		

Note: If the response is "no", please get certification from CITI or NIH before study initiation and submit a copy to the Committee Coordination Secretariat

5. List of ongoing research protocols/ activities

Protocol/ Activity Number	Role in the protocol/ activity (PI, Co-PI, Co-I)	Starting date	End date	Percentage of time
PR-12008	Co-Investigator	1/05/2012	30/06/2015	100
PR-14118	Principal Investigator	12/08/2015	05/07/2017	100

6. Publications

Typ	es of publications	Numbers
g.	Original scientific papers in peer-review journals	1
h.	Peer reviewed articles and book chapters	1
i.	Papers in conference proceedings	
j.	Letters, editorials, annotations, and abstracts in peer-reviewed journals	
k.	Working papers	
l.	Monographs	

7. Five recent publications including publications relevant to the present research protocol

- Islam Z, Sanin KI, Ahmed T (2017) Improving case detection of tuberculosis among children in Bangladesh: lessons learned through an implementation research. BMC public health 17: 131.
- **II.** Ahmed T, Hossain M, **Sanin KI**. Global Burden of Maternal and Child Undernutrition and Micronutrient Deficiencies. Annals of Nutrition and Metabolism. 2013;61(Suppl. 1):8-17.

Biography of Co-Investigator

1. Name: Shafiqul A. Sarker

8. **Present Position:** Emeritus Scientist

9. Educational background: (last degree and diploma& training relevant to the present research proposal)

	Institution	Year
Degree	MBBS (Rajshahi University, Bangladesh)	1977
Degree	MD (University of Basel, Switzerland)	1991
Degree	PhD (Karolinska Institute, Sweden)	2006

10. Ethics Certification:

		If Yes	
		Issuing Authority	Registration No
No 🗌	Yes 🖂	NIH	1484127

Note: If the response is "no", please get certification from CITI or NIH before study initiation and submit a copy to the Committee Coordination Secretariat

11. List of ongoing research protocols/ activities

Protocol/ Activity	Role in the protocol/	Starting date	End date	Percentage
Number	activity (PI, Co-PI, Co-I)			of time
PR- 12051	PI	01.05.2012	01.10.2017	15%
PR-14038	PI	24.09.2014	31.01.2018	10%
PR-15089	PI	08.06.2016	07.12.2018	40%
PR- 16007	Co-I	13.03.2016	31.10.2019	15%

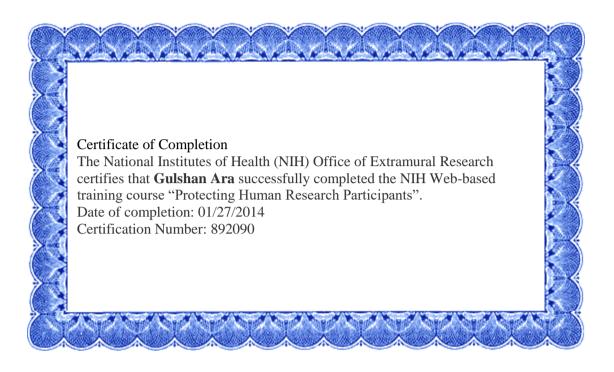
12. Publications

Types of publications	Numbers
m. Original scientific papers in peer-review journals	80
n. Peer reviewed articles and book chapters	4
o. Papers in conference proceedings	1
p. Letters, editorials, annotations, and abstracts in peer-reviewed journals	40
q. Working papers	
r. Monographs	

13. Five recent publications including publications relevant to the present research protocol

- **1. Sarker SA**, McCallin S, Barretto C, Berger B, Piitet A, Sultana S, Krauser L, Bruttin A, Brussow H. Oral T4-Like Phage Cocktail Application To Healthy Adult Volunteers from Bangladesh "Virology 434 (2012) 222–232".
- **2.** <u>Sarker SA</u>, Jäkel M, <u>Sultana S</u>, <u>Alam NH</u>, <u>Bardhan PK</u>, <u>Chisti MJ</u>, <u>Salam MA</u>, Theis W, Hammarström L, Frenken L. Anti-rotavirus protein reduces stool output in infants with diarrhea: a randomized placebo-controlled trial. Gastroenterology 2013 Oct; 145 (4):740-748.
- **3.** Gilles Bourdin, Armando Navarro, **Shafiqul A. Sarker**, Anne-C. Pittet, Firdausi Qadri, Shamima Sultana, Alejandro Cravioto, Kaisar A. Talukder, Gloria Reuteler and Harald Brüssow. Coverage of diarrhoea-associated *Escherichia coli* isolates from different origins with two types of phage cocktails *Microbial Biotechnology* (2014) **7**(2), 165–176 doi:10.1111/1751-7915.12113
- **4. Shafiqul Alam Sarker**, Shamima Sultana, Mark Pietroni and Arthur Dover. Safety of a Bioactive Polyphenol Dietary Supplement in Pediatric Subjects with Acute Diarrhoea. Int. J. Pediatrics Volume 2015, Article ID 387159, 10 pages http://dx.doi.org/10.1155/2015/387159
- 5. <u>Shafiqul Alam Sarker</u>, <u>Shamima Sultana</u>, <u>Gloria Reuteler</u>, <u>Deborah Moine</u>, <u>Patrick Descombes</u>, <u>Florence Charton</u>, <u>Gilles Bourdin</u>, <u>Shawna McCallin</u> and <u>Harald Brüssow</u>. Oral Phage Therapy of Acute Bacterial Diarrhea With Two Coliphage Preparations: A Randomized Trial in Children From Bangladesh. EBioMedicine. 2016 Feb; 4: 124–137.

Annex 1



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Tahmeed Ahmed** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 08/25/2012

Certification Number: 968527





Page 1 of 2

Title: Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh"

<u>Summary of Referee's Opinions:</u> Please see the following table to evaluate the various aspects of the proposal by checking the appropriate boxes. Your detailed comments are sought on a separate, attached page.

	Rank Score		
	High	Medium	Low
Quality of project	х		
Adequacy of project design	Х		
Suitability of methodology		Х	
Feasibility within time period	Х		
Appropriateness of budget	Х		
Potential value of field of knowledge	Х		

CONCLUSIONS

Institution: Western Sydney University

I support the application:		
a) without qualification	X	
b) with qualification		
- on technical grounds		
- on level of financial support		
I do <u>not</u> support the application		
Name of Referee: Dr Kingsley Agho		
Signature:		
Position: Senior lecturer		Date: 12/07/17

Detailed Comments

Please briefly provide your opinions of this proposal, giving special attention to the originality and feasibility of the project, its potential for providing new knowledge and the justification of financial support sought; include suggestions for modifications (scientific or financial) where you feel they are justified. (Use additional pages if necessary)

Title: Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh"

PI: Gulshan Ara

Reviewer:

Background:

Infant and Young child feeding - put breastfeeding and complementary feeding in bracket

Response- Now it is revised as per suggestion

However, few children receive – specify "number" and NOT few. receive should be received – past tense. In fact, the background and introduction should be past tense because it has already happened/done.

Response- As we have discussed about current global problem regarding IYCF practice and under nutrition, we have used present tense. However, the background has been revised for better clarification.

Background is not clear and should be tighter and should reflect the problem.

Response- The background has been revised

Knowledge gap and relevance: - also few typo errors and not flowing well.

Response--It is revised

Primary objective: why LAZ is 6-12 months? And why not 0-12 months.

Response-The intervention package has been designed for children would have started complementary feeding. As the focus of the intervention is to improve young child feeding practice, therefore age range starts from 6 months.

Include the cost of the intervention in the hypothesis too.

Response- Measuring cost effectiveness is not the objective of this study.

Methods:

Type error – it is education on IYCF and NOT education of IYCF.

Response-It is revised

OUTCOME MEASURE - not clear at all.

Difference in mean LAZ – difference between what? – not clear, is it between baseline and end line.

Response- The difference is between intervention and control group at endline

Background:

Need to be edited by English Language editor.

Response- The background has been revised

CCT in page 17 not define

Response-

Sample size calculation:

Response-

To observe a difference of 0.4 in mean LAZ – any reference?

Response- From Alive and Thrive Bangladesh Baseline Report 2011, we have found that there was a mean difference of 0.4 in LAZ between program participants and non-participants. Therefore, this difference has been used.

You gave different design effect – which one is correct? Is it 1.25 or 1.5?

Response- Design effect is 1.3. It has been revised in the protocol.

In your sample size calculation, you did not adjust for nonresponse rate – why?

Response- The sample size is calculated considering 10% nonresponse already.

Data analysis:

In your analysis, you should adjust for the effect of clustering since you used DEFF in your sample size calculation. You also need to do univariate and multivariate analysis by adjusting for the effect of clustering and other covariates.

Response- We will definitely do univariate and multivariate analysis by adjusting other covariates.

Overall,

Research design:

This seems fine

Methodology:

It is fine because of cost but I would I prefer proper interventional study for 2 years or more in order to examine a proper effect

Statistical analysis:

Need a bit of adjustment and should include multilevel modelling.

Budget:

It seems fine

Page 1 of 2

Title: Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh

<u>Summary of Referee's Opinions:</u> Please see the following table to evaluate the various aspects of the proposal by checking the appropriate boxes. Your detailed comments are sought on a separate, attached page.

	Rank Score		
	High	Medium	Low
Quality of project		Х	
Adequacy of project design		X	
Suitability of methodology	Х		
Feasibility within time period		X	
Appropriateness of budget	Х		
Potential value of field of knowledge	Х		

CONCLUSIONS

I support the application:		
a) without qualification	X	
b) with qualification		
- on technical grounds		
- on level of financial support		
I do <u>not</u> support the application		
Name of Referee: Mirak Raj	Angdembe	
Signature:		Date: Jul 13, 2017
Position: Evidence Coordinator		= 3.33.3 3. =3, =3

Institution: Nepal Health Sector Support Programme, Ministry of Health, Ramshahpath, Kathmandu, Nepa

Detailed Comments

Please briefly provide your opinions of this proposal, giving special attention to the originality and feasibility of the project, its potential for providing new knowledge and the justification of financial support sought; include suggestions for modifications (scientific or financial) where you feel they are justified. (Use additional pages if necessary)

Title: Impact of nutrition intervention (counselling, food voucher for recipe, WASH and home fortification) on growth and feeding practices of under two years children in rural Bangladesh

PI: Gulshan Ara

Reviewer:

The study looks to investigate an important issue. There has been some debate over the results of Alive and Thrive program in Bangladesh. It is interesting that this study will evaluate the effects of the intervention on length for age of the children in areas where Alive and Thrive was implemented. I am really concerned about the duration of the study though—whether we would be able to detect any significant changes in growth in such a short period, even if the intervention is successful. I will come to that later in my detail comments (below) as well. The intervention if proven to be successful could be a step towards readdressing IYCF and child growth related issues in these areas. The background is written well and outlines the existing situation with appropriate citations. The write up lacks clarification on whether the formative study conducted by SHIMA is already over with results available. I assume this formative study provides the foundation for this current study. This could be elaborated.

There are some technical issues with this proposal which can be solved—it might as well be a lack of clear articulation. Nevertheless, they will need to be addressed and clearly written for the reader to understand. I am certain that addressing these concerns at this stage of the proposal will definitely help later during publication of the study as well. My comments and suggestions in detail below:

General suggestion: We need to make clear- the thought process and rationale for choices in this study. Some of the things are not elaborated and not stated clearly.

Hypothesis: When we say "will improve child growth", it would be better to write by how much, that we expect. This can be aligned with the sample size calculation assumptions.

Response: Improvement in child growth will be measured in terms of difference in length between intervention and control group at endline survey. Sample size calculation has been done based on this outcome and detailed in sample size section.

Objective 1: Will we be able to measure a significant difference in length for age (LAZ) with only 12 months of intervention? I am sure the investigators must have thought about it and took a decision on this time period. May be this needs to be explained.

Response: Considering the availability of the budget, donor has decided to continue the intervention up to 12 months. However, there are several published studies which have shown significant difference in LAZ with 12 months intervention period

Objective 2 and 3: I could not find specific measures/analysis techniques to detect improvement in IYCF practices or to assess feasibility of food voucher. May be you can write it clearly.

Response: The objective has been revised. The improvement in IYCf practice will be measured using the standard indicators recommended by WHO and difference in proportion of children following the recommended practice between intervention and control group will be measured to identify improvement

Objective 4: Could you please explain the hypothesis that you will be testing in this? What do you wish to test and expect to find is not clear. It is explained to some extent in the sample size calculation for acceptability trial but is not exclusively stated anywhere else in the proposal.

Response: The objective has been revised. The newly developed recipe will be tested in the community with limited number of participants. The hypothesis is 50% or more participants will accept the recipe positively in terms of different organoleptic properties. Even though shuji is a common food in the community, inclusion of vegetables and egg might result in different taste and therefore acceptance. The acceptability trial will act as baseline data, if usage of this recipe gets scaled up in future program.

Study design: The study design proposed is not clear. A quasi experimental design would lack randomization/random assignment; however the design consists of randomization. May be this is a cluster randomized trial: trial because there is an intervention, there is a control group and there is randomization. Please think through this. Secondly, I find a potential ethical concern over providing food vouchers to the intervention population only. As we know from the start of the study that food supplements will definitely bring positive effects in the children being studied (intervention group), can we deprive the children in control group of it? Thirdly, what are the differences between routine wash program and tailor made wash counseling? May be we need to make this clear.

Response: The study design is Cluster randomized trial and correction has been made in the protocol according to suggestion. However, there are several studies especially RCT, where control group did not receive food assistance or financial support other than nutrition education. The control group will be not deprived, the SS, SK will provide similar counseling messages to the control mothers as they are expected to counsel to the intervention mothers. The intervention mothers will receive two additional counseling messages (counseling on utilization of food voucher, recipe). Regarding WASH, the tailor made WASH counselling will contain message on exposure to poultry feces and its association with environmental enteropathy and subsequent undr-nutrition. It has been detailed under the description of intervention packages section.

Study site and participants:

- "...the study site is selected purposively" please elaborate the purpose.
- Response- objective of project SHIMA was to evaluate the current status of child undernutrition (stunting) and IYCF practice in 10 sub-districts where previously Alive and Thrive program had been implemented. From this 10 sub-districts, Shivalaya was selected based on communication and existing brac program in consultation with donor and brac.
- In the randomization procedure chart, it is said that the seven unions in Shibaloy will be randomized in to intervention and control group. However, in this section we mention that the unions will be purposively/systematically selected. It is not clear.
- There are 7 unions in Shivalaya sub-districts. Unions will be randomly allocated to intervention and control groups. The section has been revised for clarification.

- "...a number of 390 of mother-children pair" Does this mean 390 mothers and 390 (their) children? Or 195 mothers and 195 (their) children? In sample size calculation 200 is mentioned.
- Total sample size is 400 with 1:1 intervention and control allocation. Four hundred mother-children pair means, 400 children with their mothers.
 - "...a number of 390 of mother-children pair mean 390 mothers and their children.

Responses:

Our total sample size is 205 mother-children pair in each group, so total sample size is 410.

Recruitment and inclusion/exclusion criteria for clusters

- "Unions on the sampling frame...if they do not have any other infant feeding interventions currently being implemented either from the government or non-government sectors." —Since there are only seven unions, what are the chances that a large number of unions have interventions being implemented in them? What will happen in that case?

Response: There are only seven unions in Shibalay upazila, , so there is no chance that a large number of unions have interventions being implemented in them.

Exclusion criteria for study participants:

- "Under two years children with stunting (LAZ <-2 SD); Children with Severe Acute Malnutrition (SAM) as per guideline"—since these households belong to the ultra-poor, I see chances that a large proportion of children would be either stunted or be suffering from SAM. In this way if a large number are excluded, could pose a problem for sample selection and generalization of results.

Response: We agree with your opinion. We have revised the exclusion criteria. Now children with LAZ <- 2 SD will be included, however, children with LAZ <- 3 SD will be excluded.

Sampling scheme:

- Please use the term "sub district" vs "upazilla" consistently in the text. In the previous section "sub district" term has been used.
- This has been revised and nor sub-district has been used in the protocol.
- How will the presence/absence of sanitary latrine be controlled in the final model/analysis? Since the effect of tailored WASH interventions is being assessed, this might act as a confounder.
- Information on presence/ absence of sanitary latrine will be collected during baseline survey and will be controlled in the final regression analysis.
- Which is the primary sampling unit? Above it is mentioned that after listing all children, they will be randomly selected according to the sample size. If this is the case will unions still be the PSUs?
- The PSU is union in this study. After selection of unions for either intervention or control arm, information on suitable participants will be collected following inclusion/exclusion criteria and a list will be prepared. From that list appropriate number of participants will be selected by simple random sampling.
- Will the socio-economic status of mothers in control and intervention areas have an effect on how compliant they are to BCC messages and feeding instructions? How will this be controlled in the final results/analysis?

Response:

We will select household following pre-defined inclusion criteria (other targeted poor (OTP) household) and therefore SES from both control and intervention should be comparable. However, this will also be controlled during regression analysis.

Components of the intervention package:

- Need to explain why this particular food was selected. Whether there is previous evidence of it being effective. Does this come from the formative study conducted previously? May be we need to elaborate this.
- This particular recipe was selected because the ingredients are locally available and used by the community. During the formative research it was found that animal source protein consumption was still very poor in the community. Following that finding and after discussion with specialists in nutrition sector, it was decided that the new recipe must be easy to prepare, store as well as nutritious and locally available.

Development of Behavior Change Communication (BCC) materials:

- The proposal talks about SK and their role in BRAC's system but I think it misses out on explaining PK and their role to the naïve readers.
- The role of PK is now added in the protocol

Food voucher conditional on practicing recommended recipe:

- "A voucher will have to be spent out within a certain time period before becoming invalid" —How will we monitor this?
- **Response** Use of voucher will be monitored by project staff from icddr,b.
- "Bi-monthly weight gain of the children will be considered as better compliance of utilization of food voucher" —How practical and logical is this to measure? There must have been a thought process. Please make it clear.
- **Response** We have revised the section and omitted the above mentioned criteria for compliance measurement.

Home fortification:

- "The SS will distribute one-month supply of micronutrient powder (MNP) during home visits once at a time."—How often will the SS visit the household for counseling sessions and to monitor compliance? The number of household visits by SS will have a huge implication on adherence to MNP. This was what I had found during my study in one of the Alive and Thrive upazillas.
- Response We have included visit schedule by SS/PK in the main protocol

Table: Key messages of "WASH for child" intervention

- What are the specific messages on poultry feces? This has not been mentioned. Exposure to poultry feces has been highlighted as one of the main problems in previous sections of the proposal.
- **Response** We have included relevant messages in the main protocol.

Capacity building of the front line workers of BRAC:

- Only the worker's working in the intervention area will be trained? Or both workers in intervention as well as control area will be trained? This might have implication on the results of the study.
- Response- Workers from both of the group will be trained.
- "On regular basis, one day special refresher training will be conducted" What intervals?
- Response- Refresher's training will be organized in every four months interval.

Home visits by SS and PK:

- I think the frequency of home visits in both the intervention and control areas should be same.

- Response- Frequency of home visits by SS/PK will be same between intervention and control groups. However, the intervention group will have an additional group session during when preparation of newly developed recipe will be demonstrated.
- SS should not know (blinded) which the control areas are and which are the intervention areas to prevent bias. Else, this might affect the results.
- Response- The service providers cannot be blinded as SS will provide some additional messages on food voucher and recipe.

Practical demonstration of introduction of new recipes:

- The greater interaction of SS with mothers in the intervention areas might lead to biased results.
- If higher number of planned visits to intervention areas is a necessity, it should be made a part of the intervention package, else its effect in the end results will be hard to justify. As this will certainly have an effect in the absorption of the intervention and BCC package in the intervention area as compared to the control area.
- "The consistency and preparation will different for 6-12 months and >12 months age group." Why different? Would be good to include reasons. Is this a locally accepted diet?
- Response- Same messages will be delivered for both control and intervention mothers on IYCF. However, as food voucher, new WASH BCC and recipe is the major component of the intervention packages, therefore, the SS/PK will have to allocate extra time for counseling to cover all of the topics. However, number of visits will be same but mothers will be attending an extra cooking class to learn the preparation of the proposed recipe. Each mother will attend only 1 cooking session during the whole intervention period.

In table Nutrient content of improved recipe:

- Egg has 7.25g of protein—isn't this on the higher side? Please check.
- **Response** The nutrient content of egg has been taken from latest food composition table of Bangladesh where it is stated that a chicken egg of farm variety while bolied contains 16.5 gm of protein per 100 g. We have calculated the protein amount for a medioum sized chicken egg (~50 gram)
- % of DRI Which population group standard? May be we need to write that.
- Response- DRI has been taken from IOM standard.

Acceptability of the new recipe:

- Use of 9-point hedonic scale: Why 9 points are chosen for the scale? Based on my previous experience using this scale Choosing a scale with lesser number of points should be considered as the mothers/caregivers will have difficulty understanding/responding to acceptability questions with many rating options. Unless a scale with higher number of rating points is justified, I'd suggest going with lesser number of rating. Odd vs even rating points should also be considered. There is also a chance that study participants may be unwilling to give negative answers. All these may lead to homogeneous responses.
- With such scales there are also higher chances of selection of the midpoint frequently. The SS (those who implement the tool) should be advised/trained about this.
- **Response-** The acceptability trial will be conducted by trained research staff; the SS will be not involved.
- Furthermore, for a starving child in a poor household who would rarely be fed a full meal, acceptability of food (new recipe) may not be an issue at all. This will have to be considered.
- **Response** As this a newly developed recipe, the finding of the acceptability trial will act as baseline data for future scaling up of such program.
- We have chosen 9 points hedonic scale as this is the most widely used scale for measuring food acceptability.

Measurements:

Anthropometry:

- "Anthropometry will be collected every two months interval" Is there any justification for this?
- Response: Anthropometry data will be collected monthly . This has been revised.

Sample Size Calculation and Outcome (Primary and Secondary) Variable(s):

- "To observe a difference of 0.4 in mean LAZ..." Is there any justification as to why this particular value is selected?
- **Response-** These information have been collected and used based on the baseline report of Alive and Thrive program Bangladesh.
- "...intervention and control group (-1.4 vs -1.8, standard deviation 1.2)..." Is there any justification or citation for this?
- **Response-** These information have been collected and used from the Alive and Thrive Bangladesh Baseline report 2011.
- "...with effect size=0.3..." Should not the effect size be 0.4 based on information above. Why this effect size is chosen? Justify. May be we need to justify why we cannot choose an effect size smaller than this? This might have an implication on the ability of the study to detect small differences with statistical significance.
- **Response-** The effect size has been calculated based on Cohen's d which is calculated as (M1-M2)/ SD where M1-M2 is the difference between group means and SD is the standard deviation of either group. According to literatures, effect size is small if ≤0.2 and medium if ≤0.5. We have selected an effect size between small and medium based on our budget resource and sample size.
- How was the design effect of 1.25 derived? Design effect is usually used to compensate for clustering effects such as in cluster randomized trials. This will again point back to the study design where it is mentioned "quasi-expt.". It is not clear.
- Response- The design effect was calculated using following formula-
- DEFF= $1+\rho$ (n-1), Where p is the intra-cluster correlation and n= number of observation per cluster.
- Intra-cluster correlation (ρ)= 0.005 was taken from the Alive and Thrive Bangladesh Baseline report 2011
- So DEFF= 1+ 0.005 (66-1)= 1.3
- "The final sample size for intervention or control arm is 200" 200 what? Children I presume. How many boys and how many girls? How many sample per union in intervention and control? Is it fixed or not?
- **Response** The final sample size is 205 children in each arm. As we will have 3 unions as intervention and 3 unions as control, therefore on an average 67 children will be selected per union. We do not have any fixed proportion for boys and girls as the children will be selected randomly.
- I suggest describing the elements in the entire equation used (for sample calculation) in this section.
- Response- The elements in the equation have been described now in the protocol.

Data Analysis:

- Test of mean or proportions? I think the sample was calculated based on mean.

Response: Test of means will be done and reported



Form

Consent Form (English)

Format for Consent Form (Lactating mothers with 6-24 month of aged child)

Protocol No. PR-17083 Version No. 05.00 Date: 05.10.17

Protocol Title Impact of nutrition intervention on growth and feeding practices of under two years children in SHIMA working area.

Principal Investigator's name: Gulshan Ara

Organization: icddr,b

Background (Intervention)

Childhood under nutrition is associated with growth faltering (wasting, stunting), micronutrient deficiencies, delayed cognitive development and morbidity. Lots of intervention is implemented to combat global child under nutrition through the promotion of appropriate infant and young child feeding (IYCF) practices. However, the changes in behaviour did not result in a reduction in stunting significantly. Therefore icddr,b and BRAC developed an intervention package to reduce the gap in complementary feeding practice as well as sanitation hygiene which will be supported by conditional food voucher to selected participants. As a part of intervention packages selected mother children (6-12 months) pairs will receive feeding counselling, food voucher to feed the children homemade snack following a recommended recipe, micronutrient powder and tailored WASH messages.

Background (Control)

Childhood under nutrition is associated with growth faltering (i.e. deficit in height or stunting), micronutrient deficiencies, delayed cognitive development and morbidity. Lots of intervention is implemented to combat global child under nutrition through the promotion of appropriate infant and young child feeding (IYCF) practices. However, the changes in behaviour did not result in a reduction in stunting significantly. Therefore icddr,b and BRAC have developed an intervention package to reduce the gap in complementary feeding practice as well as sanitation and hygiene practices.

Purpose of the research

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), commonly known as Cholera Hospital, is conducting a research to develop and evaluate an intervention strategy which should improve appropriate complementary feeding practice as well as other corresponding practices like sanitation and hygiene in the community and will subsequently reduce the burden of child under nutrition specifically stunting.

Why invited to participate in the study?

We are inviting you to participate in this study because your cooperation to the study may help to promote appropriate complementary feeding to improve child growth and feeding practices.

Methods and procedures (Intervention)

If you agree to our proposal of enrolling you in the study, we will ask you some questions about socio-economic status, current use of other liquids and solid foods, timing of introduction of other liquids or solid foods, and information about who is providing advice about infant feeding amongst family and friends, collect 24-hr dietary recalls and monthly recall that your child usually take within 24 hours as well as whole month. We will ask you some questions about the food voucher and also observe your courtyard, kitchen and household inside and ask you some questions on hand washing and hygiene practices. We will also measure his/her weight and height and collect the childhood illness history for last 15 days. The completion of all processes may need about one hour of your time.

Methods and procedures (control)

If you agree to our proposal of enrolling you in the study, we will ask you some questions about socio-economic status, current use of other liquids and solid foods, timing of introduction of other liquids or solid foods, and information about who is providing advice about infant feeding amongst family and friends, collect 24-hr dietary recalls and monthly recall that your child usually take within 24 hours as well as whole month. We will also observe your courtyard, kitchen and household inside and ask you some questions on hand washing and hygiene practices. We will also measure his/her weight and height and collect the childhood illness history for last 15 days. The completion of all processes may need about one hour of your time.

Risk and benefits

There is no risk from participating in this study involving any procedure, which may harm you. In fact, you may know more about your nutritional status and related information if you ask us. If you help in this study by giving some time, the research will provide high level evidence on appropriate intervention to reduce malnutrition in young children and improve feeding practices in rural Bangladesh.

Privacy, anonymity and confidentiality

We will keep all of your information strictly confidential. Computer based record will be kept under lock, and computerised data will be password-protected. None other than the research staff of our study and the Ethical Review Committee of icddr,b that protects the interest of research participants will have access to your information. If you wish we will inform you of the results of our tests.

Future use of information

The information collected from this study may be shared with other researchers if needed, but we will strictly maintain your confidentiality and privacy.

Right not to participate and withdraw

Your participation in this study is completely voluntary. You have the right to withdraw yourself and your child from the study at any time. Even if you do not agree to join the study, or if you want to withdraw your participation from the study, then you will still receive the same quality of medical care available to you through icddr,b, the government, and any other organizations.

Answering your questions/ Contact persons

You are free to ask us questions about the study, if you have any. If you have additional questions later, you may contact Gulshan Ara (9827001-10 Ext.2336) at the Dhaka Hospital of icddr,b (Cholera Hospital, Mohakhali) or . Moreover, you can contact Mr. M.A. Salam Khan, Coordination Manager, Research Administration at 9827084 or 9827001-10 Ext.3206.

If you agree to our proposal of enrolling you/your patient in our study, please indicate that by putting your signature or your left thumb impression at the specified space below

Thank you for your cooperation	
Signature or left thumb impression of participant	Date
Signature or left thumb impression of Parent/ Guardian/ Attendant	Date
Signature or left thumb impression of the witness	Date
Signature of the PI or his/her representative	 Date

(NOTE: In case of representative of the PI, she/he shall put her/his full name and designation and then sign)

(Name and contact phone of IRB Secretariat, RA, M. A. Salam Khan, Phone No: 9886498 or PABX 8860523-32 Extension. 3206).

Consent Form (Bangla)

Format for Consent Form (Lactating mothers with 6-24 month of aged child)

Protocol No. PR-17083	Version No. 04.00	Date: 05.10.17
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<u>Protocol Title</u> Impact of nutrition intervention on growth and feeding practices of under two years children in SHIMA working area.

প্রধান গবেষকের নাম:- গুলশান আরা

প্রতিষ্ঠানের নাম:- আর্ত্তজাতিক উদরাময় গবেষনা কেন্দ্র, বাংলাদেশ, (আই সি ডি ডি আর, বি)

ভমিকা (ইনটারভনেশন)

সঠিক পুষ্টি শিশুর শারীরিক এবং মানসিক বিকাশ এবং রোগ-ব্যাধির সাথে সম্পর্কিত। গবেষণায় দেখা গেছে, শিশুর খাবার এবং পুষ্টি বিষয়ক নিয়মকানুন চর্চা শিশু মৃত্যুর হার এবং অপুষ্টি দূরীকরণে শুরুত্বপূর্ণ ভুমিকা পালন করে। কিন্তু যদি সঠিকভাবে চর্চা করা না হয় তবে শুধুমাত্র পরামর্শ প্রদানের মাধ্যমে শিশু অপুষ্টির হার সম্পূর্ণ কমানো সম্ভব নয়। এ কারনে ব্রাক এবং আইসিডিডিআর, বি একটি সমন্বিত কর্মপন্থা তৈরি করেছে। এই কর্মপন্থার অংশ হিসেবে মা-দের কে ৬-১২ মাস বয়সী শিশুর সম্পূর্বক খাবার খাওয়ানোর পরামর্শ প্রদান, শিশুদের জন্য বাড়িতে কি করে একটি পুষ্টিকর নাস্তা তৈরি করা যায় তার উপর প্রশিক্ষণ প্রদান, এই পুষ্টিকর নাস্তা তৈরি করতে যে যে উপাদান লাগবে তার জন্য ভাউচার প্রদান, শিশুদের খাবার এর সাথে দেয়ার জন্য মাইক্রোনিউট্রযে েন্ট পাউডার এবং পরিষ্কার পরিছন্নতা সম্পর্কিত বিশেষ তথ্য প্রদান করা হবে।

ভ্মকাি (কনটরণেল)

সঠিক পুষ্টি শিশুর শারীরিক এবং মানসিক বিকাশ এবং রোগ-ব্যাধির সাথে সম্পর্কিত। গবেষণায় দেখা গেছে, শিশুর খাবার এবং পুষ্টি বিষয়ক নিয়মকানুন চর্চা শিশু মৃত্যুর হার এবং অপুষ্টি দূরীকরণে গুরুত্বপূর্ণ ভূমিকা পালন করে। কিন্তু যদি সঠিকভাবে চর্চা করা না হয় তবে শুধুমাত্র পরামর্শ প্রদানের মাধ্যমে শিশু অপুষ্টির হার সম্পূর্ণ কমানো সম্ভব নয়। এ কারনে ব্রাক এবং আইসিডিডিআর,বি একটি সমন্বিত কর্মপন্থা তৈরি করেছে। এই কর্মপন্থার অংশ হিসেবে মা-দের কে ৬-১২ মাস বয়সী শিশুর সম্পূর্বক খাবার খাওয়ানোর পরামর্শ প্রদান, শিশুদের খাবার এর সাথে মাইক্রোনিউট্টিযে েন্ট পাউডার খাওয়ানোর পরামর্শ প্রদান এবং পরিষ্কার পরিছন্নতা সম্পর্কিত তথ্য প্রদান করা হবে।

উদদশেয

আইসিডিডিআর,বি একটি গবেষণা করতে যাচ্ছে যার মাধ্যমে একটি সমন্বিত কর্মপন্থা তৈরি এবং মূল্যায়ন করা হবে যা সমাজে ৬-১২ মাস বয়সী শিশুর সম্পূরক খাবার খাওয়ানোর চর্চা এবং এর সাথে সম্পর্কিত আনুষঙ্গিক চর্চা যেমন পরিষ্কার-পরিছন্নতা/ হাত ধোয়ার অভ্যাস কে উন্নত করার মাধ্যমে শিশুর অপুষ্টি-র হার (যেমন- খর্বাকৃতি) কমিয়ে আনা সম্ভব হবে। কেন অংশ নেবেন-

আমরা আপনাকে এই গবেষণায় অংশগ্রহণ করতে আমন্ত্রন জানাচ্ছি কারন আপনার ৬-১২ মাস বয়সী একটি শিশু আছে। আপনি এবং আপনার শিশু যদি এই গবেষণায় অংশগ্রহণ করতে সম্মত হন তবে, এই গবেষণা র মাধ্যমে যে নতুন তথ্য পাওয়া যাবে, তা ব্যবহার করে শিশুর সম্পূরক খাবার খাওয়ানোর চর্চা কে আরো বেশি উন্নত করা সম্ভব হবে যার ফলে আপনার শিশু এবং আপনার শিশু-র মত অন্য সব শিশুর সঠিক পুষ্টি এবং শারীরিক এবং মানসিক বিকাশ নিশ্চিত করা সম্ভব হবে।

প্রত্যাশা (ইনটারভনেশন)

আপনি এবং আপনার শিশু যদি এই গবেষণায় অংশগ্রহণ করতে সম্মত হন, তবে আমরা আপনার কাছ থেকে আপনার পরিবার সম্পর্কিত কিছু সাধারণ তথ্য, আপনার ৬-১২ মাস বয়সী শিশুর খাদ্যাভ্যাস সম্পর্কিত কিছু তথ্য এবং শিশুর খাদ্যাভ্যাস সম্পর্কিত তথ্য আপনি কার মাধ্যমে পাচ্ছেন এই সব তথ্য প্রতি মাসে একবার করে সংগ্রহ করব। এর সাথে যদি আপনি অনুমতি দেন তবে, আমরা আপনার উঠান, রান্নাঘর এবং ঘর এর ভেতর এর পরিবেশ পর্যবেক্ষণ করব এবং

আপনাকে ভাউচার এর ব্যবহার এবং হাত ধোয়া/ পরিষ্কার পরিছন্নতা সংক্রান্ত কিছু তথ্য সংগ্রহ করব। আমরা আপনার শিশুর উচ্চতা/ ওজন পরিমাপ করব এবং গত ২ সপ্তাহে শিশুর কোন অসুখ হয়েছিল কি না সে সম্পর্কে তথ্য সংগ্রহ করব। এই সকল তথ্য সংগ্রহ করতে আমরা আপনার কাছ থেকে সর্বোচ্চ ১ ঘণ্টা সময় দেয়ার জন্য বিনীত অনুরোধ করছি।

প্রত্যাশা (কনটর∙োল)

আপনি এবং আপনার শিশু যদি এই গবেষণায় অংশগ্রহণ করতে সম্মত হন, তবে আমরা আপনার কাছ থেকে আপনার পরিবার সম্পর্কিত কিছু সাধারণ তথ্য, আপনার ৬-১২ মাস বয়সী শিশুর খাদ্যাভ্যাস সম্পর্কিত কিছু তথ্য এবং শিশুর খাদ্যাভ্যাস সম্পর্কিত তথ্য আপনি কার মাধ্যমে পাচ্ছেন এই সব তথ্য প্রতি মাসে একবার করে সংগ্রহ করব। এর সাথে যদি আপনি অনুমতি দেন তবে, আমরা আপনার উঠান, রান্নাঘর এবং ঘর এর ভেতর এর পরিবেশ পর্যবেক্ষণ করব এবং হাত ধোয়া/ পরিষ্কার পরিছন্নতা সংক্রান্ত কিছু তথ্য সংগ্রহ করব। আমরা আপনার শিশুর উচ্চতা/ ওজন পরিমাপ করব এবং গত ২ সপ্তাহে শিশুর কোন অসুখ হয়েছিল কি না সে সম্পর্কে তথ্য সংগ্রহ করব। এই সকল তথ্য সংগ্রহ করতে আমরা আপনার কাছ থেকে সর্বোচ্চ ১ ঘণ্টা সময় দেয়ার জন্য বিনীত অনুরোধ করছি।

ঝুঁকি উপকারিতা (ইনটারভনেশন)

আপনি এবং আপনার শিশু যদি এই গবেষণায় অংশগ্রহণ করতে সম্মত হন,তবে এতে করে আপনাদের কোন রকমের ক্ষতি হবার কোন সম্ভাবনা নেই। বরং আপনি আপনার শিশু-র পুষ্টিগত শারীরিক অবস্থা, সম্পূরক খাবার এবং হাত ধোয়া/পরিষ্কার পরিছন্নতা সংক্রান্ত শুরুত্বপূর্ণ তথ্য জানতে পারবেন। এই সব নতুন তথ্য যদি আপনি নিয়মিত চর্চা করেন তবে আপনার শিশুর সঠিক পুষ্টি এবং শারীরিক এবং মানসিক বিকাশ নিশ্চিত হবে। এর সাথে আপনি আপনার শিশুর জন্য বাড়িতে কি করে একটি পুষ্টিকর নাস্তা তৈরি করা যায় তার উপর প্রশিক্ষণ পাবেন, এই পুষ্টিকর নাস্তা তৈরি করতে যে যে উপাদান লাগবে তা সংগ্রহ করার জন্য বিনামূল্যে ভাউচার পাবেন এবং শিশুর খাবার এর সাথে দেয়ার জন্য মাইক্রোনিউট্রিয়েনেট পাউডার বিনামূল্যে পাবেন।

ঝুঁকি উপকারিতা (কন্ট্র**োল**)

আপনি এবং আপনার শিশু যদি এই গবেষণায় অংশগ্রহণ করতে সম্মত হন,তবে এতে করে আপনাদের কোন রকমের ক্ষতি হবার কোন সম্ভাবনা নেই। বরং আপনি আপনার শিশু-র পুষ্টিগত শারীরিক অবস্থা, সম্পূরক খাবার এবং হাত ধোয়া/পরিষ্কার পরিছন্নতা সংক্রোন্ত শুরুত্বপূর্ণ তথ্য জানতে পারবেন। এই সব নতুন তথ্য যদি আপনি নিয়মিত চর্চা করেন তবে আপনার শিশুর সঠিক পুষ্টি এবং শারীরিক এবং মানসিক বিকাশ নিশ্চিত হবে।
ভবিষয়েৎ-

এই গবেষণা থেকে প্রাপ্ত তথ্য যদি কোন কারনে ভবিষ্যৎে ব্যবহার করার প্রয়োজন হয়, তবে তথ্য ব্যবহার করার এবং গোপনীয়তা রক্ষা করার জন্য প্রাতিষ্ঠানিক যে আইন/ নির্দেশনামা আছে তা কোঠর ভাবে পালন করা হবে। কোন অবস্থাতেই আপনার পরিচয়/ ঠিকানা কোথাও/ কারও কাছে প্রকাশ করা হবে না।

ভবিষ্যত তথ্যের ব্যবহার:

এই গবেষনা থেকে প্রাপ্ত তথ্য প্রয়োজনে অন্যান্য গবেষকদের সাথে প্রকাশ করা হবে কিন্তু আপনার তথ্যের গোপনীয়তা কঠোরভাবে রক্ষা করা হবে।

গবেষণায় অংশগ্রহন ও প্রত্যাহারের অধিকার:

এই গবেষণায় আপনার অংশগ্রহন সম্পূর্ণ স্বেচ্ছামূলক। গবেষনা চলাকালীন যে কোন সময় আপনি নিজেকে এবং আপনার সস্তানকে গবেষণা থেকে প্রত্যাহার করে নিতে পারেন। এমনকি আপনি যদি গবেষণায় অংশগ্রহন না চান অথবা অংশগ্রহন প্রত্যাহার করেন তবুও আপনি পূর্বের মতই আই সি ডি ডি আর বি, সরকারী এবং অন্য যে কোন সংস্থা থেকে স্বাস্থ্য সেবা গ্রহন করবেন।

আপনার প্রশ্নে উত্তরদান/ যার সাথে যোগাযোগ করবেন:

এই গবেষনা সম্পর্কে যদি আপনার কিছু জানার থাকে তবে আপনি যেকোন সময়ই আমাদের প্রশ্ন করতে পারে। পরবর্তীতেও আপনার কিছু জানার থাকলে আপনি আইসিভিজিআর,বির ঢাকা হাসপাতালে (মহাখালী কলেরা হাসপাতাল) গুলশান আরা সাথে সাক্ষাৎ বা নম্বরে ০১৯২৫৯০২৩৮৩ যোগাযোগ করতে পারে। এছাড়াও আপনি রিসার্চ এ্যাডমিনিস্ট্রেশনের কো-অর্জিনেশন ম্যানেজার মি:এম. এ সালাম খান এর সাথেও এই নাম্বার ৯৮২৭০৮৪ অথবা র ৯৮২৭০০১-১০. এক্সটেনশন-৩২০৬ যোগাযোগ করতে পারেন।
আপনি যদি আপনার এবং আপনার সন্তানের এই গবেষনায় অংশগ্রহনে রাজি থাকেন তবে নিচের নির্দিষ্ট স্থানে আপনার স্বাক্ষর বা বৃদ্ধাঙ্গুলির ছাপ দিন। আপনার সহযোগিতার জন্য আপনাকে ধন্যবাদ।

আংশগ্রহনকারীর সাক্ষর বা আঙ্গুলের ছাপ

আংশগ্রহনকারীর অভিভাবকের সাক্ষর বা আঙ্গুলের ছাপ

তারিখ

প্রধান গবেষক বা তার প্রতিনিধির সাক্ষর

তারিখ

(উল্লেখ্য: কোন কারনে যদি প্রধান গবেষক অনুপস্থিত থাকলে তার প্রতিনিধি নাম পদবী এবং সাক্ষর দিন)

কমিটি সম্বন্ধয় সেক্রেটারীর নাম ও ফোন নাম্বার :এম এ সালাম খান, ফোন ৯৬৬৬৪৯৮(সরাসরি) পিএবিএক্স ৮৮৬০৫২৩-৩২,এক্স৩২০৬}

Ascent Form (English)

Format for Ascent Form (6-24 month of aged child)

Protocol No. PR-17083 Version No. 01.00 Date: 23.07.17
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<u>Protocol Title</u> Impact of nutrition intervention on growth and feeding practices of under two years children in SHIMA working area.

Principal Investigator's name: Gulshan Ara

Organization: icddr,b

Background (Intervention)

Childhood under nutrition is associated with growth faltering (wasting, stunting), micronutrient deficiencies, delayed cognitive development and morbidity. Lots of intervention is implemented to combat global child under nutrition through the promotion of appropriate infant and young child feeding (IYCF) practices. However, the changes in behaviour did not result in a reduction in stunting significantly. Therefore icddr,b and BRAC developed an intervention package to reduce the gap in complementary feeding practice as well as sanitation hygiene which will be supported by conditional cash transfer through food voucher to selected participants. As a part of intervention packages selected mother children (6-12 months) pairs will receive feeding counselling, food voucher feed the children homemade snack following a recommended recipe, micronutrient powder and tailored WASH messages.

Background (Control)

Childhood under nutrition is associated with growth faltering (i.e. deficit in height or stunting), micronutrient deficiencies, delayed cognitive development and morbidity. Lots of intervention is implemented to combat global child under nutrition through the promotion of appropriate infant and young child feeding (IYCF) practices. However, the changes in behaviour did not result in a reduction in stunting significantly. Therefore icddr,b and BRAC have developed an intervention package to reduce the gap in complementary feeding practice as well as sanitation and hygiene practices. As a part of intervention packages selected mother-children (6-12 months) pairs will receive feeding counselling, micronutrient powder and WASH messages.

Purpose of the research

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), commonly known as Cholera Hospital, is conducting a research to develop and evaluate an intervention strategy which should improve appropriate complementary feeding practice as well as other corresponding practices like sanitation and hygiene in the community and will subsequently reduce the burden of child under nutrition specifically stunting. To measure the effect of newly developed intervention, results will be compared with a group who will not receive any intervention rather than exposed to usual health messases from GoB and any NGO.

Why invited to participate in the study?

Your childis inviting you to participate in this study because your cooperation to the study may help to promote appropriate complementary feeding to improve child growth and feeding practices.

Methods and procedures (Intervention)

If you agree to our proposal of enrolling your child in the study, we will ask you some questions about socio-economic status, current use of other liquids and solid foods, timing of introduction of other liquids or solid foods, and information about who is providing advice about infant feeding amongst family and friends, collect 24-hr dietary recalls and monthly recall that your child usually take within 24 hours as well as whole month. We will ask you some questions about the food voucher and also observe your courtyard, kitchen and household inside and ask you some questions on hand washing and hygiene practices. We will also measure his/her weight and height and collect the childhood illness history for last 15 days. The completion of all processes may need about one hour of your time.

Methods and procedures (control)

If you agree to our proposal of enrolling your child in the study, we will ask you some questions about socio-economic status, current use of other liquids and solid foods, timing of introduction of other liquids or solid foods, and information about who is providing advice about infant feeding amongst family and friends, collect 24-hr dietary recalls and monthly recall that your child usually take within 24 hours as well as whole month. We will also observe your courtyard, kitchen and household inside and ask you some questions on hand washing and hygiene practices. We will also measure his/her weight and height and collect the childhood illness history for last 15 days. The completion of all processes may need about one hour of your time.

Risk and benefits

There is no risk from participating in this study involving any procedure, which may harm your child. In fact, you may know more about your child nutritional status and related information if you ask us. If you help in this study by giving some time, the research will provide high level evidence on appropriate intervention to reduce malnutrition in young children and improve feeding practices in rural Bangladesh.

Privacy, anonymity and confidentiality

We will keep all of your and your child information strictly confidential. Computer based record will be kept under lock, and computerised data will be password-protected. None other than the research staff of our study and the Ethical Review Committee of icddr,b that protects the interest of research participants will have access to your information. If you wish we will inform you of the results of our tests.

Future use of information

The information collected from this study may be shared with other researchers if needed, but we will strictly maintain your confidentiality and privacy.

Right not to participate and withdraw

Your participation in this study is completely voluntary. You have the right to withdraw yourself and your child from the study at any time. Even if you do not agree to join the study, or if you want to withdraw your participation from the study, then you will still receive the same quality of medical care available to you through icddr,b, the government, and any other organizations.

Answering your questions/ Contact persons

You are free to ask us questions about the study, if you have any. If you have additional questions later, you may contact Gulshan Ara (9827001-10 Ext.2336) at the Dhaka Hospital of icddr,b (Cholera Hospital, Mohakhali) or . Moreover, you can contact Mr. M.A. Salam Khan, Coordination Manager, Research Administration at 9827084 or 9827001-10 Ext.3206.

If you agree to our proposal of enrolling you/your patient in our study, please indicate that by putting your signature or your left thumb impression at the specified space below

Thank you for your cooperation	
Signature or left thumb impression of participant	Date
Signature or left thumb impression of Parent/ Guardian/ Attendant	Date
Signature or left thumb impression of the witness	Date
Signature of the PI or his/her representative	 Date

(NOTE: In case of representative of the PI, she/he shall put her/his full name and designation and then sign)

(Name and contact phone of IRB Secretariat, RA, M. A. Salam Khan, Phone No: 9886498 or PABX 8860523-32 Extension. 3206).

Ascent Form (Bangla)

Format for Ascent Form (6-24 month of aged child)

Protocol No. PR-17083 Version No. 01.00 Date: 23.07.17

Protocol Title Impact of nutrition intervention on growth and feeding practices of under two years children in SHIMA working area.

প্রধান গবেষকের নাম:- গুলশান আরা

প্রতিষ্ঠানের নাম:- আর্স্তজাতিক উদরাময় গবেষনা কেন্দ্র, বাংলাদেশ, (আই সি ডি ডি আর, বি)

ভুমিকা: (Intervention)

শিশুর অপুষ্টি শিশুর শারীরিক বৃদ্ধির ঝুঁকি (যেমন উচ্চতা বা খর্বাকার শিশু), অনুপুষ্টির ঘাড়তি, বিলম্বিত জ্ঞানীয় বিকাশ এবং রোগব্যাধির সাথে সম্পর্কিত। পরীক্ষায় দেখা গিয়েছে যে যথাযথ আইওয়াইসিএফ দ্বারা শিশু মৃত্যু হার কমেছে এবং অপুষ্টি দূরীকরনে গুরুত্বপূরর্ণ ভূমিকা রাখে। কিন্তু, শুধু মাত্র পরামর্শ দিয়ে শিশুর অপুষ্টি দূরীকরণ সম্ভব না। তাই, ব্র্যাক এবং আইসিডিডিআর, বি একটি সমন্বিত ইন্টারভেনশন প্যাকেজ তৈরী করার সিদ্ধান্ত নিয়েছে। মনোনীত প্যাকেজের অংশ হিসাবে মা ও সন্তানদের (৬-১২ মাস) সম্পূরক খাবার খাওয়ানোর পরামর্শ প্রদান, শিশুদেরকে একটি সুপারিশকৃত বাড়িতে তৈরি পুষ্টিকর জলখাবার খাওয়ানোর জন্য খাবারের ভাউচার প্রদান, মাইক্রোনিউট্রিয়েন্ট পাউডার এবং স্যানিটেশন স্বাস্থ্যবিধি সম্পর্কিত তথ্য প্রদান করা হবে।

ভুমিকা: (Control)

শিশুর অপুষ্টি শিশুর শারীরিক বৃদ্ধির ঝুঁকি (যেমন উচ্চতা বা খর্বাকার শিশু), অনুপুষ্টির ঘাটতি, বিলম্বিত জ্ঞানীয় বিকাশ এবং রোগব্যাধির সাথে সম্পর্কিত। বহু গবেষণায় দেখা গিয়েছে যে যথাযথ আইওয়াইসিএফ এর ফলে শিশু মৃত্যু হার কমেছে এবং অপুষ্টি দূরীকরনে গুরুত্বপূর্ব ভূমিকা রাখে। আইওয়াইসিএফ এর মাধ্যমে শুধু মাত্র পরামর্শ দিয়ে শিশুর অপুষ্টি দূরীকরণ সম্ভব না। তাই, ব্র্যাক এবং আইসিডিডিআর,বি একটি সমন্বিত ইন্টারভেনশন প্যাকেজ তৈরী করার সিদ্ধান্ত নিয়েছে। মনোনীত প্যাকেজের অংশ হিসাবে মায়ের সন্তানদের (৬-১২ মাস) সম্পুরক খাবার খাওয়ানো পরামর্শ প্রদান, মাইক্রোনিউট্রেন্ট পাউডার এবং স্যানিটেশন স্বাস্থ্যবিধি সম্পর্কিত তথ্য প্রদান করা হবে।

গবেবেষণার উদ্দেশ্যঃ

আর্ন্তজাতিক উদারাময় গবেষনা কেন্দ্র, বাংলাদেশ (আইসিডিডিআর, বি) যা কলেরা হাসপাতাল নামেও পরিচিত। প্রতিষ্ঠানটি বর্তমানে সম্পূরক খাদ্যাভ্যাস এবং এই সম্পর্কিত স্বাস্থ্যবিধি ও স্যানিটেশন ব্যবস্থার উন্নয়ন সাধনের লক্ষ্যে পরীক্ষামূলকভাবে সঠিক ও উপযোগী কৌশল নির্ধারণ ও পর্যালোচনার মাধ্যমে শিশুর অপুষ্টি জনিত ঝুঁকি বিশেষ করে উচ্চতা জনিত সমস্যা হ্রাস করার লক্ষ্যে একটি গবেষণা পরিচালনা করছে । নতুন উন্নত ইন্টারভেনশন প্রভাব পরিমাপ করার জন্য ফলাফলগুলি একটি গ্রুপের সাথে তুলনা করা হবে যারা সরকারী ও বেসরকারী এনজিও থেকে সচরাচর স্বাস্থ্যবার্তা পেয়ে থাকে ।

কেন এই গবেষনায় অংশগ্রহণ করবেনঃ

আমরা আপনার **শিশু**কে এই গবেষণায় অর্স্তভুক্ত **হওয়ার** আহ্বান জানাচ্ছি কারণ আপনার সহযোগীতার জন্য সঠিকভাবে শিশুর পরিপূরক খাদ্য গ্রহণের মাধ্যমে খাদ্যভ্যাস উন্নয়ন, শিশুর বৃদ্ধি এবং অপুষ্টির ব্যপকতাকে রোধ করতে সাহায্য করবে।

উত্তরদাতার নিকট প্রত্যাশা : (Intervention)

আপনার শিশু যদি এই গবেষণা কাজে অংশগ্রহন করতে সম্মত হন তাহলে আমরা আপনার আর্থ সামাজিক অবস্থা, শিশুর জন্য বর্তমানে তরল ও শক্ত খাবারের ব্যবস্থা, শক্ত বা তরল খাবার শুরু করার সময় সম্পর্কে কিছু প্রশ্ন করব। আমরা আরও জানতে চাইব যে পারিবারিক ও পাড়া প্রতিরেশী বা আত্মীয় নয় এমন কেহ আপনাকে শিশুর খাদ্যাভাস সম্পর্কে উপদেশ দিয়েছে এবং গত ২৪ ঘন্টায় এবং এক মাসের মধ্যে কতবার শিশুটি খাদ্য গ্রহন করেছে। আমরা খাদ্য ভাউচার ব্যবহার সম্পর্কে আপনাকে প্রশ্ন জিজ্ঞাসা করব । এ ছাডাও আমরা আপনার আঙ্গিনা, রান্নাঘর এবং ঘরের ভিতরেও দেখবো এবং হাত ধোয়া এবং স্বাস্থ্যবিধি অনুশীলন সম্পর্কে কিছুপ্রশ্ন জিজ্ঞাসা করব। আমরা আপনার ওজন ও উচ্চতা এবং আপনার শিশুর ওজন, উচ্চতা পরিমাপ করব এবং গত ১৫ দিনের বাচ্চার স্বাস্থ্য অবস্থা সম্পর্কে জানব। এই পুরো প্রক্রিয়াটির জন্য আপনার ১ ঘন্টা সময় আমাদের দরকার হবে।

উত্তরদাতার নিকট প্রত্যাশা : (Control)

আপনার শিশু যদি এই গবেষণা কাজে অংশগ্রহন করতে সম্মত হন তাহলে আমরা আপনার আর্থ সামাজিক অবস্থা, শিশুর জন্য বর্তমানে তরল ও শক্ত খাবারের ব্যবস্থা, শক্ত বা তরল খাবার শুরু করার সময় সম্পর্কে কিছু প্রশ্ন করব। আমরা আরও জানতে চাইব যে পারিবারিক ও পাড়া প্রতিরেশী বা আত্মীয় নয় এমন কেহ আপনাকে শিশুর খাদ্যাভাস সম্পর্কে উপদেশ দিয়েছে এবং গত ২৪ ঘন্টায় এবং এক মাসের মধ্যে কতবার শিশুটি খাদ্য গ্রহন করেছে। আমরা আপনার আঙ্গিনা, রান্নাঘর এবং ঘরের ভিতরেও দেখবো এবং হাত ধোয়া এবং স্বাস্থ্যবিধি অনুশীলন সম্পর্কে কিছু প্রশ্ন জিজ্ঞাসা করব। আমরা আপনার ওজন ও উচ্চতা এবং আপনার শিশুর ওজন, উচ্চতা পরিমাপ করব এবং বাচ্চার গত ১৫ দিনের স্বাস্থ্য অবস্থা সম্পর্কে জানব। এই পুরো প্রক্রিয়াটির জন্য আপনার ১ ঘন্টা সময় আমাদের দরকার হবে।

বুঁকি এবং উপকারীতা :

এই গবেষণার কার্যক্রমের সাথে অর্ন্তভুক্ত হলে কোনো ক্ষতি সম্ভাবনা নেই , বরং এই গবেষণায় অর্ন্তভুক্ত হলে আপনি বা আপনার শিশুর বর্তমান পুষ্টিগত অবস্থা এবং এ সম্পর্কিত যে কোনো তথ্য জানতে পারবেন। যদি এই গবেষনা কার্যক্রমে আপনি আমাদেরকে সাহায্য করেন তাহলে তা শিশুর সম্পূরক খাবার খাওয়ানোর পরামর্শ, মাইক্রোনিউট্রিয়ন্ট/অনুপুষ্টির শুঁড়ো এবং হোম ওয়াশ এবং রান্নার পদ্ধতি কনসালিইং যা কন্ডিশনাল ক্যাশ ট্রান্সফার (সিসিটি) দ্বারা সমর্থিত হবে,যাতে শিশুদের সুপারিশকৃত রেসিপি অনুসরণ মাধ্যমে অপুষ্টি দুরীকরনে বাংলাদেশের গ্রামীণ শিশুদের সাহায্য করবে।

গোপনীয়তাঃ

আপনার দেওয়া সকল তথ্য কঠোর গোপনীয়তার সাথে রাখা হবে। সকল তথ্যাবলী তালাবদ্ধ করে রাখা হবে এবং কম্পিউটারের তথ্য সংরক্ষিত পাসওয়ার্ড দিয়ে সংরক্ষণ করা হবে। গবেষণায় অংশগ্রহনকারীর স্বার্থ রক্ষার্থে আমাদের গবেষনা কর্মী এবং নৈতিক পর্যালোচনা কমিটির ব্যক্তিবর্গ ছাড়া অন্য কেউ আপনার তথ্য ব্যবহার করতে পারবে না। আপনি যদি জানতে চান তাহলে আমরা আপনার এবং আপনার বাচ্চার পরিমাপের ফলাফল আপনাকে জানাবো।

ভবিষ্যত তথ্যের ব্যবহার:

এই গবেষনা থেকে প্রাপ্ত তথ্য প্রয়োজনে অন্যান্য গবেষকদের সাথে প্রকাশ করা হবে কিন্তু আপনার তথ্যের গোপনীয়তা কঠোরভাবে রক্ষা করা হবে।

গবেষণায় অংশগ্রহন ও প্রত্যাহারের অধিকার:

এই গবেষণায় আপনার অংশগ্রহন সম্পূর্ণ স্বেচ্ছামূলক। গবেষনা চলাকালীন যে কোন সময় আপনি নিজেকে এবং আপনার সন্তানকে গবেষণা থেকে প্রত্যাহার করে নিতে পারেন। এমনকি আপনি যদি গবেষণায় অংশগ্রহন না চান অথবা অংশগ্রহন প্রত্যাহার করেন তবুও আপনি পূর্বের মতই আই সি ডি ডি আর বি, সরকারী এবং অন্য যে কোন সংস্থা থেকে স্বাস্থ্য সেবা গ্রহন করবেন।

আপনার প্রশ্নে উত্তরদান/ যার সাথে যোগাযোগ করবেন:

এই গবেষনা সম্পর্কে যদি আপনার কিছু জানার থাকে তবে আপনি যেকোন সময়ই আমাদের প্রশ্ন করতে পারে। পরবর্তীতেও আপনার কিছু জানার থাকলে আপনি আইসিডিডিআর.বির ঢাকা হাসপাতালে (মহাখালী কলেরা হাসপাতাল) গুলশান আরা সাথে সাক্ষাৎ বা নম্বরে ০১৯২৫৯০২৩৮৩ যোগাযোগ করতে পারে।

এছাড়াও আপনি রিসার্চ এ্যাডমিনিস্ট্রেশনের কো-অর্ডিনেশন ম্যানেজার মি:এম. এ সালাম খান এর সাথেও এই নাম্বার ৯৮২৭০৮৪ অথবা র ৯৮২৭০০১-১০. এক্সটেনশন-৩২০৬ যোগাযোগ করতে পারেন।

অংশগ্রহনকারীর সাক্ষর বা আঙ্গুলের ছাপ	তারিখ
মংশগ্রহনকারীর অভিভাবকের সাক্ষর বা আঙ্গুলের ছাপ	 তারিখ
নাক্ষীর সাক্ষর বা আঙ্গুলের ছাপ	তারিখ
প্রধান গবেষক বা তার প্রতিনিধির সাক্ষর	 তারিখ

Study ID: / /	Study	ID:	/	/	/
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Study subject eligibility form (B)

B1	Do you have a living children aged 6-12 month?	Yes=01 No =02
B2	Age of your child	Month ///
В3	Do you have any plan to leave from this place within 3 months?	Yes=01 No = 02
B4	If Yes, where do you plan to shift?	Outside at Harirumpur upazila=01 Inside at Harirumpur upazila =02 Outside at Manikgonj=03 Don't know= 99
B5	At least three of the four criteria will need to be met to be eligible for this study	
B5.1	The household is dependent on irregular income source	Yes=01 No =02
B5.2	Family's maximum monthly income of Taka 8,000	Yes=01 No =02
B5.3	Unable to make productive or effective use of NGO or other financial institute's loans in the past	Yes=01 No =02
B5.4	No productive assets in the household	Yes=01 No =02

DRAFT QUESTIONNAIRE Household questionnaire (D)

	ehold General Information in the second second like to ask you son		•	embers.		
1	1 What is your name? Respondent's Name					
				AGE		
	Please give me the names of the persons who usually live in your household starting with the head of the household	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually sleep here?	Does (NAME) usually eat here?	How old is (NAME)? IF AGE IS LESS THAN 1 YEAR, WRITE '00'
D1.1	D1.2	D1.3	D1.4	D1.5a	D1.5b	D1.6
01			M1 F2	YES1 NO2		IN YEARS
02			M1 F2	YES1 NO2	YES1 NO2	IN YEARS
03			M1 F2	YES1 NO2	YES1 NO2	IN YEARS
04			M1 F2	YES1 NO2	YES1 NO2	IN YEARS
05			M1 F 2	YES1	YES1	IN YEARS

06				2		2	YES1 NO2	IN	YEARS
07				2	_	2	YES1 NO2	INY	/EARS
08			F	2		1	YES1 NO2	IN	/EARS
09				2	_	2	YES1 NO2	IN	/EARS
10				2	_	2	YES1 NO2	IN	YEARS
11				2		1	YES1 NO2	IN	YEARS
12				1	_	1	YES1 NO2	IN	/EARS
If more th	an 12 household mem	bers, use continuation shee	t					1	
	Self Husband/wife Son Daughter	EAD OF HOUSEHOLD: 04		02		Brother/siste Sister-in-law. Nephew/niec Father/mothe Father-in-law	and daughter06 r	07	
NO	QUESTIONS			CODING	CAT	EGORIES	,,		CODE
D2.1	What is the religion who live in this hous (Mark only one answ		eople	Hinduis Christia Buddhis Other (Specify	m nity sm		02 03 04 77		
D2.2	Which ethnic group	do you belong to?		Bangali. Other_ (Specify					[_][_]
D2.3	What is the main household?	occupation of the head o	f the	Small But Large But Factory Service. Skilled I Unskille Farmer, Poultry, Home but Domest	usine: work abou d lab cattle ased ic hel vife	technicalsssserer/serviceourultural worker e raisingmanufacturing p			

D2.3	What is the main occupation of the respondent	Professional/technical01	
	(Mother)?	Small Business02	
		Large Business03	
		Factory worker04	
		Service05	
		Skilled labour/service06	[][]
		Unskilled labour07	
		Farmer/agricultural worker08	
		Poultry/cattle raising09	
		Home based manufacturing10	
		Domestic help11	
		House wife12	
		Other 77	
		(Specify)	
D2.6	How many rooms in the household are used for	Number of sleeping rooms	
	sleeping?		[_][_]
	52 111 600	10 F00NON 410 CTATUS	
	EZ.: HH SOC	IO ECONOMIC STATUS	
SL.	Questions	Response	Code
E2.1		Own tube well01	
		Other's tube well02	[][]
	What is the main source of drinking water for	Community tube well03	
	members of your household?	Supply Water (piped)04	
	/1 ANGWED ONLY)	Ring Well/ Indara05	
	(1 ANSWER ONLY)	Pond	
		River/ Canal07	
F2 2	De very de emithine to the vieter to mello it cofer	Other (specify)77	
E2.2	Do you do anything to the water to make it safer		r 1r 1
	drink?	No	
E2.3			
E2.3		Boil01 Add bleach/chlorine/purifying tablet02	r 1r 1
		Strain through a cloth03	
		Use water filter04	
	What do you usually do to make water safer to drink?	Let it sand and settler05	
		Do nothing06	
		Other77	
		(Specify)	
E2.4	What is the main source of water used by your	Own tube well01	Cooking
	household for cooking, bathing and washing utensi		
	(1 ANSWER ONLY)	Community tube well03	Bathing
	(27.11.011.21.7)	Supply Water (piped)04	[][]
			Washing
			تالــا
E2.5	What kind of toilet facility do members of your	Sanitary with flush (water sealed)01	
LZ.3	household usually use?	Sanitary without flush (water	[_][_]
	nousenota asaany ase.	sealed)02	[][]
		Pucc/pit (without water sealed)03	
		Kutcha/Hanging (fixed place)04	
E2.6	Where do young children in your household usually		
22.0	go to the toilet?	Sanitary withhout flush (water sealed)02	[_][_]
	5- 15 the tenet.	Pucc/pit (without water sealed)03	,
		Kutcha/Hanging (fixed place)04	
F2.7	Be were about about a factor of the control of the		r 1r 3
E2.7	Do you share this toilet facility with other household	ds? Yes01	[][]
		No02	

E2.8	Do you own the house you live in?	Owns house01	
		Rents02	[_][_]
		Free housing03	
		Other (specify) 77	
E2.9	Do you have a garden where you grow vegetables	Yes01	
	and/or fruits?	No02	[_][_]
E2.10	Does any member of this household own any	Yes01	
	agricultural land?	No02	[_][_]
E2.11	How many decimals of agricultural land do	Area in decimal	
	members of this household own?(Add total	Don't know99	[_][_]
	amount if multiple members of the household own land)		
E2.12	Does your household or anyone of your household		
	have:		
	a. Electricity?	Yes01	
		No02	[_][_]
	b. Radio?	Yes01	
	Williams.	No	[_][_]
	c. Television?	Yes01	[_][_]
		No02	
	d. Mobile phone?	Yes01	
		No02	[_][_]
	e. Land phone?	Yes01	
	'	No02	[_][_]
	f. Refrigerator?	Yes01	
		No02	[_][_]
	g. Almirah/wardrobe?	Yes01	
		No02	[_][_]
	h. Table?	Yes01	
		No02	[_][_]
	i. Chair?	Yes01	
		No02	[_][_]
	j. Watch?	Yes01	r 1r 1
		No02	[_][_]
	k. Bicycle?	Yes01	
		No	[_][_]
	s. Motor cycle/scooter/tempo?	Yes01	r 1r 1
	m. Animal drawn cart?	No02 Yes01	<u> </u>
	THE ATTENDED TO THE ATTENDED T	No02	[][]
	n. Car or truck?	Yes01	[_][_]
		No02	
	o. A boat?	Yes01	[_][_]
		No02	
	p. Rickshaw/van?	Yes01	[][]
		No02	
E2.13	Do you have any other kind of electric power? If	Generator01	
	yes, which type?	Solar02	[_][_]

E2.14 Wha cook	t type of fuel does your household mainly use for	Electricity01	
00011	ring?	LPG02	[_][_]
		Natural gas	''
		Blogas04	
		Kerosine05	
		Charcoal06	
		Wood/ straw07	
		Animal08	
		Animal dung09	
52.45	0	Other (Specify)	
E2.15 Main	floor material [observation]		1
		Brick/Cement02	[_][_]
		Wood03	r 1r 1
		Smoothed mud04	
		Tile05	
		Bamboo06	
		Others (Specify) 77	
E2.16 Main	exterior wall material [observation.]	Concrete01	[_][_]
		Brick/Cement02	
		Tin /CI sheet03	[_][_]
		Wood04	
		Smoothed mud05	
		Jute Stick06	
		Bamboo/ Grass/straw07	
		, ,	
E2.17 Main	roof material [observation.]	Others (Specify) 77 Concrete01	r 1r 1
EZ.17 IVIdITI	Trooi material [observation.]		[_][_]
		Brick/Cement02	
		Tin /Cl sheet03	
		Wood04	
		Smoothed mud05	
		Tile06	
		Jute Stick07	
		Bamboo/ Grass/straw08	
		Others (Specify)77	
E2.18 Do yo	ou know the monthly expenditure of your family?	Yes01	
		No02	[_][_]
E2.19 Pleas	se tell the approximate monthly expenditure of		[][]
	family (approximate collective expenditure of all	Taka	
	amily members)		

Q#	Questions/Instructions	Coding categories	Codes	Check/S
				kip
E3.1	In what month and year you were born?	Month Don't know month Year Don't know year	9998	
E3.2	What is your marital status?	Currently married Separated Deserted Divorced Widowed	1 2 3 4 5	
E3.3	Have you ever attended to school?	Yes, School Yes, Madrasa Yes, Both No	1 2 3 4	Skip to E1.6

E3.4	What was the highest level of schooling you attended:	Primary	1	
	primary, secondary, or college and higher?	Secondary	2 3	
E3.5	What was the highest class you completed at that level?	Class		
E3.5.1	How many years in total have you attended school?	Year of schooling		
E3.5.2	Can you read or write a letter in any language easily,	Easily	1	
	with difficulty or not at all?	With difficulty	2	
E3.6	Do you read newspapers or magazines?	Not at all	3	
L3.0	Do you read newspapers of magazines:	No	2	skip to E1.7
E3.6.1	If yes. how often do you read a newspapers or	Almost every day	1	
	magazines	At least once a week Less than once a week	2 3	
E3.7	Do you listen to the radio?	Yes	1	
L3.7	bo you listen to the radio:	No	2	Skip to E1.8
E3.7.1	If yes. how often do you listen to radio?	Almost every day	1	,
		At least once a week	2	
		Less than once a week	3	
E3.8	Do you watch television?	Yes	1 2	Skip to E1.9
E3.8.1	If yes. how often do you watch television?	No	1	3kip to E1.9
25.0.1	in yes. now orten do you water television.	At least once a week	2	
		Less than once a week	3	
E3.9	What is your religion?	Muslim	1	
		Hindu	2	
		Buddhist Christian	3 4	
E3.12	Are you currently working?	Yes	1	
	(Payment in cash or kind)	No	2	Skip to
E3.13	What kind of work do you mainly do?	Technical	1	E1.16
E3.13	Verbatim:	Business	2	
	(Record what the mother says then categories from the	Factory worker	3	
	list)	Semi-skilled labour/service	4	
		Unskilled labour	5	
		Poultry/ cattle raising	6	
		Home-based manufacturing Domestic servant	7 8	
		Bomestic servant		
	Husband's background		•	
	d like to ask some question about your husband	_,		
	an is currently married, go to Section E4 otherwise go to E5			
E4.1	How old is your husband ?	Age in complete years		
E4.2	Did your husband ever attended school or	Yes, School	1	
	madrasha?	Yes, Madrasa	2	
		Yes, Both	3 4	Skin to E 1 1
E4.3	What was the highest class your husband	No	4	Skip to E 4.4
L4.5	completed at that level?			
E4.3.1	How many years in total have you attended school?	Year of schooling		
E4.4	What kind of work does your husband mainly do?	Professional	01	
	Verbatim:	Technical	02	
	(Record what the mother says then categories from the list)	Business Factory worker	03 04	
		Semiskilled labour/service	05	
		Unskilled labour	06	
		Poultry/ cattle rearing	07	
		Home based manufacturing	08 09	
I	1	Domestic servant	U3	

		Unemp	loyed					10	-			
.5	How much does your husband earn each month? (don't know - 999999)			Гака								
			'	raka								
	RIC MEASUREMENT FORM-JM	ı										
11.1	Height in cm (1 st measurement)				c.m							
11.2	Height in cm (2 nd measurement)				c.m							
11.5	Weight in Kg (1 st measurement)				Kg							
11.6	Weight in Kg (2 nd measurement)				Kg							
	CHILD MORIDITY (ver should say Hello, My name is, and the ike to ask you some questions about the health of your	n ask mot				your ba	aby?					
NO.	Questions/Instructions	Coding	categor	ies		Cod	es		Skip /	Chec	k	
H.1,1	In general, how is (NAME)'s health?	Well		=01	_	[]		SKIP t	o H 1.	.3	
	How is (NAME) today?	Somew Not we Died		ell = 0: =03 = 04					SKIP t	o H1.	2	
H1.1.2	Date of child death?		MM \	YYYY		End	the ir	ntervi	ew			
H 1.3	If not well, for how long baby (NAME) has been sick?	Day				[][]				
In last two	weeks did (NAME) experience any of the following sy	mptoms?	(READ	OUT)								
H 1.4	Has (NAME) been ill with a fever at any time in the last two weeks?	Yes=01	No=02			[]		SKIP t	o H1.	4	
H1.5	If yes, for how many days the baby (NAME) had fever?	Day				[]					
H 1.6	Has (NAME) been ill with a cough at any time in the last two weeks?	Yes=01	No =02	2		[]		Skip t	o H1.!	5	
H 1.7	If yes, for how many days the baby (NAME) has been ill with cough?	Day				[]					
H 1.8	Has (NAME) been ill with a cold/ running nose at any time in the last two weeks?	Yes =01	, No =0	2		[]		Skip t	o H1.6	ŝ	
H.1.9	If yes, for how many days the baby (NAME) has been ill with a cold/ running nose?	Day				[]					
In last two	o weeks did (NAME) have : (READ OUT)											
H .2.1	Rapid breathing?	Yes =01	, No =0	2		[]					
H 2.2	Difficulty in breathing?	Yes =01	, No =0	2		[]					
H .2.3	Chest indrawing?	Yes =01	, No =0	2		[]					
	1 to H2.3. If any one or more of the answers is circled "Yskip to H2.3	Yes" then	go to H	1.9.					•			
H .2.4	For how many days the baby (NAME) had the above mentioned breathing problems?	Day				[_][]				
H.2.5	Did you seek any treatment/ advice to treat the feve cough or breathing problem or chest drawning?	er or	Yes=01	L,No =0	2	[_]		Skip	to H 2	2.7	

H. 2.7	Is (NAME) still sick with a fever/ cough?			Only fever=01 Only cough=02			
				Both fever and	[_]		
				cough=03			
				Neither=04			
H. 2.8	In last two weeks did (NAME) have :			Yes=01, No =02			
	(Diarrhea)						
H .2.9	Dysentery (stool output with mucus and blood)			Yes=01, No =02			
Check H	2.8 and H2. if any of the answer is circled "Yes" t	then go t	to H2.10.	otherwise skip to H	12.14		
H.2.10	For how many days did (NAME) have diarrhed dysentery?	ea/	Day				
H.2.11	Did you seek any treatment/ advice to treat		Yes=01	, No =02			
	diarrhea/ dysentery?					Skip to H.2.13	
H.2.13	Does (NAME) still have diarrhea/dysentery?		Yes=01	, No =02			
H.2.14	In last two weeks did (NAME) have Any other problem of eye, for example; redr	2000	Yes=01	, No =02	[]	Skip to H.2.17	
	water loss, wheezing etc.	1033,				3KIP to 11.2.17	
H.2.15	Did you seek any treatment/ advice to treat eye problem?	ou seek any treatment/ advice to treat the Yes=01		, No =02			
H.2.17	In last two weeks did (NAME) had itchy skin/rashes?		Yes=01	, No =02	[_]	Skip to H.2.20	
H.2.18	Did you seek any treatment/ advice to treat itchy skin/rashes?	the	Yes=01	, No =02		Skip to H.2.20	
		eeding	Question	naire (I)			
No.	Questions and Filters	Coding	g categoi	ries	Skip		
l1.1	Are you breastfeeding the baby (NAME)?	Yes=0:	1				
	, , , ,	No =0)2				
		Don't	know =9	9	Skip to	11.2	
11.1.1	When did you stop breast feeding?						
		DD	MM	YY			
			t know =				
I1.1.2	Why did your baby stop breast feeding?						
	A. Baby cries too much						
	B. Insufficient milk					[_]	
	C. Illness of baby D. Illness of mother	Yes=0:	1			[] [_]	
	E. Mother insufficient milk No =02				[]		
	F. Mother insumicient mink F. Mother is reluctant to breastfeed Don't know=99)				
	G. Family pressure						
	H. Influence friends and Neighbours						
	I. Others						
24 hours	 dietary recall of children (The history of 24 hou	rs of foo	d intake)			
	I what your child (name) had eaten at home or o				nen you got yo	ur baby (name) yesterday	
	Did he eat anything? If yes, please tell me what						

Please tell what your child (name) had eaten at home or outside all day or night? Think of it when you got your baby (name) yesterday morning? Did he eat anything? If yes, please tell me what did you eat? (Probes) say all foods. If "no", then go to question number B. What then he (name) did? Did he eat anything? Repeat B. So ask the respondent what they ate till the next day until sleeping. If the respondent speaks of mixed food, such things as Khichuri etc., The answer is to bring from the respondent. (Probe). C. The respondent can tell the names of all the food items stain them under the list and circle the 01. If the food is not in the list of foods, then the food should be written in the other food box. If a spice is used only in small amounts, then it should also be mentioned. The respondents will have to be enrolled in the list. Where there is no 01 circle, it is to be asked whether the mother had eaten the food on day or night yesterday or not. The number of foods 01 that will be eaten at the time of the meal will be brought to 11.5.

No.	Questions and Filters			Coding ca	itegories	Skips
	Frequency of 24 hr Recall I1.5					
11.5			Yes	No	I don't know	How many times
Α	bread, rice, noodles or other food that is made from grain	A	01	02	99	How many times don't know
В	Sweet pumpkin, carrot, sweet potato or any yellow or orange-colored vegetables	В	01	02	99	How many times don't know
С	White potato or any other root food	С	01	02	99	How many times don't know
D	Any kind of dark green leafy vegetables	D	01	02	99	How many Times don't Know
E	Seasonal mango, ripe papaya, seasonal palm or local fruit rich in vitamin A	E	01	02	99	How many Times don't Know
F	Other fruits and vegetables	F	01	02	99	How many Times don't Know
G	organs	G	01	02	99	How many Times don't Know
Н	Any meat such as cows, lamb, sheep, chicken or duck	Н	01	02	99	How many Times don't Know
I	Egg	I	01	02	99	How many times don't know
J	Fresh fish or dried fish, sea fish	J	01	02	99	How many times don't know
K	Pulses, peas, peas, nuts, etc.	K	01	02	99	How many times don't know
L	Cheese, curd, other milk foods	L	01	02	99	How many Times don't Know
M	Suji	M	01	02	99	How many Times I don't know
N	Oil, fat butter, ghee, other oil foods	М	01	02	99	How many times I don't know
0	Any kind of sweet food like chocolate, sweet Cakes biscuits etc.	N	01	02	99	How many Times don't Know
Р	spices such as turmeric, chilli powder, spices, coriander leaves, etc.	0	01	02	99	How many Times don't Know

Q	recipe (Filtil/ Haida)	Q	01	02	99	Times	
						don't Know	,
R	recipe (khichuri)	R	01	02	99	How many	
						Times	
						don't Know	,
11.6	Now I will ask you some questions: Did you fee last seven days, which of the following food ite (name) was eating at home or outside the last	ms is g	iven to th	ie baby (r			_
	The answer is to say the mixer meal, such as kh (Probe). The respondents can tell the names of the food group then the food should be written in the or should also be mentioned. The list of respondent answered must be listen eaten the food yesterday day or night? If the mother Please enter the foods that are not included in	d stain ther for ned to. I	them und od box. If Where 01 says yes t	ler the lis there is is not do hen if he	t and circle a small amo one in the ci says no circ	01. If the food is ount of spices use ircle, you should cle 02 and if you	not in the listed food ed in the food, then it ask that the mother had
11.6.1	Infant formulas		Yes=0				
			No =0		}		
			Don't	know=99) }		Skip to I1.6.1.2
14.6.4.4	Harmon March State Control Control		0	1 0	1		
11.6.1.1	How many times infant formulas have been give the last 7 days?	en in	Twice More Once Twice	a week = a week =	2 ce a day = 03 04 : 05		
I1.6.1.2	Other milk such as milk powder / cow milk / go	nat.	Yes=0		ce a week =	06	
11.0.1.2	milk	Jat	No =0		} }}		Skip to 11.9.2
11.6.1.3	How many times he has been given other milk last 7 days?	in the	Twice More Once Twice	a week = a week =	2 ce a day = 03 04		
11.6.2	Yogurt		Yes=0 No =0 Don't		}		Skip to 11.63
11.6.2.1	How many times he has been given yogurt in th 7 days?	he last	Once a Twice More Once a Twice	a day = 0: daily = 0: than twic a week = a week =	1 2 ce a day = 03 04		
11.9.3	Gruel		Yes=0				
			No =0 Don't)2 know=99	} 9 }		Skip to I1.64
11.9.3.1	How many times he has been given thin Gruel i last 7 days?	in the	Once a Twice More Once a	a day = 0: daily = 0:	1 2 ce a day = 03 04	3	

		More than twice a week = 06	
11.9.4	Suji	Yes=01	
		No =02 }	
		Don't know=99 }	Skip to11.9.5
11.9.4.1	How many times he has been given suji in the last 7	Once a day = 01	
	days?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
_		More than twice a week = 06	
11.9.5	Any other liquid food?	Yes=01	
		No =02 }	
		Don't know=99 }	Skip to 11.9.6
11.9.5.1	How many times he has been any other liquid food	Once a day = 01	
	given in the last 7 days?	Twice daily = 02 More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.9.6	Bread, rice, noodles or other food that is made from	Yes=01	
11.5.0	grain?	No =02 }	
		Don't know=99}	Skip to11.9.7
11.9.6.1	How many times he has been given bread, rice,	Once a day = 01	
	noodles or other food that is made from grain?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.9.7	Sweet pumpkin, carrot or sweet potato or any yellow	Yes=01	
	or orange-colored vegetables?	No =02	
		Don't know=99	Skip to 11.9.8
11.9.7.1	How many times has he been given sweet pumpkin,	Yes=01	
	carrot or sweet potato or any yellow or orange-	No =02	
	colored vegetables for the first time since last	Don't know=99	
	meeting with me? (Check the food list)		
44.0.7.0			
11.9.7.2	How many times he has been Sweet pumpkin, carrot	Once a day = 01	
	or sweet potato or any yellow or orange-colored vegetables?	Twice daily = 02 More than twice a day = 03	
	vegetables:	Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.9.8	Potatoes or any other basic food	Yes=01	
*	,	No =02	
		Don't know=99	Skip to 11.9.9
11.9.8.1	How many times he has been given the potato or	Once a day = 01	,
	other basic food in the last 7 days?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.9.9	Any dark green vegetables.	Yes=01	
***	,	No =02	
		Don't know=99	
			Skip to I1.6.10
11.9.9.1	How many times he has been given the Any dark	Once a day = 01	
	green vegetables?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
	İ	Twice a week = 05	1
		More than twice a week = 06	

11.6.10	Fruit of ripe mango, ripe papaya or local fruits rich in	Yes=01	
	vitamin A	No =02	
		Don't know=99	Skip to I1.6.11
11.6.10.1	How many times he has been given the fruits of ripe	Once a day = 01	
	mango, ripe papaya, or local fruits rich in vitamin A in	Twice daily = 02	
	the last 7 days?	More than twice a day = 03	
		Once a week = 04 Twice a week = 05	
		More than twice a week = 06	
		Wore than twice a week – 00	
I1.6.11	Any other fruits and vegetables.	Yes=01	
11.0.11	Any other mats and vegetables.	No =02 }	
		Don't know=99 }	Skip to I1.6.13
11.6.11.1	How many times he has been given the any other	Once a day = 01	5p to 12.0.25
	fruits and vegetables in the last 7 days?	Twice daily = 02	
	?	More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
I1.6.12	Organs	Yes=01	
	o Band	No =02 }	
		Don't know=99 }	Skip tol1.6.13
11.6.12.1	How many times he has been given the such organs	Once a day = 01	·
	in the last 7 days?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.6.13	Any meat such as cows, lamb, sheep, chicken or duck	Yes=01	
		No =02 }	
14 6 42 4	Harris Maria ha ha ha a sha sh	Don't know=99 }	Skip tol1.6.14
I1.6.13.1	How many times he has been given the any meat such as cows, lamb, sheep, chicken or duck in the last	Once a day = 01 Twice daily = 02	
	7 days?	More than twice a day = 03	
	7 days:	Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
I1.6.14	Egg	Yes=01	
		No =02 }	
		Don't know=99 }	Skip to 11.6.15
11.6.14.1	How many times he has been given egg in the last 7	Once a day = 01	
	days?	Twice daily = 02	
		More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
I1.6.15	Fresh fish or dried fish, sea fish	More than twice a week = 06 Yes=01	
11.0.15	riesh iish of uneu iish, sed lish	No =02 }	
		No -02	Skip to I1.6.16
11.6.15.1	How many times he has been given Fresh fish or	Once a day = 01	5.0.p to 11.0.10
	dried fish, sea fish in the last 7 days?	Twice daily = 02	
	,	More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
	·	•	

I1.6.16	Beans, pulses, wheat, nuts, or beans?	Yes=01	
		No =02 }	
		Don't know=99 }	Skip to 11.6.17
11.6.16.1	How many times he has been given the beans,	Once a day = 01	
	pulses, wheat, nuts or beans last 7 days?	Twice daily = 02	
		More than twice a day = 03	<u> </u>
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.6.17	Cheese, curd, other milk foods	Yes=01	
		No =02 }	
		Don't know=99 }	Skip to I1.6.18
11.6.17.1	How many times he has been given the Cheese, curd,	Once a day = 01	
	other milk foods last 7 days?	Twice daily = 02	
	·	More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.6.18	Oil, fat butter, ghee, other oil foods	Yes=01	
11.0.10	on, rac bacter, grice, other on roots	No =02 }	
		Don't know=99 }	Skip to 11.6.19
11.6.18.1	How many times he has been given the Oil, fat	Once a day = 01	3KIP to 11.0.13
11.0.10.1	butter, ghee and other oil foods last 7 days?	Twice daily = 02	
	butter, give and other on roods last 7 days :	More than twice a day = 03	
		Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
11.6.19	Any kind of sweet food like chocolate, sweet Cakes	Yes=01	
.1.0.13	biscuits etc.	No =02 }	
	bisedits etc.	Don't know=99 }	Skip to 11.10 .1
11.6.19.1	How many times he has been given	Once a day = 01	JNIP (U 11.1U .1
11.0.13.1	any kind of sweet food like chocolate, sweet Cakes	Twice daily = 02	
	biscuits etc last 7 days	More than twice a day = 03	
	biscuits etc last / days	Once a week = 04	
		Twice a week = 05	
		More than twice a week = 06	
		iviole triali twice a week – 00	

HAND WASHING AND FOOD SAFETY QUESTIONNAIRE (Z)

No.	Questions and Filters	Coding categories	Skip
11.18	Do you?		
	A. Wash hands immediately before preparing food.		[_]
	B. Wash hands immediately before serving	Yes=01, No =02	
	food/feeding the		
	Child.	Yes=01, No =02	
	C. Wash hands after handling raw meats/chicken/fish		
	and		[_]
	vegetables	Yes=01, No =02	
	D. Wash hands after defecation/ using toilet.		[]
11.18.1	How do you wash your hands?		
	A. With running water only	Yes=01, No =02	
	B. With soap and wate	Yes=01, No =02	
	C. With ash, sand, soil or other	Yes=01, No =02	
	D. With bowl of water	Yes=01, No =02	

	-					
11.18.2	How do you wash your child's hands?					
	A. With running water only		Yes=01, No =02			
	B. With soap and water C. With ash, sand, soil or other		Yes=01, No =02 Yes=01, No =02			
	C. With ash, sand, son of other		163-01, 140 -02			
		N CONDITON	(OBSERVATION)			
11.19	Type of kitchen?	Private				
		Communal	02			
11.19.1	How is the kitchen space? Kitchen space	Clean (visih	ly) and clean and tidy- 01			
11.13.1	clean (visibly) and tidy or dirty		clean or untidy 02			
11.19.2	How garbage or wastes are disposed?	_	aste disposal in a bin in the kitchen	f 1		
		01 Garbage/wa	aste thrown in courtyard			
		Car bage, we	02			
11.19.3	Is there any insects, pests, animals in					
	kitchen/food preparation area or on					
	food (raw or cooked)	Yes=01, No	-03	[]		
	A. Insects B. Pests	Yes=01, No				
	C. Animals	Yes=01, No				
11.19.4	Where the child food is prepared?					
	On ground	Yes=01, No	=02			
	On table	Yes=01, No	=02			
	COOKING	AND REHEA	TING (INTERVIEW)			
			,			
11.20	How the child food is cooked/ prepared?		Yes=01, No =02	r 1		
	A. Separately cooked B. Child food is prepared from family cooke	d food.	Yes=01, No =02 Yes=01, No =02			
	C. Do not store the child food, the child is		165 62,116 62			
	instantly		Yes=01, No =02			
	D. At ambient (room) temperature more th	an 4	Vas-01 No -02	[]		
	hours E. Feed the cooked food within 2 hours of		Yes=01, No =02			
	preparation		Yes=01, No =02			
	F. Do you reheat the stored food before fee	eding the				
	child?		Yes=01, No =02			
	HAND WAS	HING FACILIT	TIES (OBSERVATION)			
11 21	A Dunnan of annual providence in the bound		Vac 01 Na 02	r 1		
11.21	A. Presence of soap anywhere in the home B. Presence of a designated place to wash h		Yes=01, No =02			
	C. Presence of a designated place to wash h		Yes=01, No =02			
	water available at the time of observation.					
	D. Presence of a designated place to wash hand cleansing agent, such as soap and w		Yes=01, No =02	[
	a nand cleansing agent, such as soap and w available at the time of inspection.	ater				
			Yes=01, No =02			
		STATE OF THE	EVITCHEN			
STATE OF THE KITCHEN						

11.22	STA	TE OF THE KITCHEN		
	A.	Presence of unwashed utensils at the time of inspection	Yes=01, No =02	
	В.	Dirt and cow dung In the kitchen floor at the	Yes=01, No =02	
	C.	time of inspection Poultry feces visible in the kitchen floor during	Yes=01, No =02	
	D.	inspection Animal in the kitchen	Yes=01, No =02	

K Q. No.	QUESTION	CODING CATEGORIES	CODE
. Food consu	umption		
Now I would	like to ask you some questions about the food eater	by you and your family. I know this is sometim	nes hard to
remember, l	out please give me the best answer you can.		
	How many days you and your family have taken the following foods in last seven days? Do not count small amounts (Less than 1 tea spoon).		
K 1.1	Any cereals, e.g. rice, bread, wheat, wheat bread, rice flakes, puffed rice, barley, wheat grain, popcorn?	Yes01 No02	
K 1.1a	If yes, how many days a week?	Days	
K 1.2	Any pumpkin, carrots, squash, or sweet potatoes or vegetables that are yellow or orange inside?	Yes01 No02	
K 1.2a	If yes, how many days a week?	Days	
K 1.3	Any white potatoes, white yams or other foods made from roots and tubers?	Yes01 No02	
K 1.3a	If yes, how many days a week?	Days	
K 1.4	Any dark green, leafy vegetables, e.g., Ipomoea, amaranth, spinach, parwar sag, and drumstick leaves?	Yes01 No02	
K 1.4a	If yes, how many days a week?	Days	
K 1.5	Any other vegetables, e.g. cucumber, radish, pepper, string beans, cabbage, cauliflower, radish, onion?	Yes01 No02	
K 1.5a	If yes, how many days a week?	Days	
K 1.6	Any ripe papaya, mangoes or other fruits that are yellow or orange inside?	Yes01 No02	
K 1.6a	If yes, how many days a week?	Days	
K 1.7	Any other fruits, e.g. banana, papaya, sithphal, grapefruit, apple, orange, jackfruit, jambu fruit, plums, melon, tomato, date, lemon, etc.?	Yes01 No02	
K 1.7a	If yes, how many days a week?	Days	
K 1.8	Any meat, such as, liver, beef, poultry, lamb, pork, etc.?	Yes01 No02	
K 1.8a	If yes, how many days a week?	Days	
K 1.9	Any eggs?	Yes01 No02	
K 1.9a	If yes, how many days a week?	Days	

K 1.10	Any fresh or dried fish or shellfish?	Yes01 No02	
K 1.10a	If yes, how many days a week?	Dave	
	Any legumes/pulses, e.g. Bengal gram, black gram		
K 1.11 K 1.11a	dal, lentil, Khesari? If yes, how many days a week?	No02 Days	[][]
K 1.12	Any milk or milk products, e.g. cow milk, buffalc milk, goat milk, yogurt, curd, cheese?	Yes01 No02	
K 1.12a	If yes, how many days a week?	Days	
K 1.13	Any foods prepared using fat, e.g., oil, butter, dalda or ghee?	Yes01 No02	
K 1.13a	If yes, how many days a week?	Days	
K 1.14	Any sugar or honey?	Yes01 No02	
K 1.14a	If yes, how many days a week?	Days	
K 1.15	Others (specify)	Yes01 No02	
K 1.15a	If yes, how many days a week?	Days	
E2 .Househo	old Food Insecurity Access Scale (HFIAS)		
Q. No.	QUESTION	CODING CATEGORIES	CODE
K 2.1	In the past four weeks, did you worry that your household would not have enough food?	Yes01 No02 (if no Skip to E2.2)	
K 2.1.a	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past four weeks)02 Often (more than ten times in the past four weeks)03	
К 2.2	In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	Yes01 No02	
K 2.2.a	How often did this happen?	Rarely (once or twice in the past four weeks)	
К 2.3	In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?	Yes01 No02	
K 2.3.a	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past four weeks)02 Often (more than ten times in the past four weeks)03	[_][_]
K 2.4	In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	Yes01 No02	[_][_]
К 2.4.а	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past	

		four weeks)02	
		Often (more than ten times in the past four	
		weeks)03	
K 2.5	In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	Yes01 No02	[_][_]
К 2.5.а	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past four weeks)02 Often (more than ten times in the past four weeks)03	
К 2.6	In the past four weeks, did you or any other household member have to eat fewer meals in a day because there was not enough food?	Yes01 No02	
K 2.6.a	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past four weeks)02 Often (more than ten times in the past four weeks)03	[_][_]
K 2.7	In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?	Yes1 No2	
К 2.7.а	How often did this happen?	Rarely (once or twice in the past four weeks)01 Sometimes (three to ten times in the past four weeks)02 Often (more than ten times in the past four weeks)03	
K 2.8	In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food?	Yes01 No02	
К 2.8.а	How often did this happen?	Rarely (once or twice in the past four weeks)	[_][_]
К 2.9	In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?	Yes01 No02 (if no this section is finished)	[_][_]
K 2.9.a	How often did this happen?	Rarely (once or twice in the past four weeks)	[_][_]
K3 .Househo	old Hunger Scale (HHS)		
K3.1	In the past 4 weeks, was there ever no food of any kind in your house because of lack of resources to get food?	Yes01 No02	
К3.2	In the past 4 weeks (30 days), did you or any household member go to sleep at night hungry because there was not enough food?	Yes01 No02	

КЗ.З	In the past 4 weeks (30 days), did you or any household member go a whole day and night without eating anything because there was not enough food?	Yes01 No02	

	HOUSE HOLD ODGE	VATION CHIPT(C)	
	HOUSE HOLD OBSER	VATION GUIDE(G)	
	VILLAGE		
	HOUSEHOLD NUMBER		
On appr	paching the house, observe the presence of the following:		
G1.1	Flies in the compound?	Yes =01, No =02	
	·	·	
G1.2	Faces on the path to the house?	Yes =01, No =02	
G1.3	Faces around the house?	Yes =01, No =02	[_]
G1.4	Faces on the courtyards/house hold inside?	Yes =01, No =02	
G1.5	Animal faces around the house?	Yes =01, No =02	
G1.6	Animal faces in the house?	Yes =01, No =02	
G1.7	Is the compound clean (swept)?	Yes =01, No =02	
G1.8	Weeds around house?	Yes =01, No =02	[_]
G1.9	Is cooked food covered?	Yes =01, No =02	
G1.10	Animals running around compound?	Yes =01, No =02	
G1.11	Waste water from washing cooked utensils	Yes =01, No =02	
G1.12	Poured in the yard?	Yes =01, No =02	
For the	following items, ask to see and physically inspect before tick	king.	
62.4	Harrish ad dishara and 2	V 04 N- 02	
G2.1	Unwashed dishes seen?	Yes =01, No =02	
G2.2	Is stored water covered?	Yes =01, No =02	
G2.3	Any house hold toilet seen?	Yes =01, No =02	
G2.4	Any house hold waste dump seen?	Yes =01, No =02	
G2.5	Faces seen in the dump?	Yes =01, No =02	
G2.6	Soap and water for hand washing seen?	Yes =01, No =02	
G2.7	Is waste well kept?	Yes =01, No =02	
	MONTHLY VOUCHER POST DISTRIBUT	ION MONITORING FORM (F)	
F1	Have you received any food voucher form barc to buy ingredients for cooking of suzi firni/halua to feed your child?	Yes =01, No =02	
	ingicalcing for cooking of suzi in infination to reed your clind:		
F1.1	Can you please show me a sample of food voucher?	Yes =01, No =02	
F2	Did anybody advice you how to use this food voucher?	Yes =01, No =02	
F3	How long it takes to go to voucher distribution centre?	/// min / / /Hr	
F4	How long you have to wait to get the voucher?	//_min //_/Hr	
		, ·	

F7	DO you face any problem to store the food ingredients	Yes =01, No =02	
F8	If yes, what sorts of problem do you usually face? 1. Eggs were rotten 2. Other relatives or family members consume the food 3. Rat or insects destroy the food 4. Others	Yes =01, No =02 Yes =01, No =02 Yes =01, No =02 Yes =01, No =02	
F9	According to the advice by "Pushti apa", do you feed your child suzi halua / firni regularly?	Yes =01, No =02	
F10	Do the food ingradients those you purchase on monthly basis through the voucher are sufficient for the baby to feed snack twice a day?	Yes =01, No =02	
F11	Do you prepare any food rather than suzi recipe from the food ingredients that you receive through the food voucher?	Verbatim 	
F12	Does your child consume the cooked suzi firni/ halua fully?	Yes =01, No =02	
F13	If no, what is the reason for not eating the cooked suzi firni/halua? A. Vomiting B. Do not want to eat the same food every day C. Problem in digestions D. Others	Yes =01, No =02 Yes =01, No =02 Yes =01, No =02 Yes =01, No =02	
F15	Besides your child, does any other family member consume the cooked suzi/firni/halua?	Yes =01, No =02	
F16	Do you face any difficulties to store the cooked suji/firni/halua?	Yes =01, No =02	
F17	If yes, what kind of difficulties do you face to store the cooked suji/firni/halua?	Verbatim	
F18	Could you please show me all of the used food voucher (collect the used food voucher from the respondents)		

INTERVIEWER ID: //_/	STUDY ID: ///
NUTRITION INTERVENTION INTEGRATED WITH FO	
BANGLA QUESTIONNAII	RE
INTERNATIONAL CENTRE FOR DIARHOEL DISE GPO BOX-128, MOHAKHALI, DHAKA-10	

Eligibility screening form selection and enrolment of subjects (B)

B1.1	আপনার কি 6 থেকে 12 মাস বয়সী শিশু সন্তান আছে?	01 = হাঁ
B1.2	আপনার সন্তানের জন্ম সাল কত? (মা যদি সঠিক ভাবে জন্ম সাল বলতে না পারে তাহলে দয়া করে টিকার কার্ড দেখে শিশুর জন্ম সাল লিখুন)	02 = না Fig. 12
B1.3	আপনাদের কি আগামী তিন মাসের মধ্যে বসত ভিটা ছেড়ে অন্য কোথাও যেয়ে বসবাস করার পরিকল্পনা আছে?	01 = হাাঁ 02 = না (if no skip to B1.5)
B1.4	যদি হাঁয হয় তাহলে কোথায় বসবাসের পরিকল্পনা আছে ? (হরিরামপুরের বাইরে হলে ধন্যবাদ দিয়ে ইন্টারভিউ শেষ করুন)	01 = হরিরামপুর উপজেলার বাইরে 02 = হরিরামপুর উপজেলার ভিতরে 03 = মানিকগঞ্জের জেলার বাইরে 99 = জানি না
B1.5	এই গবেষণায় অন্তর্ভুক্ত হওয়ার জন্য নির্বাচিত পরিবারটিকে নিম্ন লিখিত 4 টি মানদণ্ডের মধ্যে কমপক্ষে যে কোনো তিনটি পূরণ করতে হবে / কোনো পরিবার যদি তিনটি মানদণ্ডের অন্তর্ভুক্ত না হয় তাহলে ধন্যবাদ দিয়ে ইন্টারভিউ শেষ করুন	
B1.5.1	পরিবারটি কি অনিয়মিত আয়ের উৎসের উপর নির্ভরশীল ?	01 = হাাঁ 02 = না
B1.5.2	পরিবারের সর্বোচ্চ মাসিক আয় কি 8000 হাজার টাকা ?	01 = হাাঁ 02 = না
B1.5.3	অতিতে এনজিও বা অন্যান্য আর্থিক প্রতিষ্ঠানের ঋণদান কর্মসূচীতে অংশগ্রহন করেছেন?	01 = হাাঁ 02 = না
B1.5.4	পরিবারের কোন উৎপাদনশীল সম্পদ আছে কি ?	01 = হাাঁ 02 = না

INTERVIEWER ID: / /	INT	ERV	/IEV	VER	ID:	/	/ /
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SIUDI	10:/	/	/	

Household questionnaire (D)

	আপনার নাম কি ?		উত্তরদাতার নাম ঃ			
ক্রমিক নং	সাধারণ বাসিন্দা	খানা প্রধানের সহিত সম্পর্ক	পুরুষ/ মহিলা	বা	সস্থান	বয়স
	এখন আমাকে দরা করে আপনার খানায় বসবাসকারী সদস্যদের নাম বলুন(খানা প্রধানের নাম দিয়ে শুরু করুন)	খানা প্রধানের সাথে(নাম) এর সম্পর্ক কি ? (নিচের কোড দেখুন)	(নাম)পুরুষ না মহিলা	(নাম) কি রাতে থাকেন ?	(নাম) সাধারণত এখানে খান ?	(নাম) বয়স কত ? বয়স 1 বছরের নিচে হলে (০০) লিখুন
D1.1	D1.2	D1.3	D1.4	D1.5a	D1.5b	D1.6
01			মহিলা1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
02			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
03			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
04			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
05			মহিলা 1 পুরুষ2	হাঁ 1 না 2	হাঁ 1 না 2	বছর
06			মহিলা 1 পুরুষ2	হাঁ1 ना2	হাঁ 1 না 2	বছর
07			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
08			মহিলা 1 পুরুষ2	হঁা1 না2	হাঁ 1 না 2	বছর
09			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ 1 না 2	বছর
10			মহিলা 1 পুরুষ2	হাঁ1 না2	হাঁ1 না2	বছর
	সংখ্যা 10 জনের বেশী হলে ধ				-	
	র সঙ্গে সম্পর্কঃ 01=নিজে,02 , 10 = বাবা/মা, 11 = শ্বশুর/			: পুত্ৰবধু, 06 = নাতি/ন	নাতনি, 07 = ভাইবোন, 0	8 = ননদ, 09 =

NO	QUESTIONS	CODING CATEGORIES	CODE/SKIP
D2.1	আপনি বা আপনার পরিবার কোন ধর্মের অনুসারি?	01 = মুসলিম	
	(একটি মাত্র উত্তর হবে)	02 = হিন্দু	
		03 = খ্রিস্টান	
		04 = বৌদ্ধ	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
		99 = জানিনা	
D2.2	আপনি কোন জাতির অর্প্তভূক্ত?	01 = বাঙালি	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
D2.3	খানা প্রধানের প্রধান পেশা কি?	01 = দিনমজুর	
		02 = ক্ষুদ্র ব্যবসায়ী	
		03 = বড় ব্যবসায়ী	
		04 = কারখানা শ্রামিক	
		05 = সরকারী চাকুরি	
		06 = দক্ষ শ্রমিক	
		07 = অদক্ষ শ্রমিক	
		08 = কৃষক	
		09 = গবাদি পশু পালন	
		10 = হস্ত শিল্পের ব্যবসা	
		11 = গৃহপরিচারিক	
		12 = বেসরকারী চাকরী	
		77 =অন্যান্য(নির্দিষ্ট করুন)	
D2.6	আপনার পরিবারের সদস্যদের ঘুমানোর জন্য কয়টি	কন্দের সংখ্যা	
	কক্ষ আছে ?		
		IO ECONOMIC STATUS	1
NO	QUESTIONS	CODING CATEGORIES	CODE/SKIP
E1.1			
	আপনার পরিবারের সদস্যরা প্রধানত কোথাকার	01 = নিজেদের টিউবয়েল	
	পানি পান করে ?	02 = অন্যের টিউবয়েল	
		02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল	[_][_]
	পানি পান করে ?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি	[_][_]
	পানি পান করে ?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল	[_][_]
	পানি পান করে ?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর	[_][_]
	পানি পান করে ?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল)	[_][_]
	পানি পান করে ? (একটি মাত্র উত্তর হবে)	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন)	[_][_]
E1.2	পানি পান করে ?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন)	[_][_]
E1.2	পানি পান করে ? (একটি মাত্র উত্তর হবে)	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ 02 = না (if no skip to E1.4)	
E1.2	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ	
E1.2	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) বি 01 = হ্যাঁ 02 = না (if no skip to E1.4) 99 = জানিনা (ifdo,t know skip to E1.4) 01 = পানি ফুটানো	
	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ 02 = না (if no skip to E1.4) 99 = জানিনা (ifdo,t know skip to E1.4) 01 = পানি ফুটানো 02 = পানি বিশুদ্ধকরন ট্যাবলেট	
	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) র	
	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ 02 = না (if no skip to E1.4) 99 = জানিনা (ifdo,t know skip to E1.4) 01 = পানি ফুটানো 02 = পানি বিশুদ্ধকরন ট্যাবলেট	
	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ 02 = না (if no skip to E1.4) 99 = জানিনা (ifdo,t know skip to E1.4) 01 = পানি ফুটানো 02 = পানি বিশুদ্ধকরন ট্যাবলেট 03 = পানি রিফলটার 04 = পানির ফিল্টার	
	পানি পান করে ? (একটি মাত্র উত্তর হবে) আপনারা পানি বিশুদ্ধ করার জন্য কি কিছু ব্যবহ করেন?	02 = অন্যের টিউবয়েল 03 = এলাকার টিউবয়েল 04 = ট্যাপের পানি 05 = ক্য়া/ ইন্দারা 06 = পুকুর 07 = (নদী/খাল) 77 = অন্যান্য(নির্দিষ্ট করুন) ার 01 = হ্যাঁ 02 = না (if no skip to E1.4) 99 = জানিনা (ifdo,t know skip to E1.4) 01 = পানি ফুটানো 02 = পানি বিশুদ্ধকরন ট্যাবলেট 03 = পানি ছাঁকন 04 = পানির ফিল্টার	

E1.4	আপনার পরিবারের সদস্যদের গোসল, রান্না-বান্না	01 = নিজেদের টিউবয়েল	
	ও থালা-বাসন ধোয়ার জন্য ব্যবহৃত পানির প্রধান	02 = অন্যের টিউবয়েল	
	উৎস কি?	03 = এলাকার টিউবয়েল	
	(একটি মাত্র উত্তর হবে)	04 = ট্যাপের পানি	
E1.5	আপনার পরিবারের সদস্যরা কি ধরনের পায়খানা	01= আধুনিক পায়খানা (ওয়াটার সিল সহ)	
	ব্যবহার করে ?	02 = স্লাব পায়খানা (ওয়াটার সিল ছাড়া)	
	(একটি মাত্র উত্তর হবে)	03 = গর্ত তৈরি করে পায়খানা	
		03 = গত তোর করে শার্মানা 04 = কাঁচা / ঝুলন্ত পায়খানা	
		04 – খাল / খুলভ শার্থানা	
E1.6	পরিবারের ছোট বাচ্চারা কি ধরনের পায়খানা	01 = আধুনিক পায়খানা (ওয়াটার সিল সহ)	
	ব্যবহার করে ?	02 = স্লাব পায়খানা (ওয়াটার সিল ছাড়া)	
	(একটি মাত্র উত্তর হবে)	03 = গর্ত তৈরি করে পায়খানা	
	, , , , , , , , , , , , , , , , , , ,	04 = কাঁচা / ঝুলন্ত পায়খানা	
		० - पार्था / भूगांच ।। संस्थान	
F4 7	অন্য কোন পরিবার কি এই পায়খানা ব্যবহার	01 = হাাঁ	
E1.7	· ·	i i	
	করে ?	02 = না	
E1.8	এই বাড়িটি কি আপনাদের নিজের?	01 = নিজের বাড়ি	
		02 = ভাড়া	
		03 = বিনা পঁয়সায় থাকা	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
		(, , , , , , , , , , , , , , , , , , ,	
E1.9	আপনাদের কি কোন্ সবজি বা ফলের বাগান	01 = হাাঁ	
	আছে?	02 = না	
E1.10	আপনার পরিবারের কোন্ সদস্যের কৃষি জমি	01 = शाँ	
	আছে?	02 = না (if no skip to E1.12)	
		-	
E1.11	যদি হ্যাঁ হয় তাহলে কি পরিমান কৃষি জমি	, ,	
	আছে?(সকল সদস্যদের কৃষি জমি থাকলে, সবার	99=জানিনা	
	জমির পরিমান যোগ করে লিখতে হবে)		
E1.12	আপনার পরিবারের বা পরিবারের কারো কি নিম্নলিখিত জিনিস গুলো আছে?		
L1.12	and the state of t		
	a. বিদ্যুৎ	01 = হাাঁ , 02 = না	
	a. ાવળાૂલ	01 = 20, $02 = 40$	
	b. রেডিও	01 = হাাঁ , 02 = না	
	200		
	c. টেলিভিশন	01 = হাাঁ , 02 = না	
	d. মোবাইল	01 = হাাঁ , 02 = না	
	·		
	e. ল্যান্ডফোন	01 = হাাঁ , 02 = না	

	f. ফ্রিজ	01 = হাাঁ , 02 = না	
	g. আলমারি/ওয়্যারড়োব	01 = হাাঁ , 02 = না	
	h. টেবিল	01 = হাাঁ , 02 = না	
	i. চেয়ার	01 = হাাঁ , 02 = না	
	j. ঘড়ি	01 = হাাঁ , 02 = না	
	k. বাই সাইকেল	01 = হাাঁ , 02 = না	
	l. মোটর সাইকেল/স্কুটার/টেম্পো	01 = হাাঁ , 02 = না	
	m. পশু চালিত গাড়ি	01 = হাাঁ , 02 = না	
	n. কার <i>ট্</i> রাক	01 = হাাঁ , 02 = না	
	০. নৌকা	01 = হাাঁ , 02 = না	
	p. রিক * াা/ভ্যান	01 = হাাঁ , 02 = না	
E1.13	আপনাদের পরিবারের কি অন্য কোন ধরনের বিদ্যুৎ ব্যবহারের ব্যবস্থা আছে?	01 = হাঁ 02 = না (if no skip to E1.14)	
E1.13a	যদি হ্যাঁ হয় তাহলে কি ধরনের ব্যবস্থা আছে ?	01 = জেনারেটর 02 = সোলার	
E1.14	রান্নার জন্য আপনার পরিবারে প্রধানত কি ধরনের জ্বালানী ব্যবহার করা হয় ?	01 = বিদ্যুৎ 02 = এলপিজি 03 = প্রাকৃতিক গ্যাস 04 = বায়োগ্যাস 05 = কেরোসিন 06 = চারকোল 07 = কাঠ/খড় 08 = পশুর গোবর 77 = অন্যান্য(নির্দিষ্ট করুন)	
E1.15	মেঝের প্রধান উপাদান [পর্যবেক্ষণ করে লিখুন]	01 = কংক্রিট 02 = ইট/সিমেন্ট 03 = কাঠ 04 = মস্ণ কাদা 05 = টালি 06 = বাঁশ 77 = অন্যান্য (নির্দিষ্ট করুন)	

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E1.16	দেয়ালের প্রধান উপাদান [পর্যবেক্ষণ করে লিখুন]	01 = কংক্রিট	
		02 = ইট/সিমেন্ট	
		$03 = \overline{\phi}$	
		04=মসূণ কাদা	
		05 = টিনের / সি আই শীট	
		06 = পাট কাঠি	
		07 = বাঁশ / ঘাস / খড়	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
E1.17	ছাদের প্রধান উপাদান [পর্যবেক্ষণ করে লিখুন]	01 = কংক্রিট	
		02 = ইট/সিমেন্ট	
		03 = কাঠ	
		04=মসূণ কাদা	
		05 = টিনের / সি আই শীট	
		06 = পাট কাঠি	
		07 = বাঁশ / ঘাস / খড়	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
E1.18	আপনি আপনার পরিবারের মাসিক ব্যয় জানেন কি?	01 = হ্যাঁ	
		02 = না (if no skip to E2.1)	
		99 = জানিনা (if no skip to E2.1)	
E1.19	অনুগ্রহ পূর্বক আপনার পরিবারের আনুমানিক	. ,	
	মাসিক ব্যয়/খরচ বলুন ? (পরিবারের সকল সদস্য	টাকা	
	সমুহের আনুমানিক ব্যয়)		
	·	·	

Section E2- Women questionnaire

Sl	Questions/Instructions	Coding categories	Codes	Check/ Skip
E2.1	কোন মাস এবং কোন বছর আপনি জন্মগ্রহন করেছিলেন ?	মাস		
		কোন মাস জানেন না	98	
		বছর		
		কোন বছর জানেন না	9998	
E2.2	আপনার বর্তমান বৈবাহিক অবস্থা কি ?	01 = বিবাহিত		
		02 = বিচ্ছিন্না		
		03 = অবিবাহিত		
		04 = তালাকপ্রাপ্তা		
		05 = বিধবা		
E2.3	আপনি কি কখনও স্কুলে গিয়েছেন ?	01 = হাাঁ , স্কুল		If no
		02 = হাা, মাদ্রাসা		skip to
		03 = হাঁা , উভয়ই		E2.5.2
		04 = না		
E2.4	আপনি সর্বোচ্চ কতটুকু পড়ালেখা করেছেন ?	01 = প্রাথমিক		
		02 = মাধ্যমিক		
		03 = কলেজ এবং উচ্চতর		
E2.5	আপনি সর্বোচ্চ কোন শ্রেণী পাশ করেছেন ?	व्यंभी		

F2 F 4	कार्यित करू वर्ण्यव स्टब्स श्रेरालका व	ক্রত বংশ্বর	1
E2.5.1	আপনি কত বৎসর স্কুলে পড়েছেন ?	কত বৎসর	
E2.5.2	আপনি কোন্ অসুবিধা ছাড়া সহজেই যে কোন একটি	0 1= সহজেই	
	ভাষাতে চিঠি লিখতে বা পড়তে পারেন ?	02 = কঠিনভাবে	
		03 = একদমই না	
E2.6	আপনি কি সংবাদপত্ৰ বা পত্ৰিকা পড়তে পাড়েন ?	01 = হাাঁ	If no
	, ,	02 = না	skip to
			E2.7
E2.6.1	যদি হাঁয় হয় তাহলে আপনি সাধারণত কখন সংবাদপত্র বা	01 = প্রায় প্রতিদিন	
	পত্রিকা পড়েন ?	02 = সপ্তাহে অন্তত একবার	
		03 = সপ্তাহে একবারের কম	
E2.7	আপনি কি রেডিও শুনেন ?	01 = হাাঁ	If no
		02 = ना	skip to
			E2.8
E2.7.1	যদি হাঁা হয় তাহলে আপনি কখন কখন রেডিও শুনেন ?	01 = প্রায় প্রতিদিন	
		02 = সপ্তাহে অন্তত একবার	
		03 = সপ্তাহে একবারের কম	
E2.8	আপনি কি টেলিভিশন দেখেন?	01= হাাঁ	If no
		02 = না	skip to
			E2.10
E2.9	যদি হ্যাঁ হয় তাহলে আপনি কখন কখন টেলিভিশন দেখেন	01 = প্রায় প্রতিদিন	
	?	02 = সপ্তাহে অন্তত একবার	
		03 = সপ্তাহে একবারের কম	
E2.10	আপনি কি বর্তমানে কোন ধরনের কাজ করছেন ?	01 = হ্যাঁ	If no
		02 = না	skip to
			sec E3
E2.11	বর্তমানে আপনি কি ধরনের কাজ করছেন ? (বাচ্চার মা)	01 = দিনমজুর	
		02 = ক্ষুদ্ৰ ব্যবসায়ী	
		03 = বড় ব্যবসায়ী	
		04 = কারখানা শ্রমিক	
		05 = সরকারী চাকুরি	
		06 = দক্ষ শ্রমিক	
		07 = অদক্ষ শ্রমিক	
		08 = কৃষক 09 = গবাদি পশু পালন	
		09 = গ্রাণ পত পালন 10 = হস্ত শিল্পের ব্যবসা	
		10 = ২৩ শিশ্পের ব্যবসা 11 = গৃহপরিচারিক	
		11 = গৃৎপার্গার্থ 12 = বেসরকারী চাকরী	
		12 = বেশরকারা চাকরা 77 =অন্যান্য(নির্দিষ্ট করুন)	
		📗 / / —अन्यान्य(।नायड कर्यून)	

Section E-3: Husband's background					
এখন আমি আপ ভাষ	ানাকে আপনার স্বামীর বয়স,পড়াশোনা এবং কোন্ কাজক		আপনাকে কিছু প্রশ্ন জি	ঙ্গোসা করতে	
E3.1	আপনার স্বামীর বয়স কত ?	পূর্ণ বয়স লিখতে হবে			
E3.2	আপনার স্বামী কি কখনও স্কুলে গিয়েছেন ?	01 = হাা , স্কুল 02 = হাা, মাদ্রাসা 03 = হাা , উভয়ই 04 = না		If no skip to E3.4	
E3.3	আপনার স্বামী সর্বোচ্চ কোন্ শ্রেনী পর্যন্ত পড়ালেখা করেছেন ?	01 = প্রাথমিক 02 = মাধ্যমিক 03 = কলেজ এবং উচ্চতর			
E3.3.1	আপনার স্বামী কত বৎসর স্কুলে পড়েছেন ?	কত বৎসর			
E3.4	আপনার স্বামী বর্তমানে কোন্ ধরনের কাজ করছেন ?	01 = হাঁ 02 = না		If no skip to JM	
E3.4.1	আপনার স্বামী প্রধানত কি ধরনের কাজ করেন ? আপনার স্বামী মাসে কত টাকা আয় করেন ? (জানি না - 999999)	01 = দিনমজুর 02 = ক্ষুদ্র ব্যবসায়ী 03 = বড় ব্যবসায়ী 04 = কারখানা শ্রমিক 05 = সরকারী চাকুরি 06 = দক্ষ শ্রমিক 07 = অদক্ষ শ্রমিক 08 = কৃষক 09 = গবাদি পশু পালন 10 = হস্ত শিল্পের ব্যবসা 11 = গৃহপরিচারিক 12 = বেসরকারী চাকরী 77 =অন্যান্য(নির্দিষ্ট করুন)			
		টাকা			
		surement of mother (JM)			
JM1.1	উচ্চতা সে মি (১ম পরিমাপ)	c.m			
JM1.2	উচ্চতা সে মি (২য় পরিমাপ)	c.m			
JM1.3	উচ্চতা সে মি (২য় পরিমাপ)	c.m			
JM1.4	ওজন কে জি (১ম পরিমাপ)	Kg			
JM1.5	ওজন কে জি (২য় পরিমাপ)	Kg			
JM1.6	ওজন কে জি (২য় পরিমাপ)	Kg			

Child morbidity questionnaire (H) (6-23 months) আমি আপনার শিশুর (নাম) শারিরীক অবস্থা সম্পর্কে কিছু প্রশ্ন জিজ্ঞাসা করবো।

SL	Questions/Instructions	Coding categories	Codes	Skip / Check
H1.1	আপনার বাচ্চা (নাম) আজকে কেমন আছে?	01 = ভাল		If Code 4 than next
		02 = সামান্য অসুস্থ		question, other than
		03 = ভাল না		question H1.3
		04 = মারা গেছে		
H1.2	বাচ্চা কোন্ সালে কোন্ মাসে মারা গিয়েছে?			
H1.2.1	বাচ্চা মারা যাওয়ার সময় বয়স কত?	বয়স : মাস/বছর	End the	interview
H 1.3	যদি অসুস্থ হয়, তাহলে আপনার বাচ্চা কতদিন ধরে অসুস্থ?	দিন		
	গত ২ সপ্তাহে আপনার বাচ্চা নিম্নলিখিত কোন সমস্যায়			
H 1.4	বাচ্চা (নাম) কি গত দুই সপ্তাহের মধ্যে জ্বরে	01 = হ্যাঁ		
	ভূগেছে?	02 = না		If no skip to H1.6
H1.5	কত দিন ধরে আপনার বাচ্চা জ্বরে ভুগছে?	<u> </u>		
H 1.6	বাচ্চা কি গত ২ সপ্তাহের মধ্যে কখনো কাশিতে	01 = হাাঁ		
	ভূগেছে?	02 = না		If no skip to H1.8
H 1.7	কত দিন ধরে আপনার বাচ্চা কাশিতে ভূগছে?	দিন		
H 1.8	বাচ্চা কি গত ২ সপ্তাহের মধ্যে কখনো ঠান্ডা/সর্দিতে	01= হ্যাঁ	l .——	
	ভূগেছে?	02 = না		If no skip to H2.1
H.1.9	যদি হাঁ হয় , কত দিন ধরে আপনার বাচ্চা ঠান্ডা/ সর্দিতে ভুগেছে ?	<u> </u>		
এখন আমি অ	পিনার বাচ্চা (নাম) নিম্ললিখিত কোন সমস্যায় ভূগেছে বি	হ ? (সমস্যা গুলো পড়ে শোনান)		
H .2.1	ঘন ঘন নিঃশ্বাস	01 = হাাঁ		1
П .∠. I	44 44 140-4121	02 = না		
H 2.2	জোরে জোরে নিঃশ্বাস	01 = হ্যাঁ		
		02 = ना		
H .2.3	বুকের পাঁজর দেবে যাওয়া	01 = হ্যাঁ		
		02 = না		
H2.1 থেকে	H 2.3 চেক করুন । যদি এক বা একধিক উত্তর হাঁ বৃ	ত্তায়িত হয় তবে H2.4 এ যান । অন্যথায়	H 2.5 তে	যান ।
H 2.4	কতদিন ধরে আপনার বাচ্চা উপরোক্ত শ্বাসকষ্টজনিত	দিন		
	অসুস্থতায় ভূগছে?			
H2.5	আপনি কি আপনার বাচ্চার	01 = হাাঁ		
	জ্বর/সর্দি/কাশি/শ্বাসকষ্ট/বুকের পাঁজর দেবে যাওয়া	02 = না		
	ইত্যাদি ব্যাপারে কোন চিকিৎসা বা পরামর্শ			
	নিয়েছেন?			

H2.7	আপনার বাচ্চা (নাম) কি এখনো অসুস্থ আছে?	01 = শুধুমাত্র জ্বর		
		02 = শুধুমাত্র কাশি		
		03 = জ্বর ও কাশি উভয়ই		
		04 = কোনটাই না		
H 2.8	গত ২ সপ্তাহে আপনার বাচ্চা (নাম) কি ডায়রিয়ায়	01 = হাাঁ		
11 2.6	ज्या हिला ?			
	্র্যাখণোর (গত ২৪ ঘন্টায় ৩ বারের বেশি পানির মত পাতলা	02 = না		
	`			
11.2.0	পায়খানা হলে)	01 -*		
H 2.9	আমাশয়ে ভূগেছিলো?	01 = হাাঁ		
	(পায়খানার সাথে মিউকাস এবং রক্ত আসলে)	02 = না		
H2.8 থেকে	H 2.9 চেক করুন । যদি এক বা একধিক উত্তর হাঁ	বৃত্তায়িত হয় তবে H 2.10 এ যান । অন	্যথায় H 2.14 ব	ত যান ।
H2.10	কতদিন ধরে আপনার বাচ্চা ডায়রিয়া/আমাশয়ে	দিন		
	ভুগছে?			
H2.11	ডায়রিয়া/আমাশয়ের জন্য আপনি কি কোন্	01 = হ্যাঁ		
112.11	চিকিৎসা/পরামর্শ নিয়েছেন?	02 = না		
H2.13	আপনার বাচ্চা (নাম) কি এখনো ডায়রিয়া/আমাশয়ে	02 = শ 01 = হাাঁ		
П2.13	` ,	· ·		
	ভূগছে?	02 = না		
H2.14	গত ২ সপ্তাহে আপনার বাচ্চার (নাম) চোখে কোন	01 = হ্যাঁ		
	সমস্যা হয়েছিলো কি?	02 = না		If no skip to
	যেমনঃ লাল হয়ে যাওয়া, পানি পড়া, পিচুটি হওয়া			H2.17
	ইত্যাদি			
H2.15	আপনি কি বাচ্চার চোখের সমস্যার ব্যাপারে কোন	01 = হাাঁ		
	চিকিৎসা/পরামর্শ নিয়েছিলেন?	02 = না		
H2.17	গত ২ সপ্তাহে আপনার বাচ্চার (নাম)	01 = হ্যাঁ		
П2.17	চুলকানি/চর্মরোগ/র্যাশজাতীয় কোন সমস্যা	'		If no oldin to
	l '	02 = না		If no skip to
	হয়েছিলো কি?			H2.19
H2.18	আপনি কি চুলকানি/চর্মরোগ/র্যাশজাতীয় সমস্যার	01 = হ্যাঁ		
	জন্য কোন চিকিৎসকের পরামর্শ নিয়েছিলেন?	02 = না		
		02 = 11		
110 5 110 1	1 112 15 112 10			1 1
H2.5 ,H2.1	1,H2.15,H2.18 চেক করুন । যদি এক বা একধিক	৬ওর হা বৃত্তাায়ত হয় তবে H 2.19 এ ফ	ধান । অন্যথা য় 📗	1.1 তে যান ।

H2.19	H2.5, H2.11, H2.15, H2.18 যেকোন্ একটা	সরকারী	
	হ্যাঁ হয় তাহলে পরামর্শের জন্য কোথায় গিয়েছেন?	01 = সদর হাসপাতাল	
		02 = উপজেলা স্বাস্থ্য কমপ্লেক্স	
		03 = পরিবার কল্যান কেন্দ্র	
		04 = কমিউনিটি ক্লিনিক	
		প্রাইভেট	
		05 = প্রাইভেট হাসপাতাল	
		06 = প্রাইভেট ক্লিনিক	
		07 = ফার্মেসী	
		08 = প্রাইভেট ডাক্তার চেম্বার	
		<u>এনজিও</u>	
		09 = স্থায়ী ক্লিনিক	
		10 = অস্থায়ী ক্লিনিক	
		77 = অন্যান্য(নির্দিষ্ট করুন)	
H2.20	যদি আপনার বাচ্চাকে কোন চিকিৎসকের	/ / / / / /	
	কাছে/হাসপাতালে নিয়ে যেয়ে থাকেন তাহলে	টাকা	
	যাতায়াত বাবদ কত খরচ হয়েছিলো?		
H2.21	সেবা/ডাক্তারের ফিস বাবদ কত টাকা খরচ হয়েছিল?	///// টাকা	
110.00	The state of the s		
H2.22	যদি আপনার বাচ্চাকে বাড়িতে চিকিৎসা করিয়ে থাকেন, তবে ওষুধ বাবদ কত খরচ হয়েছিলো?	//////	
	(চিকিৎসার নামসহ খরচ লিখুন)	١٦٠١	
	(ויצויין טאר צויירווי אווירידוטו)		

Child feeding Ouestionnaire (I)

SL	Questions/Instructions	Coding categories	Codes	Skip/Chec k
I1.1	আপনার বাচ্চা (নাম) কি এখনও বুকের দুধ খাচ্ছে ?	01 = হ্যাঁ 02 = না		If yes ,skip to I 1.4
I1.2	আপনার বাচ্চা কে কবে থেকে বুকের দুধ খাওয়ানো বন্ধ করেছেন ?	//// জানি না = 99		
I1.3	আপনার বাচ্চা কে কেন বুকের দুধ খাওয়ানো বন্ধ করেছেন ? A. বাচ্চা অনেক কান্নাকাটি করে B. বাচ্চা পরিমিত দুধ পায় না C. বাচ্চা অসুস্থ D. মা অসুস্থ E. মায়ের বুকে পর্যাপ্ত পরিমাণ দুধ নাই F. মা বুকের দুধ দিতে অনিচ্ছুক G. পারিবারিক বাধা H. বন্ধু বা প্রতিবেশী দ্বারা প্রভাবিত I. অন্যান্য(নির্দিষ্ট করুন)	01 = 20, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 4001 = 20$, $02 = 40$		

দয়া করে বলবেন কি আপনার বাচ্চা (নাম) গতকাল সারাদিনে ও রাতে ঘরে অথবা বাহিরে কি কি খেয়েছিলো ? চিন্তা করে দেখুন তো গতকাল আপনার বাচ্চা (নাম) সকালে কখন উঠেছিলো ? তখন কি সে কিছু খেয়েছিলো ? যদি "হাঁ" হয় তাহলে দয়া করে বলুন কি কি খেয়েছিলো ? (প্রোব করুন) যে সব খাবারের কথা বলে । যদি "না" হয় তাহলে প্রশ্ন নাম্বার বি তে যান । বি. তারপরে (নাম) কি করেছিলো ? তখন কি সে কিছু খেয়েছিলো ? পুনরায় জিজ্ঞাসা করুন বি । এভাবে পরের দিনে ঘুমানোর আগ পর্যন্ত যা যা খেয়েছিলো তা উত্তর দাতার কাছ থেকে জিজ্ঞাসা করুন । যদি উত্তর দাতা মিশ্র খাবারের কথা বলে যেমন খিচুরী, জাউ, ইত্যাদি কি কি উপাদান দিয়ে মিশ্র খাবার তৈরী হয়েছিলো তা উত্তর দাতার কাছ থেকে আনতে হবে । (প্রোব করুন) । সি. উত্তরদাতা যে সকল খাবারের নাম গুলো বলতে পারবে, তালিকায় সে সকল খাবারের নীচে দাগ দিন এবং 01 কে সার্কেল করুন। যদি খাবারটি খাবার গ্রুপে না থাকে তাহলে খাবারটি অন্যান্য খাবারের বস্কুটিতে লিখতে হবে । যদি কোন মশলা খাবারের মধ্যে সামান্য পরিমানে

No.	Questions and Filters			Coding categories		Skips	
Frequency of 24 hr Recal 11.4							
I1.4	Questions/Instructions	কোড	হাাঁ	না	জানি না	কতবার	
A	জাউ,পাউরুটি, ভাত, নুডলস অথবা অন্যান্য খাদ্য যা শস্য কনা থেকে তৈরী হয়েছে ।	A	01	02	99	কতবার /// জানি না ///	
В	মিষ্টি কুমড়া, গাজর,মিষ্টি আলু অথবা যে কোন হলুদ বা কমলা রঙের সবজি।	В	01	02	99	কতবার /// জানি না ///	
С	সাদা আলু অথবা অন্য কোন মুল জাতীয় খাবার ।	С	01	02	99	কতবার //_/ জানি না //_/	
D	যে কোন ধরনের গাঢ় সবুজ শাক সবজি	D	01	02	99	কতবার //_/ জানি না ///	
Е	পাকা আম, পাকা পেঁপে, পাকা তাল অথবা স্থানীয় কোন ভিটামিন এ সমৃদ্ব ফল ।	Е	01	02	99	কতবার /// জানি না ///	
F	অন্যান্য ফল এবং সবজি	F	01	02	99	কতবার /// জানি না ///	
G	কলিজা, গুর্দা, হ্রদপিড অথবা এ ধরনের অঙ্গ-প্রত্যঙ্গ জাতীয় মাংস	G	01	02	99	কতবার /// জানি না ///	
Н	যে কোন মাংস যেমন গরু, খাশি, ভেড়া, মুরগী বা হাঁস	Н	01	02	99	কতবার /// জানি না ///	
I	ডিম	I	01	02	99	কতবার /// জানি না ///	
J	তাজা মাছ অথবা শুটকি মাছ, সামুদ্রিক মাছ	J	01	02	99	কতবার //_/ জানি না ///	
K	ডাল, মটর, ছোলা, বাদাম জাতীয় খাবার	K	01	02	99	কতবার /// জানি না ///	
L	পনির, দই, অন্যান্য দুধ জাতীয় খাবার	L	01	02	99	কতবার /// জানি না ///	
M	সুজি/ফিরনি/হালুয়া	M	01	02	99	কতবার /// জানি না ///	
N	তেল, চর্বি মাখন, ঘি, অন্যান্য তেল জাতীয় খাবার	N	01	02	99	কতবার //_/ জানি না ///	
0	যে কোন ধরনের মিষ্টি খাবার যেমন চকলেট, মিষ্টি. কেক বিশ্ধিট ইত্যাদি	0	01	02	99	কতবার /// জানি না ///	

P	মসলা জাতীয় খাবার যা স্বাদ বাড়ায় যেমন হলুদ,	P	01	02	99	কতবার ///	
	মরিচ গুড়া, মাছ- মাংসের মসলা, ধনিয়া পাতা					জানি না //	
	ইত্যাদি						
পানি বা তরল জ	গতায় খাবার						
Q	শৃধুমাত্র পানি	Q	01	02	99	কতবার //_	
	,					জানি না ///	
R	ব্যাণিজ্যিকভাবে তৈরিকৃত গুড়া দুধ	R	01	02	99	কতবার ///	
						জানি না ///	
S	গরুর দুধ/ছাগলের দুধ	S	01	02	99	কতবার / / /	
5	111111111111111111111111111111111111111	5	01	02		জানি না ///	
						O(11-1-11-17-17-17-17-17-17-17-17-17-17-17	
T	জুঁস	T	01	02	99	কতবার //_	
						জানি না ///	
U	পাতলা জাউ	U	01	02	99	কতবার ///	
						জানি না ///	
V	অন্যান্য তরল জাতীয় খাবার	V	01	02	99	কতবার / / /	
•	1, 51, 51, 51, 51, 51, 51, 51, 51, 51, 5	•		02		জানি না ///	
						O(11-1-11 ///	
I1.4.1	গতকাল দিনে ও রাতে আপনার বাচ্চা কতবার	কতবার ,	<u></u>	•			
	তরল, আধাশক্তএবং শক্তখাবার খেয়েছে ? জানি না ///						
T1 6							
I1.5	এখন আমি আপনাকে কিছু প্রশ্ন করবো : আমার সাথে						
	কিছু খাইয়েছেন ? গত সাত দিনের মধ্যে নীচের খাবার বাচ্চাটির (নাম) গত ৭ দিনে বা রাতে ঘরে বা বাহিরে					निरंत्रहरून । निर्धा करत वनार्यन । व	
	যদি উত্তর দাতা মিক্স খাবার এর কথা বলে যেমন সুঙি	- 1				ান দিয়ে মিকা খাবাব কৈবী	
	হয়েছিলো তা উত্তর দাতার কাছ থেকে আনতে হবে ।	, ,	- ,	4 0) 11 14	4 14 0 114		
	উত্তরদাতা যে সকল খাবারের নাম গুলো বলতে পারবে		` /	খাবাবেব	নীচে দাগ ি	নন এবং 01 সার্কেল কবলন । যদি	
	খাবার টি লিস্টেট খাবার গ্রুপে না থাকে তাহলে খাবার	*					
	সামান্য পরিমান ব্যবহার করা হয় তাহলে তাও উল্লেখ				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	উত্তরদাতার দেয়া খাবারগুলোকে তালিকা ভুক্ত করতে			ৰ্কল করা	হয়নি সেখা	নে জিজ্ঞাসা করতে হবে মা ঐ	
	খাবার টি গতকাল দিনে বা রাতে খাইয়েছিলো কিনা ?						
	তাহলে 99 সার্কেল করুন ।						
	অন্যান্য						
	যে সকল খাবার লিষ্টের মধ্যে নাই দয়া করে তা নীচে	লিখুন যা ব	াচ্চা (নাম) ে	ক খাওয়া	নো হয়েছি	नो ।	
I1.5.1	আপনার বাচ্চাকে গত ৭ দিনে কোন্ ইনফ্যান্ট ফর্মুলা	01 = 0				If no/don't know	
	(যেমন: বায়োমিল, ইনফামিল্ক, ল্যাকটোজেন)	02 = 1				skip to I1.6.1	
	দিয়েছেন কি?		জানি না				
I1.5.2	আপনার বাচ্চাকে কতবার ইনফ্যান্ট ফর্মুলা দেয়া		দিনে একবার -				
	रसिष्ट ?		দিনে দুইবার			$\neg \mid$	
		03 =	দিনে দুইবারে	রর বেশী		_	
		04 =	সপ্তাহে একব	ার			
			সপ্তাহে দুইবা				
		06 =	সপ্তাহে দুইবা	রের বেশী	†		

তিহু লাল বা প্রকাশ হাগলের দুধ) দিয়েছেন	/don't know co I1.7.1 /don't know co I1.8.1
The second state of the second states and states are states and states and states are states are states and states are states	/don't know
আপনার বাচ্চাকে গত ৭ দিনে দই খাওয়াইছেন?	
তি = না 99 = জানি না 11.7.2 আপনার বাচ্চাকে কতবার দই দেয়া হয়েছে ? 01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারর 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
তি = না 99 = জানি না 11.7.2 আপনার বাচ্চাকে কতবার দই দেয়া হয়েছে ? 01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারর 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
া 11.7.2 আপনার বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 আপনার বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দেইবারের বেশী বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার দই দেয়া হয়েছে ? 11.7.2 তা বিদ্যালয় বাচ্চাকে কতবার বিদ্যালয় বাচ্চাকে বাহে বাচ্চাকে বাচ্চাকে বাচ্চাকে বাচ্চাকে বাচ্চাকে বাচ্চাকে বাচ্চাকে	
02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
06 = সপ্তাহে দুইবারের বেশী	
I1.8.1 আপনার বাচ্চাকে গত ৭ দিনে পাতলা জাউ $01= \overline{ ext{2}}$ ে াব	
	don't know
	to I1.9.1
99 = জানি না	
I1.8.2 আপনার বাচ্চাকে কতবার পাতলা জাউ দেয়া হয়েছে $01 = $ দিনে একবার	
? 02 = দিনে দুইবার	
03 = দিনে দুইবারের বেশী	
04 = সপ্তাহে একবার	
05 = সপ্তাহে দুইবার	
06 = সপ্তাহে দুইবারের বেশী	
I1.9.1 আপনার বাচ্চাকে গত ৭ দিনে সুজি/ফিরনি/হালুয়া $01 = হ্যাঁ$ If no/	don't know
	to I1.10.1
99 = জানি না	
I1.9.2 আপনার বাচ্চাকে কতবার সুজি/ফিরনি/হালুয়া দেয়া 01 = দিনে একবার	
হয়েছে ?	
03 = দিনে দুইবারের বেশী	
04 = সপ্তাহে একবার	
05 = সপ্তাহে দুইবার	
06 = সপ্তাহে দুইবারের বেশী	
	don't know
খাবার দেওয়া হয়েছে কি? $02 = \pi$ skip t	o I1.11.1
99 = জানি না	

I1.10.2	আপনার বাচ্চাকে কতবার অন্য কোন তরল খাবার	01 = দিনে একবার	
11.10.2	দেয়া হয়েছে ?	02 = দিনে দুইবার	
		03 = দিনে দুইবারের বেশী	
		04 = সপ্তাহে একবার	
		05 = সপ্তাহে দুইবার	
		06 = সপ্তাহে দুইবারের বেশী	
I1.11.1	আপনার বাচ্চাকে গত ৭ দিনে জাউ, পাউরুটি,ভাত,	01 = হাঁ	If no/don't know
11.11.1	নুডুলস অথবা অন্যান্য খাদ্য যা শস্য কনা থেকে তৈরী	02 = না	skip to I1.12.1
	হয়েছে এমন খাবার দেওয়া হয়েছে কি ?	02 – শ 99 = জানি না	3Kip to 11.12.1
I1.11.2	আপনার বাচ্চাকে কতবার জাউ, পাউরুটি,ভাত,	01 = দিনে একবার	
	নুডুল্স অথবা অন্যান্য খাদ্য যা শস্য কনা থেকে তৈরী	02 = দিনে দুইবার	
	হয়েছে এমন খাবার দেওয়া হয়েছে?	03 = দিনে দুইবারের বেশী	
		04 = সপ্তাহে একবার	
		05 = সপ্তাহে দুইবার	
		06 = সপ্তাহে দুইবারের বেশী	
I1.12.1	আপনার বাচ্চাকে গত ৭ দিনে মিষ্টি কুমড়া, গাজর বা	01 = হ্যাঁ	If no/don't know
	মিস্টি আলূ অথবা যে কোন হলুদ বা কমলা রঙের	02 = না	skip to I1.13.1
	সবজি দেওয়া হয়েছে কি ?	99 = জানি না	
I1.12.2	আমার সাথে শেষ সাক্ষাতের পর আপনার বাচ্চাকে কি	01 = হাাঁ	
11.12.2	প্রথমবার মিষ্টি কুমড়া, গাজর বা মিস্টি আলু অথবা যে	01 = হ্যা 02 = না	
	কোন হলুদ বা কমলা রঙের সবজি দেয়া হয়েছে ? (
	খাদ্য তালিকা চেক করুন)	99 = জানি না	
I1.12.3	আপনার বাচ্চাকে গত ৭ দিনে কতবার মিষ্টি কুমড়া,	01 = দিনে একবার	
11.12.5	গাজর বা মিস্টি আলূ অথবা যে কোন হলুদ বা কমলা	02 = দিনে দুইবার	
	রঙের সবজি দেয়া হয়েছে ?	03 = দিনে দুইবারের বেশী	
		03 = শংশ বুংগারের বেশা	
		05 = সপ্তাহে দুইবার	
		05 = শঙাহে নুহবারের বেশী	
		00 = गजादर पूर्याद्यंत्र द्या	
I1.13.1	আপনার বাচ্চাকে গত ৭ দিনে আলু অথবা অন্য কোন	01 = হাাঁ	If no/don't know
11.13.1	মুল জাতীয় খাবার দেওয়া হয়েছে কি?	02 = না	skip to I1.14.1
	a variation in the second constitution of the se	99 = জানি না	3KIP to 11.14.1
I1.13.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার আলু অথবা	01 = দিনে একবার	
	অন্য কোন মুল জাতীয় খাবার দেয়া হয়েছে ?	02 = দিনে দুইবার	
		03 = দিনে দুইবারের বেশী	
		04 = সপ্তাহে একবার	
		05 = সপ্তাহে দুইবার	
		06 = সপ্তাহে দুইবারের বেশী	
I1.14.1	আপনার বাচ্চাকে গত ৭ দিনে যে কোন গাঢ় সবুজ	01 = হাাঁ	If no/don't know
	শাকসবজি দেওয়া হয়েছে কি?	02 = না	skip to I1.15.1
	, , ,	02 – শ 99 = জানি না	5.5.p to 11.13.1
		77 — VIII 11	

I1.14.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার যে কোন ধরনের গাঢ় সবুজ শাকসবজি খাবার দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার	
I1.15.1	আপানর বাচ্চাকে গত ৭ দিনে পাকা আম, পাকা পেঁপে,পাঁকা তাল, অথবা স্থানীয় কোন ভিটামিন এ সমৃদ্ব ফল দেওয়া হয়েছে কি ?	06 = সপ্তাহে দুইবারের বেশী 01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.16.1
I1.15.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার পাকা আম, পাকা পেঁপে,পাঁকা তাল, অথবা স্থানীয় কোন ভিটামিন এ সমৃদ্ব ফল দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.16.1	আপানর বাচ্চাকে গত ৭ দিনে অন্যন্য ফল এবং সবজি দেওয়া হয়েছে কি?	01 = হাাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.17.1
I1.16.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার অন্যান্য ফল এবং সবজি দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবারের বেশী	
I1.17.1	আপনার বাচ্চাকে গত ৭ দিনে কলিজা,গুর্দা, স্বৎপিভ অথবা এ ধরনের অঙ্গ- প্রত্যঙ্গ জাতীয় মাংস দেওয়া হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.18.1
I1.17.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার কলিজা,গুর্দা, হৃৎপিন্ড অথবা এ ধরনের অঙ্গ- প্রত্যঙ্গ জাতীয় মাংস দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবারর 06 = সপ্তাহে দুইবারের বেশী	
I1.18.1	আপনার বাচ্চাকে গত ৭ দিনে যে কোন মাংস যেমন গরু, খাশি, ভেড়া, মুরগী বা হাঁস মাংশ দেওয়া হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.19.1
I1.18.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার তাকে যে কোন মাংস যেমন গরু, খাশি, ভেড়া, মুরগী বা হাঁস দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	

I1.19.1	আপনার বাচ্চাকে গত ৭ দিনে ডিম খাওয়ানো হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.20.1
I1.19.2	আপনার বাচ্চাকে গত ৭ দিনে কতবার ডিম দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.20.1	আপনার বাচ্চাকে গত ৭ দিনে শুটকি মাছ বা সামুদ্রিক মাছ দেওয়া হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.21.1
I1.20.2	গত ৭ দিনে কতবার শুটকি মাছ বা সামুদ্রিক মাছ দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.21.1	আপনার বাচ্চাকে গত ৭ দিনে মটরশুটি, ডাল,গম, মসুর দানা, বাদাম অথবা বিচি জাতীয় খাবার দেওয়া হয়েছে কি ?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.22.1
I1.21.2	গত ৭ দিনে কতবার মটরশুটি, ডাল,গম, মসুর দানা, বাদাম অথবা বিচি জাতীয় খাবার দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.22.1	আপনার বাচ্চাকে গত ৭ দিনে পনির, দই, অন্যান্য দুধ জাতীয় খাবার দেওয়া হয়েছে কি ?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.23.1
I1.22.2	গত ৭ দিনে কতবার পনির, দই, অন্যান্য দুধ জাতীয় খাবার জাতীয় খাবার দেওয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.23.1	আপনার বাচ্চাকে গত ৭ দিনে তেল চর্বি মাখন, ঘি, অন্যান্য তেল জাতীয় খাবার দেওয়া হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.24.1

I1.23.2	গত ৭ দিনে কতবার তেল চর্বি মাখন, ঘি, অন্যান্য তেল জাতীয় খাবার জাতীয় খাবার দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.24.1	আপনার বাচ্চাকে গত ৭ দিনে যে কোন ধরনের মিষ্টি খাবার যেমন চকলেট, মিষ্টি, কেক,বিস্কিট ইত্যাদি দেওয়া হয়েছে কি?	01 = হ্যাঁ 02 = না 99 = জানি না	If no/don't know skip to I1.25.1
I1.24.2	গত এক ৭ দিনে কতবার যে কোন ধরনের মিষ্টি খাবার যেমন চকলেট, মিষ্টি, কেক,বিস্কিট ইত্যাদি জাতীয় খাবার দেয়া হয়েছে ?	01 = দিনে একবার 02 = দিনে দুইবার 03 = দিনে দুইবারের বেশী 04 = সপ্তাহে একবার 05 = সপ্তাহে দুইবার 06 = সপ্তাহে দুইবারের বেশী	
I1.25.1	আমার শেষ সাক্ষাতের পর থেকে এ পর্যন্ত আপনার পরিবারের কোন সদস্য, বন্ধুবান্ধব ছাড়া অন্য কেউ কি আপনাকে সাক্ষাৎ করে বাচ্চাকে কিভাবে খাওয়াবেন সে ব্যাপারে পরামর্শ দিয়েছিলেন ?	01 = মা নিজেই 02 = স্বামী 03 = প্রতিবেশী 04 = পুষ্টি কর্মী 05 = স্বাস্থ্য সেবিকা	
I1.25.2	আমার শেষ সাক্ষাতের পর থেকে এ পর্যন্ত কতবার আপনার সাথে তিনি সাক্ষাৎ করেছেন?	01 = একবার 02 = পরিদর্শন করে নাই সংখ্যা	

Handwashing and food safety questioonaire (J)

No.	Questions and Filters		Coding categories	Code	Skip/check
			0 0		•
J1.1	আপনি কখন কখন হাত ধোন ?				
	· · · · · · · · · · · · · · · · · · ·		01 =হাাঁ, 02 = না		
	B. খাবার পরিবেশন বা বাচ্চাকে খাওয়ানোর আগে		v		
			01 = হাাঁ, 02 = না		
	C. কাঁচা মাংস/মুরগী/মাছ/সবজি ধরার পর বা	কাটাকুটি			
	করার পর ধোয়া হয়		01 = হ্যাঁ, 02 = না		
	D. পায়খানা/টয়লেট ব্যবহার করার পর 🛮 হাত	ব্যায়া	01 - 02 -		
	रश -		01 = হ্যাঁ, 02 = না		
	E. বাচ্চা পায়খানা করলে তাকে পরিস্কার করা	র পর হাত	01 + 00 -		
	ধোয়া হয়		01 = হ্যাঁ, 02 = না		
	F. নাক পরিস্কারের পর বা ঝাড়ার পর হাত ধে	ায়া হয়	01 = হ্যাঁ, 02 = না		
J1.2	আপনি কিভাবে হাত ধৌত করেন ?				
	A. শুধু মাত্র পানির ধারা দিয়ে		01 = হ্যাঁ, 02 = না		
	D		01 = 00 =		
	B. সাবান এবং পানি দিয়ে		01 = হ্যাঁ, 02 = না		
			01 = হ্যাঁ, 02 = না		
	C. ছাই, বালি, মাটি এবং অন্য কিছু দিয়ে-		01 = 31, 02 = 41		
J1.3	আপনি কিভাবে হাত শুকান ?				
01.5	A. যে কোন কাপড় বা তোয়ালে দিয়ে		01 = হাাঁ, 02 = না		
	B. পরিস্কার তোয়ালে দিয়ে		01 = হাাঁ, 02 = না		
	C. বাতাসের সাহায্যে		01 = হ্যাঁ, 02 = না		
	D. হাত শুকানো হয় না		01 = হাাঁ, 02 = না		
		, in the second			
	Kitchen c	onditon	(observation)		
J2.1	রান্না ঘরের ধরন ?	01 = নিজ্	ī		
		02 = যৌথ			
J2.2	রান্না ঘর কেমন ? রান্না ঘর (দৃশ্যত)	01 = পরিং	ক্ষার (দৃশ্যত) পরিপাটি		
	6 6 6 6		রছন্ন (দৃশ্যত) অপরিপাটি		
			" (
J2.3	ময়লা আবর্জনা কিভাবে অপসারন করা হয় ।	01 = ময়লা	আবর্জনা ফেলার জায়গা		
	?	রান্না ঘরে অ	াছে		
		02 = ময়লা	া আবৰ্জনা উঠানে ফেলা হয়		
J2.4	রান্না ঘরের ভিতরে/ খাবার তৈরীর জায়গায়				
	অথবা খাবারে (কাঁচা অথবা রান্না করা				
	খাবার) কোন পোকা/ কীটপতঙ্গ/ প্রানী				
	আছে কি ?				
		01 = হ্যাঁ, (
		01 = হাাঁ, 02 = না			
	C. প্রানী	01 = হ্যাঁ, (02 = না		

					I	
J2.5	বাচ্চার খাবার কোথায় তৈরী করা হয় ?	0.4				
	মেঝের উপর	01 = ফাঁ, (
	টেবিলের উপর	01 = হাাঁ, ()2 = না			
	Caalinaa	md wahaat	:(: t)			
Cooking and reheating (interview) J3.1 বাচ্চার খাবার কিভাবে রান্না/ তৈরী করা হয় ?						
J3.1	A. আলাদা করে রান্না হয়	Í				
	B.পরিবারের জন্য রান্না করা খাবার		01 = হ্যাঁ, 02 = না			
	থেকেই বাচ্চার খাবার দেয়া হয়		01 = হাাঁ, 02 = না			
			, o =			
J3.2	বাচ্চার রান্না করা খাবার কিভাবে সংরক্ষন ক	ৱা হয় ?				
	A. মাছি/তেলা পোকা বা পোষা প্রানী		01 = হ্যাঁ, 02 = না			
	করার জন্য বাড়তি খাবার <i>ঢে</i> কে রাকা	হয়				
	B. খাবার ফ্রিজে রাখা হয়		01 = হ্যাঁ, 02 = না			
	C. বাচ্চার খাবার সংরক্ষন করা হয় না	দাথে সাথে				
	খাওয়ানো হয়		01 = হাাঁ, 02 = না			
	D. ঘরের তাপমাত্রায় চার ঘন্টার বেশী রাখ	হয়	01 = হ্যাঁ, 02 = না			
	E. বাচ্চা রান্না করা তৈরী খাবার দুই ঘ	টাৰ সংগ্ৰ				
	চ. বাজা নান্না করা তেলা বাবার বুব ব বাচ্চাকে খাওয়ানো হয়	المام المال	01 = হ্যাঁ, 02 = না			
	F. আপনি কি সংরক্ষিত খাবার বাচ্চাকে		01 = হ্যাঁ, 02 = না			
	খাওয়ানোর আগে আবার গরম করে নেন ?		01 = \$1, 02 = 11			
	Hand washing faciliti	es (obser	vation)			
J3.3						
03.3	A. বাড়ীতে কোন স্থানে সাবান আছে কিনা:	,	01 = হ্যাঁ, 02 = না			
	B. হাত ধোয়ার জন্য নিদিষ্ট জায়গা আছে ি		01 = হাাঁ, 02 = না			
	C. পর্যবেক্ষনের সময় হাত ধোয়ার জন্য নিদি		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	পানি আছে কিনা ?		01 = হ্যাঁ, 02 = না			
	D. পর্যবেক্ষনের সময় হাত ধোয়ার জন্য নিণি	নষ্ট জায়গায়	ŕ			
	হাত ধোয়ার সরন্জাম যেমন সাবান এবং পা	নি আছে	01 = হ্যাঁ, 02 = না			
	কিনা?					
	State of the kitcher	n(observa	ntion)			
J4.1	উঠানের অবস্থা পর্যবেক্ষন					
J4.1	E. উঠান ঝাড় দেওয়ার সময় বাচ্চারা কোথা	য় খেলে				
	দেখুন?		01 = হ্যাঁ, 02 = না			
	F. পর্যবেক্ষনের সময় হাঁস মুরগীর মল কোথ	ও দৃশ্যমান	, o =			
	হয়েছে কি ?	`	01 = হ্যাঁ, 02 = না			
	G. পর্যবেক্ষনের সময় মানুষের মল কোথাও ।	ৃশ্যমা ন				
	হয়েছে কি ?		01 = হ্যাঁ, 02 = না			
	 H. পর্যবেক্ষনের সময় পশু পাখির মল কোথা হয়েছে কি ? 	ও দৃশ্যমান				
	₹696₹14°;		01 = হ্যাঁ, 02 =না			

Module K: Household Food Consumption and Food Security

Q. No.	QUESTION	CODING CATEGORIES	CODE
	গত 7 দিনে কত দিন আপনি ও আপনার পরিবা	রের সদস্যরা নিমুলিখিত খাবারগুলোগ্রহণ করেছেন?	
	অল্প(1 চামচের কম)পরিমাণ হলে 00 কোড করু		
K1.1	শস্যঃ ভাত, রুটি, গম, পাউরুটি, চালের গুড়া, মুর্ণি	ড়, বার্লি, গমের ভূষি, পপকর্ণ ?	
12111	01 = হাাঁ, 02 = না (If no skip to K1.3))	
K1.2	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K1.3	কোন সাদা আলু, মিষ্টি আলু, রাঙ্গা আলু অথবা ও 01 = হ্যাঁ, 02 = না (If no skip to K1.5)		
K1.4	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?) দিন	
K1.5	কোন ডাল জাতীয় খাবার যেমন ছোলা, মুগ, মসু $01 = \overline{\text{vii}}, 02 = \overline{\text{ni}} \text{ (If no skip to K1.7)}$		
K1.6	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	<i>)</i> দিন	
	411 OT (4, 5126 1 115162 4 5141;		
K1.7	-3	এবং সজনে পাতা, কোন হলুদু বা কমলা রঙের সবজি	
		া সবজি যেমন শসা, মূলা, মরিচ, ফুলকপি, বাধাকপি	
****	ইত্যাদি? $01=$ হ্যাঁ, $02=$ না (If no skip to	<u>'</u>	
K1.8	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K1.9	পাকা পেঁপে, আম, অথবা অন্য কোন হলুদ বা	কমলা রঙের ফল, অন্য যে কোন ফল যেমন কলা,	
	পেপে, সিতফল, আঙ্গুর, আপেল, কমলা, কাঁঠা ইত্যাদি?	ল, জামু ফল, বরই, তরমুজ, টমেটো, খেঁজুর, লেবু	
K1.10	01 = হাাঁ, 02 = না (If no skip to K1.11	<u>)</u> দিন	
	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?		
K 1.11	7 3 7	ট্, মেষ অথবা ভঁকরের মাংস, টাটকা মাছ, ভঁটকি	
	মাছ বা শেলফিশ অথবা ডিম? $01=হ্যাঁ, 02=$,	-
K 1.12	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K 1.13	গরু, ছাগল বা মহিষের দুধ, গুঁড়া দুধ অথবা দই,	পনির?	
	01 = হ্যাঁ, 02 = না (If no skip to K1.15		
K 1.14	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K 1.15	তেল, বাটার, ডালডা, ঘি, অথবা যে কোনো খাব	ার যা তেল দ্বারা তৈরি?	
	01 = হ্যাঁ, 02 = না (If no skip to K1.17	()	
K 1.16	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K 1.17	চিনি, অথবা মধু?	1	
	01 = হাাঁ, 02 = না (If no skip to K1.1	9)	
K 1.18	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K 1.19	পেঁয়াজ, রসুন, জিরা, আদা, হলুদ, মরিচ, চা, কা	ফ ইত্যাদি?	
	01 = হাাঁ, 02 = না (If no skip to K1.2		
	01 01, 02 II (II 110 SKIP to IXI.2	- /	
			<u>I</u>

K1.20	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
K 1.21	অন্যান্য (নির্দিষ্ট করুন)		
	01 = হাঁ, $02 = $ না (If no skip to $K2.1$)		
K1.22	যদি হ্যাঁ হয়, তাহলে সপ্তাহে কতদিন?	দিন	
	E2 .Household Food Insecuri	ty Access Scale (HFIAS)	
Q. No.	QUESTION	CODING CATEGORIES	CODE
K 2.1	গত চার সপ্তাহের মধ্যে, আপনি কি আপনার পরিবারের ছিলেন ? $01=$ হ্যাঁ, $02=$ না (If no skip to		
K 2.2	গত এক মাসে এরকম কতবার হয়েছে? $01 = $ কদাচিৎ থেকে দশবার), $03 = প্রায়ই (দশবারের বেশি)$	ং (মাসে দু-একবার), $02=$ মাঝে মধ্যে (তিন	
K 2.3	গত চার সপ্তাহের মধ্যে, টাকার অভাবে আপনি বা আপ খাবার কিনতে পারেননি এমন হয়েছে কি? 01=হ্যাঁ, $02=$ না (If no skip to K 2.5)		
K 2.4	গত এক মাসে এরকম কতবার হয়েছে? $01 = 4$ (তিন থেকে দশবার), $03 = 2$ ায়ই (দশবারের বেশি)	দাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে	
K 2.5	গত চার সপ্তাহের মধ্যে, আপনি বা আপনার পরিবারের কোনো সদস্য খাবার কেনার সঙ্গতির অভাবে খাবারে বিভিন্নতা ছিলনা (একই রকমের খাবার) এরকম হয়েছিলো কি? 01 = zগাঁ, $02 = n$ (If no skip to K 2.7)		
K 2.6	গত এক মাসে এরকম কতবার হয়েছে? $01=$ কদাচিৎ (মাসে দু-একবার), $02=$ মাঝে মধ্যে (তিন থেকে দশবার), $03=$ প্রায়ই (দশবারের বেশি)		
K 2.7	গত এক মাসে পছন্দের খাবার কেনার সঙ্গতি ছিল না বলে পছন্দ নয় এমন খাবার খেয়েছেন কি ? $01=\overline{z}$ গাঁ, $02=\overline{z}$ না (If no skip to K 2.9)		
K 2.8	গত এক মাসে এরকম কতবার হয়েছে? 01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে (তিন থেকে দশবার), 03 = প্রায়ই (দশবারের বেশি)		
K 2.9	গত এক মাসে পর্যাপ্ত খাবার না থাকার কারনে প্রয়োজনের চেয়ে কম খেয়েছেন কি ? $01=\overline{z}$ াঁ, $02=\overline{z}$ াঁ (If no skip to K 2.11)		
K 2.10	গত এক মাসে এরকম কতবার হয়েছে? 01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে (তিন থেকে দশবার), 03 = প্রায়ই (দশবারের বেশি)		
K 2.11	গত এক মাসে পর্যাপ্ত খাবার না থাকার কারনে সারাদিনে কম করে খেয়েছেন কি (তিন বেলা খাননি)? $01 = z$ গাঁ, $02 = n$ (If no skip to K 2.13)		
K 2.12	গত এক মাসে এরকম কতবার হয়েছে? 01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে (দশবারের বেশি)		
K 2.13	গত এক মাসে, অর্থ সম্পদ নাই বলে আপনার বাসায় ব $01 = \overline{\text{vi}}$, $02 = \overline{\text{ni}}$ (If no skip to K 2.1!		
K 2.14	গত এক মাসে এরকম কতবার হয়েছে? 01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে	(তিন থেকে দশবার), $03=$ প্রায়ই (দশবারের	

	বেশি)			
K 2.15	গত এক মাসে, খাবারের অভাবে কখনও না খেয়ে ঘু			
	01 = হাাঁ, 02 = না (If no skip to K 2.2			
K 2.16	গত এক মাসে এরকম কতবার হয়েছে?	,		
	01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধে	্য (তিন থেকে দশবার), $03 = প্রায়ই (দশবারের$		
	বেশি)			
K 2.17	গত এক মাসে, খাবারের অভাবে কখনও কি সারা দি	ননে বা রাতে না খেয়ে ছিলেন?		
	01 = হাাঁ, 02 = না (If no skip to K 3.2	1)		
K 2.18	গত এক মাসে এরকম কতবার হয়েছে?			
	01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধে	্য (তিন থেকে দশবার), $03=$ প্রায়ই (দশবারের		
	বেশি)			
	K 3. Household Hur	nger Scale (HHS)		
Q. No.	QUESTION	CODING CATEGORIES	CODE	
K 3.1	গত এক মাসে, অর্থ সম্পদ নাই বলে আপনার বাসায়	01 = হ্যাঁ		
	কোন খাবার ছিল না কখনও কি এরকম হয়েছিলো ?	02 = ना (If no skip to K 3.3)		
K 3.2	যদি হয়ে থাকে, গত এক মাসে এরকম কতবার হয়েছে?			
	01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে (তি	চন থেকে দশবার), $03=$ প্রায়ই (দশবারের বেশি)		
K 3.3	গত এক মাসে, আপনি বা আপনার পরিবারের কোন	01 = হাাঁ		
	সদস্য খাবারের অভাবে না খেয়ে ঘুমাতে গেছে?	02 = ना (If no skip to K 3.5)		
K 3.4	যদি হয়ে থাকে, গত এক মাসে এরকম কতবার হয়েছে?	•		
	01=কদাচিৎ (মাসে দু-একবার), 02=মাঝে মধ্যে (তিন			
K 3.5	সদস্য খাবারের অভাবে দিনে বা রাতে না খেয়ে ছিলেন $02 = \pi i (End)$			
	কি?			
K 3.6	যদি হয়ে থাকে, গত এক মাসে এরকম কতবার হয়েছে?			
	01 = কদাচিৎ (মাসে দু-একবার), 02 = মাঝে মধ্যে (

	MONTHLY VOUCHER POST DISTRIBUTION MONITORING FORM (F) এই অংশটি শুধুমাত্র ইন্টারভেনশন পেয়েছে তাদের জন্য				
SL	QUESTION	CODING CATEGORIES	CODE		
F1.1	আপনি কি ব্রাক এর কাছ থেকে আপনার বাচ্চাকে সুজির ফিরনি বা হালুয়া খাওানর জন্য যে সমস্ত উপকরন লাগে সেটা ক্রয় করতে কোনো ফুড ভাউচার পেয়েছেন কিনা?	01 = হাাঁ 02 = না (না হলে সমাপ্ত)			
F1.2	আপনি কি দয়া করে আমাকে ভাউচারের একটি নমুনা দেখাবেন?	01 = হাাঁ 02 = না			
F1.3	আপনাকে এই ফুড ভাউচার দিয়ে কি করতে হবে, এই বিষয়ে কেউ কোনো পরামর্শ দিয়েছিল কি?	01 = হাাঁ 02 = না			
F1.4	ভাউচার বিতরণ কেন্দ্রে যেতে আপনার কতক্ষন সময় লাগে?	01 =1-1.5 ঘন্টা 02 => 1.5 ঘন্টা			
F1.5	ভাউচার সংগ্রহ করতে আপনাকে কতক্ষন অপেক্ষা করতে হয়?	01 =1-1.5 ঘন্টা 02 => 1.5 ঘন্টা			
F1.6	ফুড ভাউচার দেখিয়ে নির্দিষ্ট দোকান থেকে ভাউচার এ উল্লেখিত খাদ্য সামগ্রী সংগ্রহ করতে আপনার কোনো অসুবিধা হয় কিনা?	01 = হ্যাঁ 02 =না (If no skip to F1.8)			
F1.7	উত্তর হ্যাঁ হলে আপনি কি ধরণের অসুবিধা সম্মুখীন হয়েছেন? A. দোকানে সব ধরণের খাদ্য সামগ্রী মৌজুদ ছিল না B. খাদ্য সামগ্রীর গুণগত মান ভালো ছিল না	01 = হাাঁ, 02 = না			
	ওজনে কম দেয়া হয়েছিল C.দোকান বন্ধ ছিল	01 = হাাঁ, 02 = না 01 = হাাঁ, 02 = না 01 = হাাঁ, 02 = না			
	D.দোকানদারের ব্যবহার যথাযথ ছিল না E.কেউ খাদ্য সামগ্রী সংগ্রহ করতে বাধা প্রদান করেছিল	01 = হাাঁ, 02 = না 01 = হাাঁ, 02 = না			
F1.8	F.অন্যান্য(নির্দিষ্ট করুন) ভাউচার দিয়ে সব খাবার একসাথে সংগ্রহ করে তা বাড়িতে মৌজুদ করতে আপনার কোনো সমস্যা হয় কিনা?	01 = হাঁ 02 = না(If no skip to F1.10)			
F1.9	উত্তর হার্গ হলে কি ধরণের সমস্যা হয়? A. ডিম্ নষ্ট হয়ে যায় B. অন্য কেউ আসে খেয়ে ফেলে C. পোকামাকড় বা ইঁদুর নষ্ট করে ফেলে D. অনন্য	01 = হাাঁ, 02 = না 01 = হাাঁ, 02 =না 01 = হাাঁ, 02 = না 01 = হাাঁ, 02 = না			
F1.10	আপনি কি পুষ্টি আপার কথা মত বাচ্চাকে প্রতিদিন ফিরনি বা হালুয়া রান্না খাওয়ান কিনা?	01 = হাঁ, 02 = না			

F4 44	ভাউচার দিয়ে আপনি আপনার বাচ্চার জন্য যে মাসিক খাবার	01 0	
F1.11		01 = একমত	
	ক্রয় করেন তা আপনার বাচ্চা কে প্রতিদিন 2 বেলা নাস্তা	02 = অসম্মতি	
	খাওয়ানোর জন্য পর্যাপ্ত কিনা?	03 = কোন মতামত নেই	
F1.12	ভাউচার থেকে প্রাপ্ত খাবার দিয়ে আপনার শিশুর জন্য সুজি		
	ফিরনি বা হালুয়া বানানো ছাড়া আর কি কি করেন? (বিস্তারিত		
	লিখতে হবে)		
F1.13	শিশুর জন্য প্রতিদিন যে ফিরনি বা হালুয়া রান্না করা হয় তা	01 = ফাঁ (If yes skip to	
	শিশু পুরোপুরি ভাবে খায় কিনা?	F1.15)	
		02 = না	
F1.14	না খাবার কারণ কি?		
	A. বমি করে	01 = হ্যাঁ, 02 = না	
	B. একই খাবার প্রতিদিন খেতে চায়না	01 = হ্যাঁ, 02 = না	
	C. হজমে সমস্যা হয়	01 = হাাঁ, 02 = না	
	D. অন্যান্য	01 = হ্যাঁ, 02 = না	
	D. 44)(4)	01 = 51, 62 = 11	
F1.15	বাচ্চার জন্য রামা করা সুজি বা হালুয়া বাবু ছাড়া পরিবার এর	01 = হ্যাঁ	
11.13	অন্য কেউ খায় কিনা?	02 = না	
		02 = 41	
F1.16	রান্না করা সুজি ফিরনি বা হালুয়া সংগ্রহ করতে সমস্যা হয় কি	01 = হ্যাঁ	
F1.10	ना?	- , .	
	-11:	02 =না(If no skip to F1.18)	
F1.17	উত্তর হ্যাঁ হলে কি ধরণের সমস্যা হয় ?		
LT.T/	(বিস্তারিত লিখতে হবে)		
	(1791130 191460 464)		
F1.18	আপনি এই পর্যন্ত কতগুলা ফুড ভাউচার পেয়েছেন তা	সংখ্যা	
	আমাকে দেখবেন? (ব্যাবহৃত ফুড ভাউচার গুলা সংগ্রহ		
	করেন)		
	L ·		



Check-List

Check-list for Submission of Research Protocol For Consideration of the Research Review Committee (RRC) [Please check all appropriate boxes]

1.	Has the proposal been reviewed, discussed and cleared by all listed investigators?				
	∑ Yes ☐ No				
	If the response is No, please clarify the reasons:				
2.	Has the proposal been peer-reviewed externally?				
	If the response is 'No' or "External Review Exempted", please explain the reasons:				
	If the response is "Yes", please indicate if all of their comments have been addressed?				
	Yes (please attach)				
	No (please indicate reason(s)):				
3.	Has the budget been reviewed and approved by icddr,b's Finance? Yes No (reason):				
	Yes No (reason):				
4.	Has the Ethics Certificate(s) been attached with the Protocol?				
	⊠ Yes □ No				
	If the answer is 'No', please explain the reasons:				

Signature of the Principal Investigator	Date



Guidelines for Preparing Abstract for ERC

The Ethical Review Committee will not consider any application that does not include an abstract summary. The abstract should summarise the purpose of the study, the methods and procedures to be used, by addressing each of the following items. If an item is not applicable, please note accordingly, describing the reason:

- 1. Describe the requirements for a 'study population' and explain the rationale for inclusion of special groups in this study population, such as children or groups whose ability to give voluntary informed consents might be compromised.
- 2. Assess and describe potential risk(s) physical, psychological, social, legal or other, and also assess their likelihood and seriousness. If research methods are anticipated to involve potential risks, describe alternate methods, if any, which were considered and why they will not be used.
- 3. Describe procedures for protecting against or minimising potential risks, and an assessment of their likely effectiveness.
- 4. Include a description of the methods for safeguarding confidentiality and protecting anonymity.
- 5. When there are potential risks to the participants, or when the privacy of the individual may be affected, the investigators are required to obtain a written informed consent, duly signed by the prospective participants. For minors and individuals with compromised ability to provide a valid consent, informed consent must be obtained from their parents or legal guardians. Describe consent procedures to be followed including how and where informed consent will be obtained.
 - a) If signed consent will not be obtained, explain why this requirement should be waived and provide an alternative procedure that would be used.
 - b) If information is to be withheld from a participant, provide justification for this course of action.
 - c) If there is a potential risk to the participant or privacy of the individual might be affected while applying any particular procedure include a statement in the consent form to clarify whether or not compensation and/or treatment will be available and who will support the costs.
- 6. If study involves an interview, describe the place and processes, and approximate length of the interview.
- 7. Assess the potential benefits to be gained or risk the individual participants might be subjected to, and also the benefits that might accrue to the society in general as a result of the planned work. Clarify if and how the benefits outweigh the risks.
- 8. State if the activity requires the use of records (hospital, medical, birth, death or other), organs, tissues, body fluids, the foetus or the abortus.
 - The statement to the potential participants should include information specified in item 2,3,4,5(c) and 7, and also indicate the approximate time they would be required to remain in the activity.

Gender Analysis framework

In Relation to growth and development:	Are there sex differences in	How do biological differences between women	How do the different roles and activities of men and	How do gender norms / values affect men and	How do access to, and control over resources affect men and women's
		and men influence their :	women affect their	women's	
Vulnerability:	Female children may be more vulnerable in terms of feeding	None has been reported so far	NA NA	None has been reported so far	NA .
Health seeking behaviour	May affect female children	NA	NA	None has been reported so far	None has been reported so far
Ability to access health services	May affect female children	NA	NA		
Experience with health services and health providers	NA	NA	NA	NA	NA
Preventive and Treatment options, responses to treatment or rehabilitation	NA	None has been reported so far	NA	None has been reported so far	NA
Outcome of health problem	None has been reported so far	None has been reported so far	NA	NA	NA NA
Consequences (economic & social, including attitudinal)	NA NA	NA NA	NA	NA	NA

ANNEX Handwashing visual aid

The GloGerm™ product (available in liquid and powder form) is a simulation of germs that glow when placed under a LCD light. After putting GloGerm™ on the hands, students were able to view the 'germs' using a black light. Students were instructed to wash their hands and after had them reexamined to determine if they used proper hand-washing technique. If proper technique is used, there would be no GloGerm™ residue.



6 sec wash, no soap



6 sec wash, with soap



15 sec wash, with soap





