brac

HEALTH

Working Paper ■ January 2013

How Effective was the 'Incentive Package' Piloted in Shahjahanpur, Bogra under 'Alive and Thrive Programme

A Qualitative Assessment

Umme Salma Mukta
Md. Raisul Haque

How Effective was the 'Incentive Package' Piloted in Shahjahanpur, Bogra under 'Alive and Thrive' Programme: A Qualitative Assessment

Umme Salma Mukta
Md. Raisul Haque

January 2012

Research and Evaluation Division
BRAC Centre, 75 Mohakhali, Dhaka 1212, Bangladesh
E-mail: research@brac.net, www.brac.net
Telephone: 9881265, 8824180-87

For more details about the report please contact: mukta.us@brac.net

TABLE OF CONTENTS

ACRONYMS

AED	Academy for Educational Development
AM	*Area Manager*
A&T	Alive & Thrive
BF	Breast Feeding
BM	Breast Milk
BMI	Breast Milk Initiation
BRAC	Bangladesh Rural Advancement Committee
CF	Complementary Feeding
CHW	Community Health worker
BDHS	Bangladesh Demographic Health Survey
DR	Doctor
EBF	Exclusive Breast Feeding
EHC	Essential Health Care
FGD	Focus group discussion
GO	Governmental Organization
HH	House Hold
IYCF	Infant and Young Child Feeding practices
MNCH	Maternal, Neonatal and Child Health
NNP	National Nutrition Program
NGO	Non Governmental Organization
PO	*Program Organizer*
PK	*Pusti Kormi*
RED	Research and Evaluation Division
SS	*Shasthya Shebika*
SK	*Shasthya Kormi*
TV	Television
vCHW	*Voluntary Community Health worker*
WHO	World Health Organization

ACKNOWLEDGEMENTS

We are thankful to all the staff and the local implementing partners of A&T project in Shahjahanpur, Bogra District who arranged the participation of Voluntary Community Health Workers as respondents in the study. They also guided us to track the main participants' mother or caregiver who received services by those health workers in their catchment's area of the study.

We also appreciate the assistance provided by RED colleague and BHP-A&T team in the field, and the administrative officer in providing logistical support for fieldwork. We are grateful to the research assistants for their good work: Mizanur Rahman, Al Mamun, AFM Khaled Hossain, Rahima Akter, Saida Khan, Sayema Akter. Our warm thanks go to our study team because without their advice, thoughtful suggestions and cooperation, this study would have been impossible.

Finally, we would like to thank the voluntary community health workers and all study participants in Shahjahanpur and Bogra area who gave us their time and openly discussed their work.

RED is supported by BRAC's core fund and funds from donor agencies, organizations and governments worldwide. Current donors of BRAC and RED include Aga Khan Foundation Canada, AIDA-Spain, Asian Disaster Preparedness Center, AusAid, Australian High Commission, AVRDC (The World Vegetable Centre), Bencom S.r.L, BRAC-UK, BRAC-USA, British Council, Campaign for Popular Education, Canadian International Development Agency, CARE-Bangladesh, Center for Development Research, Commonwealth Foundation, Department For International Development (DFID), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), EACI-Qatar, Embassy of the Kingdom of the Netherlands, Euro consult Mott Mac Donald, European Commission, Family Health International, FHI Solutions, LLC, Foundation Open Society Institute, The Global Alliance for Improved Nutrition, Global Development Network, The Global Fund, Govt. of Bangladesh (GoB), The Hospital for Sick Children, Canada, ICDDR,B, International Food Policy Research Institute, International Labour Organization, International Potato centre, International Rice Research Institute, International Union for Conservation of Nature and Natural Resources, Liverpool School of Tropical Medicine, Manusher Jonno Foundation, Oxfam Novib (NOVIB), Oxford University, Rockefeller Foundation, Safer World, Sight Saver-UK, Social Marketing Company, UN Women, UNICEF, Unilever-UK, United Nations Development Program, University of Bonn, University of Leeds, University Research Company LLC, Vision Spring, Women WIN, World Bank, World Fish and World Food Program.

ABSTRACT

Bangladesh is one of the countries with high rate of infant malnutrition and the major cause is inappropriate breast feeding and complementary feeding practices. To improve the situation, both GO/NGO organizations are working intensively on the issue. In pursuance of this, AED and BRAC became partners in the Alive and Thrive project (A&T) for improving infant and young child feeding (IYCF) practices through motivation and counseling by BRAC's volunteer community health workers as frontline workers during 2009-2013. The study aimed to assess the 'incentive package' implemented in the study area through the frontline health workers of BRAC. A qualitative research design used in-depth interviews, Informal discussions, narratives and focus group discussions to gather relevant data. Findings reveal that in spite of heavy work load and unstable market situation from price hike, *SS* were not too demoralized and continued to work because of the incentive package. All the performance indicators of the *SS* showed improvement.

BACKGROUND

In Asia, Bangladesh is one of the countries with high rate of malnutrition. The baseline survey by the National Nutrition Programme (NNP) showed high rates of stunting, underweight, and wasting (Faruque *et al.* 2008). The major causes for malnutrition have been identified to be inappropriate infant and young child-feeding practices (breastfeeding and complementary feeding) up to 2 years from birth which need promotion of appropriate feeding practices is fundamentally important in reducing child malnutrition and mortality (WHO 2002) and for achieving Millennium Development Goals 1 and 4. Counseling has been shown to increase knowledge of caregivers and to improve breastfeeding, complementary feeding, and growth in young children (Haider *et al.* 2000; Pelto *et al.* 2004; Freed *et al.* 1995; Penny *et al.* 2005).

Promotion of adequate breastfeeding and complementary feeding practices have been ranked first and third respectively, among the most effective interventions for reducing under five mortality in the developing countries (Jones *et al.* 2003). Infant and young child feeding practices have been shown to have significant effects on both children and mothers. Exclusive breastfeeding (EBF) for the first six months of life protects infants against common childhood diseases and reduces the risk of childhood mortality. Timely introduction of adequate and safe complementary foods at six months of age helps to fill the dietary gaps that cannot be met by breast milk alone at that time. Continued breastfeeding for two years or beyond confers major nutritional benefits and is an essential component of appropriate complementary feeding (Kanani and Gadre 2003).

AED and BRAC are partners in Alive and Thrive project (A&T) that aims to improve infant and young child feeding (IYCF) practices and reduce stunting in its working areas within the 2009-2013 project period. This project utilizes BRAC's Essential Health Care (EHC) infrastructure which is delivering essential health care package, covering 92 million people across 70,000 villages in all 64 districts of Bangladesh. A majority of the A&T investments is going in to building BRAC EHC's capacity to impact IYCF and reduce stunting as EHC is the proven long-term sustainable BRAC health programme with the largest scale and longest continuity (AED 2005).

The community health workers (known as *Shasthya Shebika, SS*) are not paid worker of BRAC. Though they are supposed to offer voluntary services for their community, it has been found that due to poverty, they may not be interested in activities that do not contribute to their livelihood strategies. Evidence exists that economic incentive is the prime motivator for becoming a SS, as well as the main reason for drop-outs (Khan *et al.* 1998, Rahman *et al*. 2007, Ahmed 2008). The IYCF related activities in A & T would require extra time from the *SSs* which they may not comply with always and would hamper the programme. Similarly, though the Community nutrition workers (nick named *Pushti Kormi, PK*) are paid workers of A & T, performance based remuneration may also work as a motivational factor to boost their work. Small-scale projects are often successful because they manage to establish effective support and supervisory mechanisms for CHWs, often including a significant amount of supervision and oversight by the community itself (Rahman *et al.* 2007).

To assess the effectiveness for any program Performance monitoring is used to provide information on: 1) key aspects of how a system or program is operating; 2) whether, and

to what extent the specified program objectives are being attained and 3) identification of failures to produce program outputs, for use in managing or redesigning program operations. Performance indicators can also be developed to 4) monitor service quality by collecting data on the satisfaction of those served, and 5) report on program efficiency, effectiveness, and productivity by assessing the relationship between the resources used (program inputs) and the output and outcome indicators (Schmidt *et al.* 1994. Joseph *et al.* 1994).

Thus, the *SS* and *PKs*' supervisors in the program such as the *SK, PO, BM*, and *AM* would play an important role, it is assumed.

'Incentive package' for the A &T programme

Under the incentive package, certain amount of money was give when the SSs could ensure-

1. colostrums feeding within 1st hour of birth of the baby
2. exclusive breast-feeding (EBF) for the first six months
3. complementary feeding after six month with its proper consistency, frequency, quality, age specific amount, animal protein and oil
4. hygiene practice and washing hand with soap before food preparation and feeding
5. ensuring communicating with SKs, PKs or other program staff for trouble shooting

BRAC's Research and Evaluation Division (RED) is doing a study to see the effectiveness of the 'incentive package' to be introduced in the existing A & T areas. This case study of the incentive package in the 1st*upazila* (sub-district, *UZ*) piloted and refined will help in understanding the process, the dynamics and perspectives of the various players involved and contextualized the findings of the evaluation.

General objective

To assess the effectiveness of the pilot initiative on the 'incentive package' introduced in the Shahjahanpur UZ. for the frontline health workers of BRAC (Shasthya Shebika, *SS*) involved in the 'Alive and Thrive' programme...

Specific Objectives

- To document the process of implementation of the 'incentive package'
- To assess the effects of the 'incentive package' on five key indicators
- To explore the perceived barriers in implementing the 'incentive package'
- To explore the coping mechanisms to overcome the perceived barriers

RESEARCH METHODS

Study site, study population and sample

The study was conducted in the Shahjahanpur *upazila*, Bogra where the incentive package was first introduced in July, 2010. The area is representative of rural Bangladesh. BRAC *SS* (*Shasthya* Shebika) of EHC and MNCH programme who had received training in Alive and Thrive programme activities, and the newly recruited *PKs* were selected randomly from this UZ (*SS*=30, *PK*=12). Beneficiaries of the A&T program such as women who have less than two years old child, and care givers in the catchment areas of the *SSs* and *PKs* were our respondents. Besides, perspectives of the supervisors such as the *AM* (n=2*), BM* (n=2), *PO* (n=2) and *SK* (n=3) were also explored.

Methods and tools

Qualitative methods were used to collect relevant data on A & T activities. These included:

1. In-depth interview
2. Focus group discussion
3. Record analysis
4. Shadowing (Participant Observation)
5. Informal Discussion

In-depth interview

In the in-depth interview, we coveredthe socio-economic status of the key informants, the services delivered by the *SSs* and *PKs* in their catchment areas, perception on remuneration based on their performances, barriers to provide services and coping mechanisms, etc. A checklist for in-depth interview was developed and finalized after pre testing. Trained anthropologists carried out the interviews following this guideline. Thus, we conducted in-depth interviews with 12 *SSs*, 6 *PKs*, 3 *SK*s, 2 each of *Program Organizer (POs), Upazila Manager (UM) and Branch Manager (BM)*

Focus group discussion

Using a check list, in the focus group discussion (FGD) we covered the socio-economic status of the *SSs* and *PKs*, perceived quality of performances for remuneration, perceived alternatives for motivation, existing barriers and coping mechanism and unmet need for remunerations (if any). FGDs were conducted by trained Anthropologist to elicit respondent's view. Thus, we conducted 4 FGDs, 1 with *PKs* and 3 with *SSs*.

Record analysis

At the community level, *SS* and *SK* maintain all **records** of EHC activities by individual households. *SK* produces a consolidated report on monthly basis and submits it to the *POs* who then compile these reports for the area offices. At the district office, reports from area offices are consolidated on monthly, quarterly, half-yearly and yearly basis. Records had been also checked for compliance of the data from household survey.

Shadowing (Participant observation)

Through shadowing (Participant Observation) a total of 6 *SSs* and 6 *PKs*, we assessed the quality of performance of the service providers, way of delivering messages (counseling, practical demonstration etc), frequency, content and environment of the forums, and finally the performances of the facilitators.

Informal discussion

Informal Discussion conducted with the beneficiaries including mother having less than 2 years old child or caregiver to know their perception on the functioning and services by the A&T service provider. Here we also covered their perception on getting different types of services and its effectiveness, activities by the service providers to solve their difficulties on IYCF, and felt needs from the programme.

For that we were selected 12 HH of mothers/caregivers, 6 from each *SSs* and *PKs* catchment's area.

Data collection process

All subjects involved in this research were informed of the study rationale, procedures, potential risks and benefits and their right to withdraw from the study at any time. It was made very clear that participation is completely voluntary and that subjects have the right to refuse to answer questions if they wish. All participants were encouraged to ask questions at any time during the interview *(please see APPENDIX A for informed consent document).*

Inclusion/exclusion criteria

Inclusion Criteria: Who were enrolled in the A&T program.

Exclusion Criteria: Who were visibly ill and those who were unable to comfortably participate for the duration of a focus group or interview was excluded from the study.

Data analysis

The data were at first transcribed and then coded. Thematic analyses were performed. Please see the Table below for themes, sub-themes and codes used for planning and doing comprehensive analysis. Themes were categorized according to the objectives of the study.

Table: Thematic scheme of analysis of the qualitative data

Theme	General child care knowledge, attitudes, perceptions	IYCF knowledge, attitudes, practises	Motivational factors	Programme effectiveness
Sub-theme A	Common local care practices	Breastfeeding	motivational factor	Perceived benefits from the programme
Code				
Sub-theme B	Mothers perceptions about child care	Exclusive breast feeding	perception on remuneration	Perceived perception on the programme
Code				
Sub-theme C	Child health problem in community	Complementary Feeding	Component which attract more	Changes by programme positive/negative
Code				
Sub-theme D	Solution of child health problem	Hygiene practice	Why attract those component	Current practises in the community
Code				
Sub-theme E	Child care Practises for the first baby	Communication	Movement to HH and delivered messages	Requirement from the programme
Code				

RESULTS

The results are presented according to the performance indicators identified by the programme for remuneration.

Colostrums feeding

Majority of the *SS* told that they asked mothers to practice colostrums feeding within one hour of childbirth. Similar responses were also made by the *SKs.* Most of the *SS* in FGDs said that within one hour colostrums would be produced and the baby should be fed; if the baby can't suck, it should be given after manual expressing. One *SS* said:

> *"Mother or relative who stay nearby during delivery must feed colostrums to baby right after birth…COLOSTRUMS is good because it is pure, and works as vaccination"*

However, *PK* participating in the FGDs responded that the initiation of colostrums outputs has no time limitation; it will be expressed by baby's frequent sucking of breasts. A few *SSs* told that following colostrums feeding, breast milk (BM) would come out three days later, and whether or not colostrums is available,, mother needs to suckle the baby frequently.

However, there is some confusion among mothers regarding BM and colostrums. Some mothers said that first BM is colostrums that come within one hour after baby's birth. Very few could specify the colostrums by its yellowish colour. Some mothers told that for the first child they faced a bit problem with colostrums feeding but with help from the of *SSs* and their counselling, they tried to feed colostrums as soon as possible after delivery. One mother said that,

> *"Colostrums is the milk found in the breast when the mother first gives birth to her child. It's good for children. The child will become healthy if it drinks the colostrums."*

Mothers and caregivers of the babies also could mention the beneficial aspects of colostrums feeding e.g., it keeps the baby healthy, baby get sufficient nutrition to prevent diseases for survival etc., A mother said,

Case study of a mother

Rasheda (35) is a house-wife. She is an inhabitant of village "khadas" at Shahjahanpur *Upazila* in Bogra. Now she is a mother of 3. She has 2 elder sons. Now she has a 9 months aged daughter. After the birth of the daughter she was involved in Alive and Thrives program of BRAC. *SS* Saheda begum and *PK* SirinAkter give her advice and information. Baby hasn't got any advice or information about baby food and nutrition at the time of her two elder sons. When she delivered her two sons she was at her mother's house and her mother did everything. Though she was at her mother's home at the time of her daughter, she has learned and followed many things from Alive and thrive programmed. She gave her daughter colostrums after half an hour of her birth, till 6 months only gave her BM and after 7 months gave her extra food. When she made food for her daughter she also emphasize on cleaning. She thinks that now she knows about food and nutrition and tries to follow it. for this reason she thinks that if she got these advises at the time of her first child she wouldn't give him topsy-turvy food and her children might be meritorious. So she thinks these information and advises are important for the new mother.

"Colostrums must be fed right after birth (not probed for this by the researcher) because it is nutritious. No other food should be fed at this time."

Thus, after triangulation, we found that the *SSs/PKs* could ensure colostrums feeding to a great extent… majority of the mothers had clear perception on colostrums feeding and they also practiced it. .

Exclusive breastfeeding

"Now people are aware that EBF should be done for 6 months", said a *SS* while discussing how to ensure exclusive breast feeding practices. The terminology was known to most of the mothers and the community people. They know the meaning of exclusive breastfeeding. We found that majority of the mothers told that during first six month of the baby no liquid and complementary feeding allowed for the baby including juice, breast milk substitutes and others liquids. A mother said,

"Before 6 months, the digestive system is not developed properly. Therefore, mother should not feed anything other than breast milk".

Case studyof a mother

Jorina (26) mother of 13th month old child. She knew that if she feed her children only BM till 6 month they will be healthy. For that she practicing exclusive breast feed for the first six month of the baby and then tried for complementary feeding. She gives her daughter family food but she has to cook 'khichuri' extra for her daughter. She told egg, fruit, juice and grapes as good food for baby. Green leafy vegetable, Red leafy vegetable, arum etc are food as scurry according to her if baby eat these they will be healthy because they are nutrious food. She did that accordingly by the advice of the *SS* and told that she get the benefit for following the advised. Now a day's her baby became healthy, strong, suffer from less diseases.

But when asked, she said that water is ok to give, and honey is also ok to give. (Also, water is not boiled found from the shadowing).

Also from shadowing we found that some mother who told that she tried EBF, meanwhile also fed semolina, suji with cow's milk by a bottle. The perception of another mother was:

"Because BM is liquid, it does not stay in the stomach for long (stomach empties as soon as baby urinates). Suji and other solid foods are better because they stay in the stomach longer and keep baby full"

According to the *SSs* and *PKs*, mothers and community people are now aware of any kind of pre-lacteal feeding. *SS* said:

"Nowadays mothers are more conscious about colostrums feeding and exclusive breast feeding then earlier, because of us. We visited each household frequently to make them understand the fact and its importance."

Mothers also told that in their community some people (especially the elderly ones) asked them for pre-post lacteal foods such as honey and cow's milk but they didn't listen to them. Although some mother used to practice pre-lacteal feeding, with the help and counsel of the *SSs* they were convinced about EBF and practised it. This was also reinforced by health education disseminated through audio-visual media which further convinced them.

But sometime some of them didn't listen to the *SSs. SS* said:

> *"Many mothers feed banana, sweets to babies before 6 months. We know that this shouldn't be given and we forbid them (tell them it's harmful) but they say it's no problem."*

This was corroborated by the supervisors of the *SSs (SKs, POs*, and managers). They all agreed that due to the frequent visits of *SSs* and also *PKs* in their area, Bogra reached the top for practising colostrums feeding, BMI and EBF *(The Daily Somokal, March, 2011)* .

Complementary feeding

Majority of the *SSs, PKs*, and also mothers reported that they used to start complementary feedings after 6 months. But by the shadowing, we *found that in spite of SSs and PKs* devoted work, still some mother didn't follow their advice. One mother said:,

> *"Actually, orange juice is the very best thing that a child less than 6 months can drink. I feed my child orange juice because it is good for her health. Actually, Orange Juice is even better than BM."*

While advising complementary food, the *SS*s mostly emphasized animal protein (from fish, meat, liver, eggs and milk) so that mother also knew its importance. The *PKs* also asked mothers in health forums to rear poultry and kitchen garden for steady supply of protein for the baby.

According to the incentive packages vast majority of the *SSs* and *PKs* gave emphasis on age appropriate food and food frequency, consistency and quantity. Almost all mothers knew that while starting complementary food it should be mashed properly, with less spices, and that the quantity needs to be changed according to age.

Shadowing experience

We (a researcher and a research assistant) started shadowing (as a part of participant observation) the mother and the baby from very early in the morning. We went to a *SS*'s house at 6.45 am before she began her routine visits to her catchment area. When we reached, she still did not have her breakfast. After finishing some household chores and taking breakfast, she began her household visits. She told us that on that day she planned for approximately six household visits where there were children under 2 years. We just listened to her but made no comments or did not make any conversation with her after starting the visit. We just followed her just like her shadow. At the first house hold visited, the child's age was 4 month. She told the mother to feed only breast milk and nothing else. After six months, complementary food should be started, but she would inform her when the time comes. She then tried to show her position attachment for breast feeding. Next, she told the mother about how to take care of a child properly (the mother was an adolescent and was having the first baby.). After promising that she will come within 3-4 days she left the house and then moved to another house. In this way, she completed five houses from 8.00am to 1.30 pm. Then she went back home for performing her daily household chores. When we confirmed that she will not make any more visits on that day, we went to the first house we visited for the interview with the mother (As per data collection plan and policy for triangulation). The mother cordially accepted us and nicely talked with us. When asked about EBF, she said that till then she exclusively breastfeed her child and will continue for the next two months and then will start complementary feeding. But being an inquisitive anthropologist, we found that at the corner of her house there was a showcase. On its top shelf, there was a bottle full of liquid suji and besides, there was a cooking pot with cooked suji with cow's milk. When we asked whether there was any little toddler in that house who was fed bottle milk or other food in addition to breast milk, she (mother) replied NO. Then we understood that the bottle milk was for that child. After some probing, the mother accepted the fact that she tried liquids suji because she thought that breast milk wasn't enough for the baby. Also, for the first mother breast milk was not of sufficient quantity and therefore, she started additional food persuaded by her in-laws. She hesitated and decided to keep the fact hidden to the SSs until the child reached six months of age.

However, still some of the *SSs* sometimes mismatch among the age groups. But they tried to overcome the faults by frequent visits and communicate with other program staff for trouble shooting. Finally, the mothers were advised to that the sources of complementary food should be and only from the family pot.

Hygiene practices (washing hands with soap before food preparation and feeding)

The mothers stated to have had practiced food hygiene such as emphasized covering prepared food properly, washing the raw foodstuffs before cutting etc. *SS* said:

> *"From the very beginning we suggested mothers and also the others family members to keep clean. Practicing hand wash before and after taking meal and after defecation. Though it's a bit cost but ensures your health and remove from diseases, especially for the child and toddlers. "*

The *SSs* also advised washing hands of both the mother and the baby since

> *"During feeding the kid may put her/ his hand into the food.so, if their hands are not washed properly with soap then the germ from the hand goes to baby's mouth then stomach that may causes some gastrointestinal problem such as, diarrhoea, dysentery, worm, jaundice, typhoid etc…."*.

One mother said:,

> *"Now we are aware about how to prepare baby's food. We must wash everything before preparing/serving. Otherwise, the baby will have diarrhoea and dysentery. Child's food should always be prepared separately."*

Case study *SS*

Miftauljannat (27).mothers of 2 children. Now work in BRAC. During this program alive& thrive she works 2years 6 months. For her works she takes 5days training in September 2009. In this training period she trained up child food and nutrition, and food taken process etc. It's her first works. After Passing SSC exam her father gets them marriage. And after marriage she spent time to take care her baby's .so although she wants to do job but it's not possible. While children grown up then she start job. In 2009 she joins this program .every day she start work at 8am. Per day she visits 8 households. And every household he stay 35-40 minutes. She finished her work at 2 pm. She describes her work experience. Although give them very few salary in this work but I'm satisfied because it's a voluntary works. We are counseling many topic to mother. This topic known before TV, papers and books. But don't give importance its applications. But after training we feel its importance. Try to learn about this topic to mother what we know. At first mothers and her family member were give less importance .but now a days the situation is change. Now mothers want to learn about baby food, nutrition etc. We learn to mother how to feed breast milk when babies age 0-6 month. And when babies age become 7 months he needs CF from family pot/. And practical demonstration will be seen, I do this because I want to ensure babies good health. When I saw mother follow my all advice then it's make me very happy. I'm also happy when people were respect me, give salam (A way of Muslim greetings), and ask many question. I want to learn more about mother and baby related topics. About this topic wants to learn by training. We sent this massage to mother as soon as possible though they also want to know the things.

This reflected the messages delivered effectively by the *SSs*.

Communication with higher level service providers for troubleshooting

The *SSs* successfully opened communication channels with the *PKs, SKs* or other program staff while facing any problem. The PKs were specifically recruited in the A &T

programme to help the *SSs* in troubleshooting. In addition, for solving any problem A&T program encourages *SS* to communicate with other staffs as well.

However, we found that the *SSs* tried to cope the problem on their own based on their experiences; later, the decided to communicate with the *PKs, SKs* or other staff. They used to contact the *PKs* or *SKs* mostly and if failed to communicate with them, then they used to contact with *Program Organizer* (*PO*) or *Branch Manger (BM),* usually through paid mobile phone.

Case study of a *SS*

Saheba begum (50) is a *SS* of BRAC. She has been working in BRAC last 18 years. She is an inhabitant of khadas village at shahjahanpur *upazila* in Bogra . She is working in A & T program since 18 months. She is also involved in other programs of BRAC. About 285 house hold are in her control. In this household there are 22 children of 0-6 months, 11 children of 7-12 months and 24 of 12-24 months. She advises about nutrition and health to mother which is her under control. Willingly she provides this service as a volunteer. She advises every child's mother from pregnancy period to after child birth. She advises mothers about nutrition and health. Beside baby she advises mothers too. She told mother to eat good food and keep clean. She is respected by village people. They come to take advice in many matters. For this reason, she feels proud as BRAC *SS*. She thought that she could make a bridge with the community and the program and so on she felt proud.

Beside the five core component (included in an incentive package) there were two other important practices that were crucial for baby's health, well-being and early childhood development which were promoted by the *SS/PKs:*

a) Responsive feeding practices
b) Feeding during illness

Responsive feeding practices

Responsive feeding practices ensure that not only the child is fed for survival, but he/she would have pleasure from feeding. *SS* said:

> *"Sometime some mother are in rush and if the baby don't want to eat then they would feed the baby forcefully even if they are reluctant… we told them not to do that…we advised to take the baby for walks outside, to show many things or change food to encourage the baby to take food."*

It also necessary to feed the baby according to her/his food habit, and made them learns how to eat. Majority of the *SSs* and *PKs* stated that the mothers most frequently complained that their child didn't want to take food. In response, they counseled the mothers not to do forced-feeding, trying again and again with intervals, changing the food and ensuring variety of food for feeding. They also asked for homemade food (which is not adulterated) instead of shop food. The *SSs* also asked mother not to hurry while feed the baby took time and be patient. And of courses not tried to feed the baby while he seemed tired or want to sleep. A *SS* said:

> *"When children don't want to eat, mother should distract them or try to feed when they are busy playing".*

Feeding during illness

During illness of the child, s/he needs to be breast fed frequently for satisfying her/his thirst—told a *SS*. Most of the *SSs* told that they also counselled mother on care-giving during illness because in the field they found that sometimes mother stopped breast feeding during illness as the baby can't suck properly. Instead, they tried to feed

complementary food in very early ages. If the baby has already started complementary food, then the mother is told about the need of continuing breast feeding in addition to the food from the family pot. There was spill-over effect also: many women in the neighbourhood listened to the *SSs* while she counselled the target mother. On occasions, these women talked about their problems and the *SSs* tried to address those as far as possible.

DISCUSSION

South Asia, home to about 1.4 billion people, has the highest number of under-five death and under five children who are underweight. More than 70 million out of total of 146 million under-five underweight children are in South Asia (UNICEF 2006). Bangladesh is one of the countries with 'severe shortages' of health workers especially in the field of vaccination coverage, primary health care outreach, suboptimal infant feeding practices, under-5 child and maternal survival etc (WHO 2006). This shortage of qualified health workers is considered one of the major barriers to achieve the health-related Millennium Development Goals (MDGs 4, 5,6) in Bangladesh (Ahmed *et al.* 2011)

Breast milk is viewed as the ideal food for healthy infant growth because it not only strengthens the emotional bond between mother and child, but is also the most economically feasible method of feeding an infant. In Bangladesh context, in spite of breastfeeding rate of 97%, the proportion of exclusive breastfeeding remains low. For promoting IYCF practices, intervention requires an army of skilled health workers at the grassroots level because feeding practices are highly variable that are underpinned by a complex system of individual, biological, socio-cultural, and structural factors. BRAC took the challenges and tested its frontline health workers (SSs) with some monetary incentive to promote the IYCF practices among mothers and women of reproductive age (Haider *et al.* 2000, Haider *et al*. 1999, Ahmed SM 2008).

Colostrums feeding and/or initiation of breast feeding within first hour of birth revealed in India, it is dismal 16%, in Bangladesh it is 24% and Pakistan it is 26%, Nepal with 31% and Sri Lanka, with 75% which indicates a rating of Good (Gupta and Arora 2007). Again, by appropriate EBF (for the first six months) practising of infant life globally could be averted each year deaths of 1.3 million children, an estimation said from WHO (Trudeau *et al.* 1998). Despite the launching of a national breastfeeding promotion campaign in Bangladesh in 1989, exclusive breastfeeding rates remain low (Haider 1999). Exclusive breastfeeding rates in South Asia have improved between 1990 and 2006 from 43% to 47%, but still there is a wide variation between individual countries. (UNICEF 2006). The data reveals that the rate for exclusive breastfeeding varies from 10% to 68% in South Asia countries like in Maldives; it is 10%, Bangladesh and India with 46% and 47% respectively. Pakistan, Sri Lanka and Nepal fall in Good status with 50%, 58% and 68% (UNICEF 2006).

In Bangladesh, although 97% of mothers breastfeed their infants, the proportion that exclusively breastfeed remains low 32, 52%. In addition to breast milk, Bangladeshi infants are often introduced to other foods either too early or too late which caused later diarrhoea or an upset stomach (Faruque *et al.* 2008). Consequently, it is quite common to observe pre-lacteal foods given to newborns and the delay of breastfeeding. These findings were also stressed in the recent Bangladesh Demographic and Health Survey (BDHS 2007), (as discussed earlier).

For complementary feeding, most respondent preferred various nutritious food from different food group like nutrient energy, protein (animal, plant), fat (animal, plant), carbohydrate, calcium, iron, retinol, beta carotene and vitamin C, where priorities animal protein and vegetables. In the programme package, based on food composition table

appropriate for the Bangladeshi diet, was used to life skill training to the *SSs* and *PKs* which they forwarded to the mothers and caregivers. The study findings show that now a day's household's status differs in their main staple (cereals), animal foods and total food intake. However, the findings were consistent with the baseline survey of CFPR/TUP studies, which have demonstrated that lower socio-economic groups consume smaller quantities of foods compared to their higher socioeconomic counterparts (CFPR/TUP, 2004).

The rate of complementary feeding in South Asian countries varies from 22% to 98%. Where Pakistan has the lowest percentage (22%), closely followed by Afghanistan (29%), and India (35%). Nepal (66%) and Bangladesh (71%) .Maldives falls in 85% and Sri Lanka with 98%, which shows an excellent status

Again the hygiene practices increases in 57% in Southeast Asia which also reduced the diarrhoea and other diseases (UNICEF 2006).

Considering the importance of the front line health workers (BRAC *SS* in Bangladesh perspective), motivation is one of the best ways to make them more dedicated workers. Incentive systems are considered an important tool of organizational motivation Frederick Herzberg, classified money as a "hygiene" or "maintenance" factor associated with elements of one's working environment such as working conditions, policies, administrative facilities and level of payment the absence of which makes the workers dissatisfied (Herzberg F *et al.* 1959, Herzberg F 1966).Incentive measures, such as salaries, secondary benefits, and intangible rewards, recognition or sanctions have traditionally been used to motivate employees to increase performance. Organizational incentive systems do have a significant influence on the performance of individuals and thus the organization overall. A study from Ghana's public sector showed that the significance of internal factors in creating positive cultures changes (including monetary) needed to transform public organizations which could be initiated by the organizations themselves without substantial external support (Adam 2000).

Case study of a mother

Shahana (25) a mother of having a little toddler aged 11 month. She doesn't give the daughter any open food from market. But sometimes she gives her biscuits from shop. Till she doesn't give her tinned or cow milk, but she thinks cow milk better then tined powder milk as cow milk has no adulteration. She thinks tinned milk impure and she never feed tinned milk. Moreover she thinks homemade food is better than outside food. She thinks others of her area have become benefited as this programme come to their village. She says 'as apa won't come to our home and won't give as advice we could not know anything. We feed our baby everything and they become ill. She is happy on SS saheba. SS saheba comes every 2-3 days later to visit her baby. Moreover PK comes twice in a month to her home and gives advice about babies feeding. She things that by getting SSs and PKs advises and to followed them her baby is healthy and happy. She also thinks that other mother of the village should also follow this She likes everything of this program SS comes to their house gives information hears from them makes them understand about the take care of the baby and she likes it very much. Here is nothing to be bore again sometimes many team of researcher come to their house and take her interview. She likes it. Because she can learn many things. If she didn't know she might feed her other things. She likes alive and thrive program and she thinks every mother should know this matter. She maintains everything about nutrition and food for her baby and wants to learn more from SS and pk. She thinks those advices about babies feeding which was given by SS and PK are sufficient and there is nothing more. But she is eager to know more about how to keep baby feed healthy and happy.

The study also revealed that all the *SS* are demoralized nowadays because of their voluntary non monetary services. They get some incentive from the program according to their performances, ranging from 50-160 taka, which sound a lot to them for motivation. But recently the incentive is being stopped and they felt frustration. In spite of their demoralization, they still worked hard with the prospect of getting the incentive again in future. Being poor, any contribution to household income is welcome.

According to the Area manager now days the program works a bit off-track due to the incentive being stopped. *PO*s told that they couldn't force the *SSs* to work without incentive, but when they used to get incentive, they worked as they were told. Because some of the *SSs*, who needed to support the family, incentive packages also contributed. *PO* also said that in previous time they *(SS*) were serious about selling medicine then now.

Finally dropout rate in the area is almost zero. For the 2,06,715 population in 57,612 households there were 206 SSs of which only 3 dropped out. The incentive package was highly effective in this aspect.

The effectiveness of the interventions has been demonstrated in both developed and developing settings in improving breastfeeding and complementary feeding practices with consequent benefits in reduction of child morbidity (Pelto et al. 2004; Santos *et al.* 2001; Ockene *et al.* 1996; Mitchelman *et al.* 1990). The success of interventions to improve child nutrition through counselling by improved complementary feeding practices in addition to continued breastfeeding has been less well-demonstrated in different countries (Pelto et al. 2004; Santos *et al.* 2001).

Case study *SS*

Mst jorina bibi. Shasthya shebika. Age55. She has two sons and daughter. She works in BRAC since 10 years. She also works in wash program. Join in Alive &thrive program since 2009. In her works she takes training of 7 days. Although she is a member of her areas and in her works she is very busy, but she always visit for counselling 3 to4 household. Her main responsibilities are identified pregnant woman and give them different kind of suggestions. The training of alive thrive program she learn how to proper take care of babies, necessity of colostrums and age specific food of babies. In these topics she learns to mother. Pushtikormi comes her house twice a month. And go to visit field together. She describes her own experience, at first we counsel to mother. But they don't take it seriously. But now she is a member of her areas so they all people respect her and follow her advice .she always try to feed babies colostrums within 1 hours of birth. She said that previous people did not practice it seriously. They feed babies complementary food before 6 months. And give them shops food. It is harmful of baby's body. Nowadays, these situations are change. Mothers are now conscious to take care of babies. She said that she can't follow this method when she take care her sons. Because she has no idea. But these methods apply on her grandchild. Now they are become healthy. So she feels happy to her works. She helps to mother and they respect her. She also sells medicine and people called her doctor. But sometimes she become demoralized when her family members are said why she works without any salary? But she likes this voluntary works and before her death she done this work.

Outcome

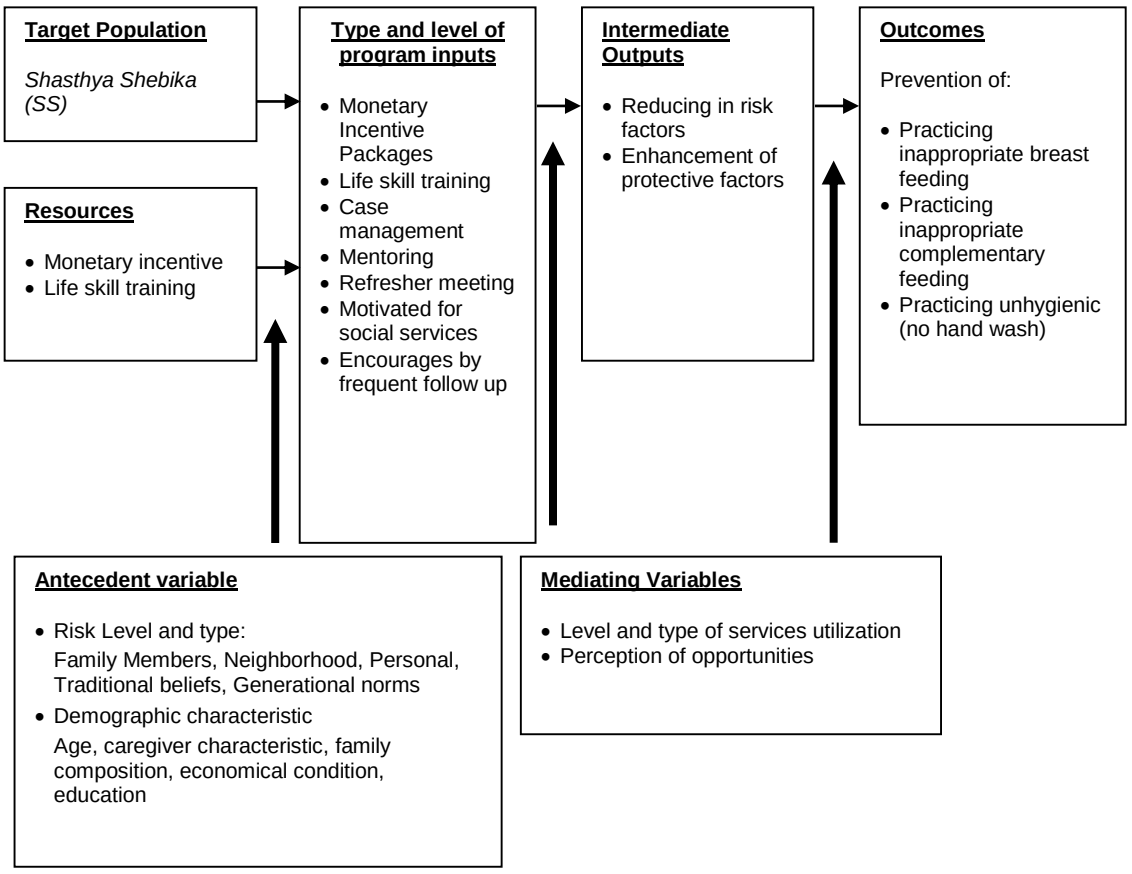
To assess the effectiveness of the offered incentive packages the quality of a service or product is based on tangible and intangible factors, both of which are important. Tangible factors are those which can be objectively measured, such as the time taken to deliver an item, the charge made and the level of operational performance. Intangible factors include those which are more subjective in nature and, therefore, more difficult to measure; for example, the utility of the item services, its adaptability and advantages over other types or merely the courtesy of the service provider's (Connell *et al.* 1995). The difficulty of quantifying some factors should not preclude their measurement as they can be as important as those

that are easily measured. Organizations should not, however, impose too many or overly demanding performance measurements and excessive monitoring on service providers as this could become counterproductive (See Annex B for the reporting mechanism of *SS*).

Here, based on those theoretical framework we considerate Incentive Packages as the social capital which also a central for functioning the whole effectiveness from facilitators' to beneficiaries. For the outcome of betterment on infant feeding practices by preventing the practicing of in appropriate breastfeeding, complementary feeding, hygiene practicing etc and to reduced the child mortality, morbidity and other risk factors as the intermediate output, the programme functioning on some type and level of inputs include: monetary incentives, life skill training, mentoring, motivation for social services by encouraging frequent follow up and refresher meeting.

A monetary incentive package was the prior function and work as Social capital. It's also the pathway of the function considerate not smooth to run. Some of the antecedent variable like Family Members, Neighbourhood, Personal, Traditional beliefs, Generational norms, demographic characteristic etc may made the obstacle. Again few mediating variables like level and type of services utilization, Perception of opportunities influence for getting the targeted the outcome.

Thus all the functional approach of the incentive packages was functioning for achieving the programme goal.



CONCLUSION

An impressive and effective start has been made by BRAC through giving BRAC CHWs monetary incentive towards motivating them in promoting IYCF-related behavior change activities. The study found that aspects of the recruitment, training and work of *SS* were conducive to motivating them but more strengthened by the monetary incentive packages that had stopped at the time of the survey.

RECOMMENDATIONS

Based upon the above findings and discussion, the following recommendations are made:

1. Need to restart the incentive packages for sustaining the improved performance
2. Need leaflets and handbills to build up awareness about breast health problems and how to solve these, position attachment, mother-child bonding etc.
3. Need to provide IYCF messages by forum with mothers, pregnant women, in laws, father, grandfather and especially the adolescents who are the future mothers
4. Need to show video clips in every refresher training as also shown during training for effective recapitulation
5. Need to recruit some female *POs* who can better interact with mother in demonstrating position attachment etc. when necessary

REFERENCES

Adams O (2000). Pay and non-pay incentives, performance and motivation prepared for WHO's December, 200 Global Health Workforce Strategy Group. Geneva. Round Table Discussion Report.

AED (2005). Academy for Educational Development. Training methodologies and principles of adult learning. TOT- adult learning.

Ahmed SM (2008). Taking Healthcare where the community is: The story of the Shasthya Shebikas of BRAC in Bangladesh, BRAC University Journal, vol. V, no. 1, 2008, pp.39-45.

Ahmed SM, Hossain MA, Chowdhury AMR & Bhuiya AU (2011). The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix and inequitable distribution. Human Resources for health, *Pub Med,* doi:10.1186/1478-4491-9-3

BDHS (2007). Bangladesh Demographic and Health Services. Dhaka, Bangladesh and Calverton, Maryland, USA: National Institute of Population Research and Training (NIPORT), Mitra and Associates, and Macro International.

CFPR/TUP (2004). Towards a profile of the ultra poor in Bangladesh: findings from CFPR/TUP baseline survey. Dhaka and Ottawa: BRAC and Aga Khan Foundation Canada,2004. 200p.

Connell JP, Kubisch AC, Schorr LB & Weiss CH *(1995). New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts.* Washington, DC: The Aspen Institute.

Faruque ASG, Ahmed AMS, Ahmed T, Islam MM, Hossain MI, Roy SK, Alam N, Kabir I & Sack DA. (2008). Nutrition: Basis for Healthy Children and Mothers in Bangladesh, *Journal of Population Nutrition*,26(3): 325–339, PMCID: PMC2740711.

Freed GL, Clark SJ, Lohr JA & Sorenson JR (1995). Pediatrician involvement in breast feeding promotion: a national study of residents and practioners.Prediatrics 96:490-4

Gupta A &Arora V (2007). The State of the World's Breastfeeding South Asia Report *Tracking Implementation of the Global Strategy for Infant and Young Child Feeding*

Haider R, Ashworth A, Kabir I & Huttly SR(2000). Effect of community-based peer counselors on exclusive breastfeeding practices in Dhaka, Bangladesh: a randomized controlled trial. *Lancet* 2000;356:1643-7.

Haider R , Kabir I and Ashworth A (1999), News from the region. Are breastfeeding promotion messages influencing mothers in Bangladesh? Results from an urban survey in Dhaka, Bangladesh, the journal of Pediatric.

Herzberg F, Mausner B & Snyderman B (1959). *The Motivation to Work*. New York: Wiley.

Herzberg F (1966). *Work and the Nature of Man*. New York: World Publishing.

Jones G, Steketee RW, Black RE, Bhutta ZA & Morris SS (2003). How many child deaths can we prevent this year? *Lancet* 362, 65-71.

Joseph WS (1994)."Assessing the Feasibility and Likely Usefulness of Evaluation." In Joseph S. Wholey, Harry P. Hatry, and Katherine E. Newcomer (eds.), *Handbook of Practical Evaluation,15-39.*San Francisco:Jossey-Bass.

Kanani S & Gadre SA (2003). The study of care giving behaviors related to feeding practices in children (3-36 months) with a focus on the comparative scenario in rural and urban areas of Vadodara city. Department of Foods and Nutrition, The M.S. University of Baroda, Vadodara.

Khan SH, Chowdhury AMR, Karim F & Barua MK (1998). Training and retraining Shasthyo Shebika: Reasons for turnover of Community Health Workers in Bangladesh. Health Care Supervisor 1998;17(1):37-47.

Mitchelman DF, Faden RR & Gielen AC (1990). Pediatricians and breastfeeding promotion: attitudes, beliefs and practices. *American Journal of Health Promotion*;4:181-6.

Ockene IS, Hebert JR, Ockene JK, Merrian PA, Hurley TG & Saperia GM (1996). Effect of training and a structured of office practice on physician-delivered nutrition counseling: the Worcester-Area Trial for Counseling in Hyperlipidemia (WATCH). *American Journal of Preventive Medicine*;12:252-8.

Pelto GH, Santos I, Gonçalves H, Victora C, Martines J & Habicht JP (2004). Nutrition counseling training changes physician behavior and improves caregiver knowledge acquisition. *Journal of Nutrition;*134:357-62.

Penny ME, Creed KHM, Robert RC, Narro MR, Caulfield LE & Black RE (2005). Effectiveness of an educational intervention delivered through the health services to improve nutrition in young children: a cluster-randomized controlled trial. *Lancet*;365:1863-72.

Rahman M, Tasneem S & Ahmed SM (2007). Research note on "Incentive mechanism for Shasthya Shebikas in Nilphamari: an economic perspective". Dhaka: BRAC;2007a.

Rahman M, Sulaiman M & TasmeemS (2007). Getting to know shasthyo Shebikas: A case study of Tangail. Dhaka: BRAC. 2007b.

Santos I, Victora CG, Martines J, Goncalves H, Gigante DP & Valle NJ *et al.*(2001). Nutrition counseling increases weight gain among Brazilian children. *Journal of Nutrition*;131:2866-73.

Schmidt RE, Bell JB & Scanlon JW (1994)."Evaluability Assessment: Making Public Programs Work Better," *Human Services Monograph Series,14:4-5.* Washington, DC

Trudeau E, Kristal AR & Patterson RE (1998). Demographic and psychosocial predictors of fruit and vegetables intakes differ: implications for dietary interventions. *J Am Diet Assoc*;98:1412–7.

The Daily Shomokal, March, 2011.

UNICEF (2006), *Progress for Children: A Report Card on Nutrition,* New YorkNumber 4, May 2006

WHO (2002). World Health Organization. Global strategy for infant and young child feeding, annex 2. Geneva: World Health Organization. 30 p.(WHA 55/2002/ REC/1).

WHO (2006). World Health Report on, Workers are not just individuals but are integral parts of functioning health teams in which each member contributes different skills and performs different functions.

APPENDIX

Appendix A: INFORMED CONSENT

Research and Evaluation Division, BRAC

Assallamo Alikum/Adab,

My name is _____, a staff of BRAC. At the present moment, BRAC is conducting an exploratory study in your locality to gather information on effectiveness of renumeration on IYCF. It is known that the number of malnourished infants is very high in Bangladesh when compared to other countries. Under nutrition can lead to morbidity, mortality, and developmental delays in children. One way to improve child nutrition is to practice safe infant feeding early in life. BRAC has taken the initiative to help improve infant nutrition through A&T program. And to asses the effectiveness of the remuneration RED will conduct a study. You are being invited to participate to share your experiences.

There is no personal benefit for participation in this research. However, your answers may provide us with information that will generate important knowledge and help to develop better programs to improve child health in the future.

You will have a discussion in a group setting or in a semi-structured interview. In the group discussion or semi-structured interview you will be asked questions by a researcher. You can choose to answer the questions or not. The research will be done in the privacy and will take no longer than 2 hours. You may withdraw from the study at any time.

This study is entirely voluntary and there is no expectation to participate. Your participation will not affect any current or future participation in BRAC programs and/or your current or future employment at BRAC.

All information collected during the discussion will be kept confidential by the researcher, however, other group members although encouraged to maintain confidentiality are not required to keep your responses confidential. Your participation means that you agree to allow the information to be used for research purposes, but your name will not be identified in any way in reports or publications. Any publication of the data will not identify you.

If you have any questions about this study call ……..

Can we tape record the interview?

For researcher: **Circle: Yes/No**

Do you have any question/enquiry about our study? May I start interviewing?

Participant's Name (Printed): _____

Has agreed ☐ Has not agreed ☐

Signature or Thumb Print of Participant: _____

Appendix B: Reporting mechanism of the SS