



A Qualitative Assessment of the Effectiveness of the “Incentive Package” Piloted in Shahjahanpur, Bogra under “Alive and Thrive” Program

Umme Salma Mukta^{1*}, Syed Masud Ahmed^{2,3}, Umme Sayka⁴, Md. Raisul Haque⁵

¹Research and Evaluation Division (RED), BRAC Center, Dhaka, Bangladesh

²Centre for Equity and Health Systems, icddr,b, Dhaka, Bangladesh

³Centre of Excellence for Universal Health Coverage, James P. Grant School of Public Health, BRAC University, Dhaka, Bangladesh

⁴Campaign for Population Education (CAMPE), Dhaka, Bangladesh

⁵Health Nutrition and Population Program in BRAC, BRAC Center, Dhaka, Bangladesh

Email: *salma.mukta@gmail.com, ahmed.sm@bracu.ac.bd, saykamoni@gmail.com, rausil.h@brac.net

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Abstract

Bangladesh is one of the countries with a high rate of infant malnutrition and the major cause is inappropriate breastfeeding 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, SSs were not too much demoralized and continued to work because of the incentive package. All the performance indicators of the SS showed improvement. The implication of this for program is discussed.

Keywords

Incentive Package, Effectiveness, Bangladesh, IYCF

Subject Areas: Anthropology, Education, Sociology

*Corresponding author.

1. Background

In Asia, Bangladesh is one of the countries with a high rate of malnutrition. The baseline survey by the National Nutrition Program (NNP) showed high rates of stunting, underweight, and wasting [1]. 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 that is fundamentally important in reducing child malnutrition and mortality [2] 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 [3]-[6].

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 [7]. 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 [8].

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 to build BRAC EHC's capacity to impact IYCF and reduce stunting as EHC is the proven long-term sustainable BRAC health program with the largest scale and longest continuity [9].

The community health workers (known as Shasthya Sebika, SS) are not paid workers 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 [10]-[12].

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 program. 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 [13].

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 re-designing 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 [14] [15].

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

“Incentive package” for the A&T program

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

- 1) colostrums feeding within the 1st hour of birth of the baby;
- 2) exclusive breastfeeding (EBF) for the first six months;
- 3) complementary feeding after six months 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 in the findings of the evaluation.

1.1. 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 Sebika, SS) involved in the “Alive and Thrive” program...

1.2. Specific Objectives

- To assess the effects of the “incentive package” on five key indicators.
- To explore the perceived barriers and coping mechanism in implementing the “incentive package”.
- To document the process of implementation of the “incentive package” to understand the effectiveness.

2. Methods

2.1. 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 pretty well representative of rural Bangladesh. BRAC SS (Shasthya Sebika) of EHC and MNCH program who had received training in Alive and Thrive program 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.

2.2. 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.

1) In the in-depth interview, we covered the 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 SKs, 2 each of Program Organizer (POs), Upazila Manager (UM) and Branch Manager (BM)

2) 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.

3) At the community level, SS and SK maintains all records of EHC activities by individual households. Shasthya Kormi 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.

4) 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.

5) 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 program.

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

2.3. 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).

2.4. 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.

2.5. Data Analysis

The data were at first transcribed and then coded. A thematic analysis was performed (please see Appendix B for describe the table for themes, sub-themes and codes used for planning and doing comprehensive analysis). Themes were categorized according to the objectives of the study.

3. Results

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

3.1. 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... COL is good because it is pure, and works as vaccination.”

Case of a Mother

Rasheda (35) is a house-wife. She is an inhabitant of village “Khadass” at Sajahanpur 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 Sirin Akter 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 program. 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.

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 color. Some mothers told that for the first child they faced a bit problem with colostrums feeding but with help from the SSs and their counseling, they tried to feed colostrums as soon as possible after delivery. One mother said that,

“Colostrums are 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,

“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.

3.2. Exclusive Breastfeeding

“Now people are aware that EBF should be done for 6 months,”

Said a SS while discussing how to ensure exclusive breastfeeding 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 of a Mother

Jorina (26) a mother of having a 13th month child. She knew that if she feed her children only BM till 6 month they will be healthy and meritorious. For that she practicing exclusive breastfeed 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 nutrias 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 and also intellectuals.

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 and post lacteals. A SS said:

“Now a day’s mothers are more conscious about colostrums feeding and exclusive breastfeeding 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 (specially the elderly ones) asked them for pre and post lacteals specially honey and cow’s milk but they didn’t listen to them. Though some mother used to practice post lacteals, with the help and counsel of the SSs they were convinced about EBF and practiced 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 SSs. One 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 its 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 came on top for practicing colostrums feeding, BMI and EBF (The Daily Somokal, March, 2011).

3.3. 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.”

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 was child 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 breastfeeding. 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 8.00 am 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 breastfed 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.

While advising complementary food, the SSs 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.

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.

Case Study SS

Mifta ul Jannat (27), a mother of 2 children. Now work in BRAC. During this program alive & thrive she works in 2 years 6 months. For her works she takes 5 days 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 8 am. Per day she visits 8 households. And every household he stays 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. These topics 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 nowadays 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 message to mother as soon as possible though they also want to know the things.

3.4. 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. One 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 healthiness 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, diarrhea, 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 diarrhea and dysentery. Child’s food should always be prepared separately.”

This reflected the messages delivered effectively by the SSs.

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

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.

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.

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 was promoted by the SS/PKs:

- 1) responsive feeding practices;
- 2) feeding during illness.

3.6. Responsive Feeding Practices

Responsive feeding practices ensure that not only the child is fed for survival, but s/he would have pleasure from feeding. One 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.

One SS said:

“When children don’t want to eat, mother should distract them or try to feed when they are busy playing.”

3.7. Care during Illness

During illness of the child, s/he needs to be breastfed frequently for satisfying her/his thirst—told a SS. Most of the SSs told that they also counseled mother on care-giving during illness because in the field they found that sometimes mother stopped breastfeeding 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 breastfeeding in addition to the food from the family pot. There was spillover effect also: many women in the neighborhood listened to the SSs while she counseled the target mother. On occasions, these women talked about their problems and the SSs tried to address those as far as possible.

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 tined or cow milk, but she thinks cow milk better then tined powder milk as cow milk has no adulteration. She thinks tined milk impure ad she never feed tined milk. Moreover she thinks homemade food is better than out food. She thinks others of her area have become benefited as this program 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.

4. Discussion

South Asia, home to about 1.4 billion people, has the highest number of under-five deaths 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 [16] [17]. Bangladesh is one of the countries with "severe shortages" of health workers specially in the field of vaccination coverage, primary health care outreach, suboptimal infant feeding practices, under-5 child and maternal survival etc. [18]. 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 [19].

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 [4] [11] [20].

Colostrums feeding and/or initiation of breastfeeding within first hour of birth revealed in Bangladesh it is 24% which indicates a rating of Good [21]. Again, by appropriate EBF (for the first six months) practicing 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 [20]. 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 [16] [17]. 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% [16] [17].

In Bangladesh, although 97% of mothers breastfeed their infants, the proportion that exclusively breastfeed remains low 33%. In addition to breast milk, Bangladeshi infants are often introduced to other foods either too early or too late which caused later diarrhea or an upset stomach [1]. 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 [16] [21] (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 program 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 base line survey of CFPR/TUP studies, which have demonstrated that lower socioeconomic groups consume smaller quantities of foods compared to their higher socioeconomic counterparts [22].

The rate of complementary feeding in South Asian countries varies from 22% to 98%. Pakistan has the lowest

percentage—22%, closely followed by Afghanistan (29%), and India (35%). On the other hand Nepal (66%), 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 diarrhea and other diseases [16] [17].

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 [23] [24]. 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.

The study also revealed that all the SS are demoralized now days 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 coffer is welcome.

According to the Area manager now days the program works a bit off-track due to the incentive being stopped. POs 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. Some of the SSs need to support their family, where 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 206,715 populations 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 [5] [25]-[27]. The success of interventions to improve child nutrition through counseling by improved complementary feeding practices in addition to continued breastfeeding has been less well-demonstrated in different countries [5] [26].

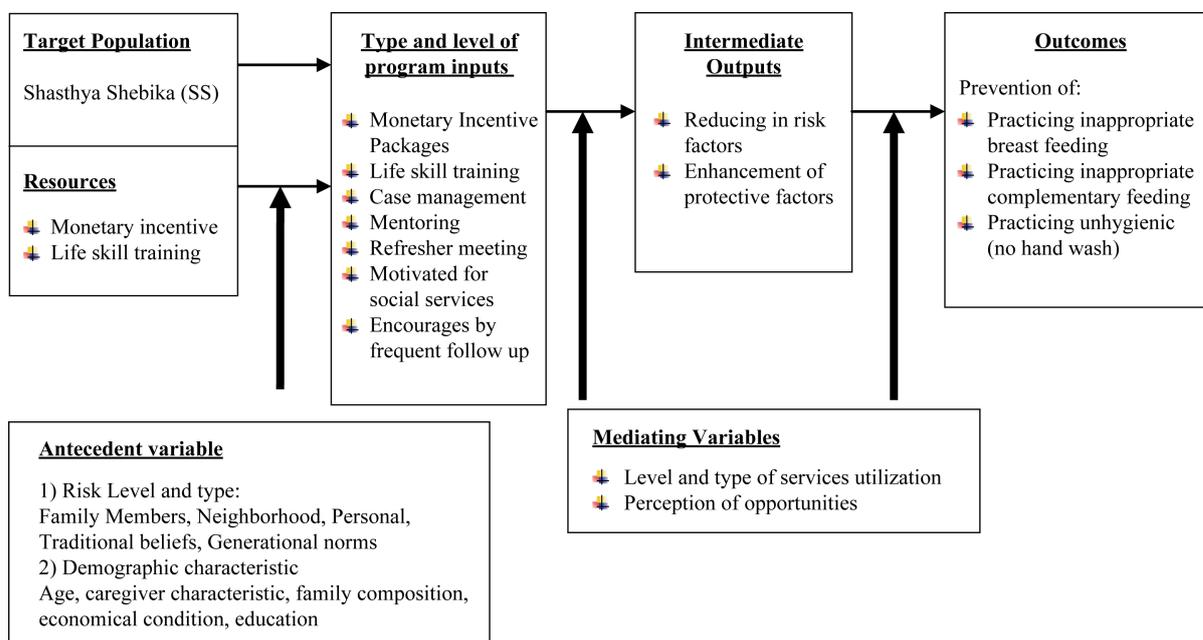
5. Outcome

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 [28]. The difficulty of quantifying some factors should not preclude their measurement as they can be as important as those that are easily measured. Organisations should not, however, impose too many or overly demanding performance measurements and excessive monitoring on service providers as this could become counter-productive.

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 outputs, the program 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.

The monetary incentive packages were the prior function and work as social capital. The pathway of function the packages considerate not smooth to run. Some of the antecedent variable like family members, neighborhood, 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 (see Appendix C for SS case and the way to their function).

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



6. 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 motivate them, but were 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.

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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 remuneration 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 assess 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: _____

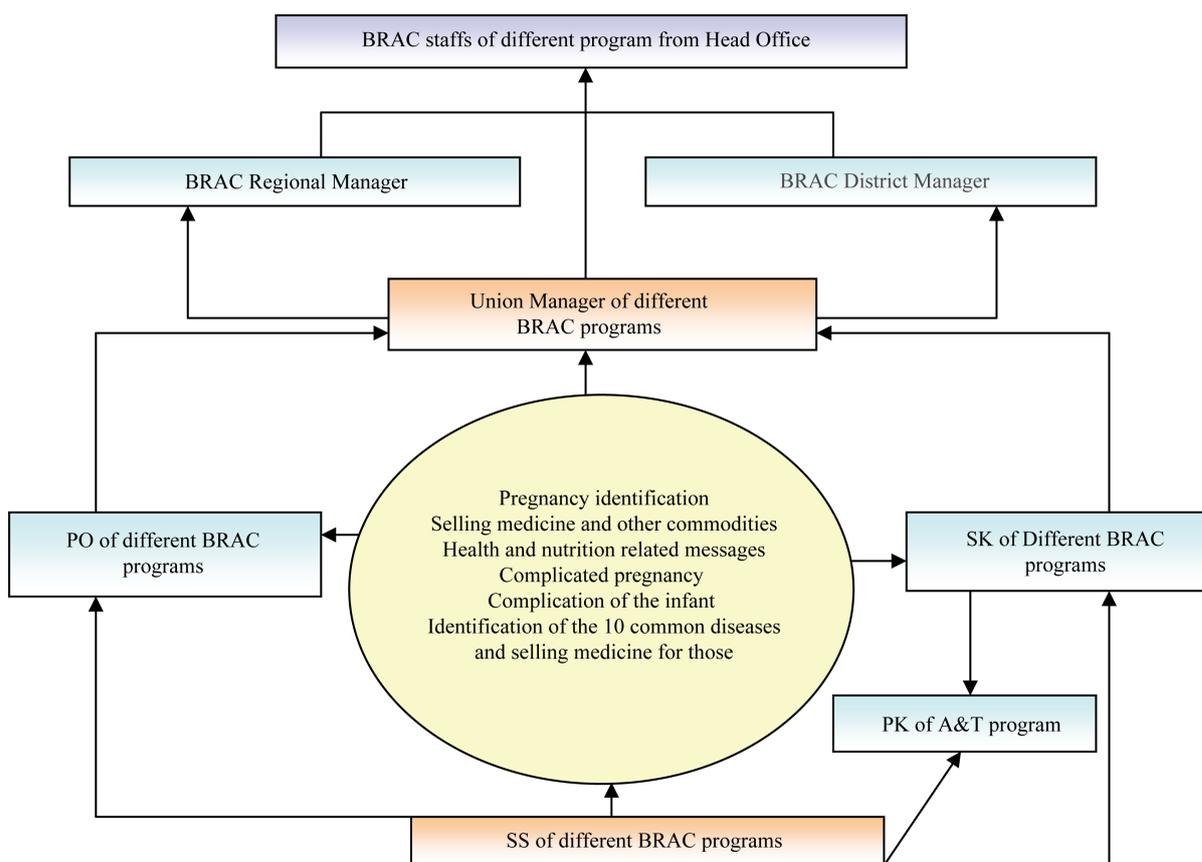
Appendix B: Table of Thematic Scheme of Analysis of the Qualitative Data

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

Appendix C: Reporting Mechanism of the SS and the Case

Case study SS

Mst Jorina Bibi. Shastho sebika. Age 55. 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 counseling 3 to 4 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. Now a day these situations are change. Mothers are now conscious to take care of babies. She said that she can't flow this method when she take care her sons. Because she have 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.



Acronyms

AED	Academy for Educational Development
AM	Area Manager
A&T	Alive & Thrive
ARI	Acute Respiratory Infection
BF	Breast Feeding
BM	Breast Milk
BMI	Breast Milk Initiation
BRAC	Bangladesh Rural Advancement Committee
CF	Complementary Feeding
CHW	Community Health worker
BHP	BRAC Health Program
DM	District Manager
DR	Doctor
EBF	Exclusive Breast Feeding
EHC	Essential Health Care
FGD	Focus Group Discussion
GO	Governmental Organization
HH	House Hold
HSC	Higher Secondary Certificate Examination
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
SSC	Secondary School Certificate Examination
SK	Shasthya Kormi
TB	Tuberculosis
TBA	Trained Birth Attendant
TV	Television
vCHW	Voluntary Community Health Worker
WHO	World Health Organization