

Child Development Foundation
Positive Deviant Hearth Nutrition Program

Final Evaluation Report

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Prepared by: Elsadig Elhashimi & Dr. Suha Khogali

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1. Introduction and Background:

The purpose of this report is to present findings of final evaluation conducted for assessing the impact of Positive Deviance Hearth Nutrition programme. It was implemented by CDF and CIS as an element of a broader food security and livelihoods intervention in Al-Gadarif State. The PD element was not sufficiently covered by the final evaluation of the whole project. It had to be re-assessed independently.

Positive Deviant Hearth Nutrition intervention was designed to rehabilitate malnourished children, enable the families to sustain their rehabilitation at home on their own and to prevent malnutrition in younger siblings. A Positive Deviance Hearth intervention is a home and neighborhood-based nutrition program for children who are at risk for protein-energy malnutrition in developing countries. The program uses the “Positive Deviance” approach to identify those behaviors practiced by the mothers or caretakers of well-nourished children from poor families and transfers the positive practices to others in the community with malnourished children. The “Hearth” or home is the location for the nutrition education and rehabilitation sessions. Positive Deviance (PD) is an approach that is based on the premise that solutions to community problems already exist within the community. This approach thus differs from traditional "needs based" or problem-solving approaches in that it does not focus primarily on the identification of needs and the external inputs necessary to meet those needs or solve problems. Instead it seeks to identify and optimize existing resources and solutions within the community to solve community problems. PD identifies those behaviors practiced by the mothers or caretakers of well-nourished children from poor families and transfers such positive practices to others in the community with malnourished children. The deviant hearth approach aims to: (1) rehabilitate malnourished children; (2) enable families to sustain rehabilitation of these children at home on their own; and (3) prevent malnutrition among other children in the community.

2. Program Description:

The Child Development Foundation (CDF) in collaboration with Care International Switzerland (CIS) had developed and implemented a livelihood and food security project. It included a component of Positive Deviance (PD) component. The PD was piloted by CDF under the technical support from CIS as part of a multi-sectoral project entitled “Promoting Resilience to Increase Food Security in Vulnerable Communities of Gadarif State” project.

3. General objectives of the PD health nutrition approach end action evaluation:

1. To review and evaluate the results of positive deviance approach program and the positive change in individuals practice regarding nutrition.
2. To identify the lessons learnt and experiences gained.
3. To measure the impacts of projects intervention on eradication of combating hunger and improvement of food security of children in targeted communities.
4. To recommend further activities, any corrective actions for future interventions.

4. Evaluation specific objectives:

The specific objectives of the assignment are to inform about the following evaluation criteria:

- Efficiency of implementation.
- Program effectiveness.
- Program impact to date as well as potential sustainability.
- What are the lessons learned from the implemented activities program (PD)?
- Do we need to make any activities/inputs to the program?

5. Evaluation methodology:

The methodology followed to evaluate the PD hearth nutrition approach was a combination of methodologies. They included desk review, collection of primary data from the direct beneficiaries by questionnaire, collection of qualitative data by FGDs and interviews.

1. **Desk review:** The evaluation team of has reviewed the project documents and other relevant literature (theory of the PD and progress reports).
Field visits to the implementation sites: tool for data collection included:
2. **Pre-structured questionnaire:** The questionnaire was used in order to identify practices that influence PD's outcomes and to collect information on behaviors practiced beyond graduation. Individual questionnaire was found to be the most appropriate tool for collecting primary data on PD related practices in this case. The Questionnaire included questions investigating background information that affect malnutrition, health care behaviors, and questions addressing the implementation of PD hearth nutrition program training. In addition to measurement indicators to assess improved nutrition status. A sample of 57 questionnaires was filled with women from four of the targeted communities namely; Eltadamon, deim Saad, Wad El huori and Wad Daeif.

The questionnaire targeted ages from 18 to above 40 years as illustrated in the table below:

Ages of respondents

Ages	Less than 18	18-30	30-40	More than 40	Total
Attended the nutrition training – with	0	8	10	5	23
Didn't attend the nutrition training - without	0	24	8	2	34
Total		32	18	7	57

3. **Focused Group Discussions (FGDs):** Three FGDs were organized with project beneficiaries to inform about the project and its implemented activities, project impact and other project effectiveness, efficiency. FGDs provided deeper understanding of effect of the project on the beneficiaries and their thoughts on the implementation of the project.
4. **Anthropometric measure:** weight, height, arm circumference and age of children of the respondents were recorded to assess their nutritional status in order to measure the improvement in their nutritional status.
5. **Interviews with the counterparts and partners:** Interviews with the counterparts and partners are also important to the full view of Positive Deviance Hearth Nutrition Approach implementation. Interviews were held with:
 - CDF staff involved in the implementation of the program
 - State Ministry of Health, Nutrition Directorate

6. Assessment of PD Hearth Nutrition Programme:

6.1 PD programme implementation stages:

The implementation process of the PD programme went through the following steps:

Step 1: Conduction of a baseline survey (positive deviant inquiry and KAP survey): The survey investigated the feeding, caring & health seeking practices of infants and young children and identified positive deviant mothers. A KAP survey was, also, carried out, focusing on core Infant and Young Children Feeding (IYCF) indicators.

Step 2: Training of CDF and partners' staff members (30 candidates) on the positive deviant (PD) hearth approach for a pilot nutritional training program. The training was delivered by CIS Nutrition Consultant. The trained staff members are now responsible for training 6 community-health volunteers in each targeted community to implement the approach on the ground.

Step 3: Training of 6 community-health volunteers in 2 communities on PD hearth nutrition programming: The trained candidates organized a 3-day training workshops for 6 CHVs on PD hearth nutrition programming in Gedarif. The CHVs were responsible for implementing the PD hearth nutrition training in the target communities.

Step 4: Identification of two communities and 150 women for the PD hearth nutrition training pilot program: Women were selected from the cash grant recipients, based on set criteria, through a participatory process, between the implementing partners and the target community leaders. The 150 PD trainees were selected out of 2,000 cash grant beneficiaries. The approach required training of a group of 30 women by one CHV. As this was a pilot, PD nutrition training was provided in 3 communities (50 each) where populations sufficiently clustered and a health centre is available for monitoring of results. A number of 3 hearth sessions were conducted by each CHV, each week for a period of 3 months in total. Each

session lasted for 3 hours and included nutrition education, cooking demonstrations & rehabilitation of malnourished children. Hearth sessions were attended by PD mother identified by the baseline survey. Key IYCF behavior change messages were disseminated during these sessions. The CHVs and PD mothers then conducted growth monitoring of children under-five years of age during monthly home visits to the beneficiaries. The follow-up continued for 6 months after completion of the training sessions for documenting outcome data and provide continued advice.

Step 5: End-of-action nutritional survey: The survey investigated the feeding, caring & health seeking practices of infants and young children following PD hearth nutrition training. This was linked to the KAP survey which was focusing on core Infant and Young Children Feeding (IYCF) indicators. The findings of the survey were compared to the baseline values for evaluation purpose, particularly, the impact of the action.

Step 6: Publication on PD hearth nutrition programming impact on target communities: CDF didn't prepare a publication on the experience and impact of PD hearth nutrition programming in the target communities as planned. The reason was the lack of budget for publication. It was missed during the budgeting process. However, the evaluation report will be published and disseminated widely to all interested parties within and outside Sudan.

It was expected that the cash grants would relieve distress due to food shortages and in combination with positive nutritional practices would lead to an overall improvement in household well-being, food security and nutritional status in targeted households. This was very ambitious expectation bearing in mind the scope of the PD. The delay in implementing PD activities had also affected the achievement of the intended results.

6.2 Relevance:

The majority (71%) of the households of the targeted communities reported that their children suffer from different diseases. The common diseases included malaria 28%, respiratory 34%, diarrhea 17%, malnutrition 3%, bilharzia 2%, and 18% other diseases. The rate of 3% malnutrition is not alarming but it is essential to intervene to halt and reverse its progress. Addressing malnutrition and related diseases remains a priority for all parents.

Addressing malnutrition is part of CDF's strategic framework that includes assisting children in need through child focused programmes and policies. Similarly, the nutrition intervention is in line with the mandate of the partner CIS whose programmatic strategy focuses on life-saving humanitarian assistance, women and children under 5.

The PD hearth nutrition intervention matches the UN SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture; and the SDG 3: Ensure healthy lives and promote well-being for all at all ages.

6.3 Effectiveness:

The delivery of expected results was contingent to timely and effective implementation of respective activities. The PD's activities had started late due to some operational constraints, however, all activities had been implemented except the publication of the PD's modules and reports.

Five out of the ten communities targeted with the project were selected for the intervention. These communities included, (Elwahda, Eltadamon & Deim Saad) from Gadarif Municipality, and (Wad El Huori & Wad Deif) from West Gallabat Locality. These communities were chosen on the basis that they had higher percentage of children less of 5 years of age.

The intervention included 150 women, 30 from each targeted community with the help of the community volunteer. CDF staff members were trained on PD approach, who in turn trained the community during a three days' workshop in each of the selected communities. Training of the 5 communities completed within three months the training focused on, nutrition education, cooking demonstrations of nutritious meals from local materials, in addition to screening for malnourished children to start their rehabilitation program. The material used for the training was taken from the MoH curriculum.

The trained candidates have acquainted adequate knowledge and transferred it to the potential mothers in targeted communities. The trained mothers have fostered the PD to an acceptable level. So far 74% of the trained women who attended the training sessions have trained other women in their communities. They don't have records of the number of trainees and other details. On the other hand, only 32% of the women who did not attended the sessions heard of the program in their community. They didn't receive adequate information about the PD approach. This indicates that the coverage was not up to the expectations.

The PD training targeted the mothers with children aging less than 5 years. The families with less than five children constituted 81% of the total beneficiaries and the proportion of beneficiary families with more than five children was only 19%. This is logical because the number of children aging less than 5 years is normally less than five. Likewise, the percentage of mothers who didn't attend any PD training session and have children less than 5 years old is 85% (out of the total number of the mothers who didn't attend PD training).

There are few women who don't have children but attended the training sessions because they were interested to volunteer for disseminating PD knowledge.

The attendance of the training was an important indicator for the effectiveness of the PD training. From the sample selected 39% attended only one session; 13% attended two sessions and 48% attended three sessions (the full course).

The PD knowledge has reflected on the diversification of children food. The table below shows the food groups the children had in the past 7 days:

Food group	No of respondent answered yes	Percentage
Legumes	36	20.68%
Fruits and vegetables	21	12.10%
Cereals, Bread, and potato	38	21.84%
Dairy	34	19.54%
Fish, Meat and Alternatives	14	8.04%
Fat and Sugar	31	17.80%
Total	174	100%

No of respondent their child had diarrhea during last month and how they were treated:

PD Beneficiaries	No of children	Had diarrhea		Baseline Value	Visited health care provider
Attended the training	23	6	26%	12%	6
Did not attend the training	34	13	38%		9
150 households					

An in-depth investigation is needed to know the reason behind the increase in diarrhea cases among children. The evaluation team observed spreading of flies in the targeted locations. This always coincides with the onset of the rainy season.

All of the respondents do not go for regular visits to the post-natal care and the last time they went to the post natal clinic was for vaccination.

The women who had attended the training were satisfied with the training as they learned new health information that they did not know before. They knew about exclusive breast feeding for 6 months, taking care of their children and the type of local foods that are good for their children.

6.4 Efficiency:

The methodology used for implementing the PD was based on ToT and voluntarism. This is the most efficient approach in community development. If the multiplier effect worked properly as planned the PD coverage would have exceeded the target of 6,000 beneficiaries. Unfortunately, this was not the case. The momentum of the trainers is declining as time goes on and they become less enthusiastic.

The procurement of goods and services for this element of the project was governed by the policies and procedures of CDF.

6.5 Impact:

Adequate knowledge of PD hearth nutrition approach has been disseminated to women in the targeted communities. It covered both those attended the training programme and those who did not attend.

There is a noticeable improvement in the attitude of mothers towards feeding their infants and children. They have, also, become knowledgeable about children health care. They use the newly learned health information such as exclusive breast feeding for 6 months, taking care of their children, and the type of local foods that are good for their children. Nevertheless, weekly food diversification for the family members is constrained by limited financial capability.

The aggregate impact of the PD intervention was negatively affected by the partial attendance. Some of the trainees did not attend all the PD training sessions and, hence, their knowledge is limited to the information that was provided in the sessions they attended.

The coverage increased through the multiplier effect (albeit it can be criticized of not being systematic). The trainees transferred the information they learned to other women in the social gatherings or when they see someone in a situation doing something that is not healthy. But there are no other systematic activities in the community on the prevention of malnutrition after the end of the program.

The ministry of health was not involved in the implementation of the program and there are no other activities carried out in these communities to prevent or advocate for prevention of malnutrition.

Impact on Malnutrition

Sample size	Malnourished	%	Baseline Value
57	0	0%	3%

Before the PD intervention there was 4 cases of malnutrition out of the 150 beneficiary households. The cases were referred to the health center to start rehabilitation program. Three of them were treated, and one is still on treatment program.

6.6 Sustainability:

The main factors of sustainability need to be further enhanced to ensure the continuation and promotion of effective PD. The sense of ownership among the lead mothers who are responsible for fostering the PD culture is yet to be up to the required level. They need to be more committed to their mission.

The in-built mechanism is not as systematic as required. The PD training sessions should be regular on weekly basis. Every lead mother should train 10 mothers giving them full training package.

A mechanism for effective follow up from the Food Security Committee and Nutrition Department is necessary for the sustainability of the PD impact.

7. Lessons Learnt:

- Promotion of PD Hearth Nutrition Approach by community volunteers can be effective only if there is a close follow up from a higher authority.
- Flimsy selection criteria result in incapable and uncommitted trainers. Firm selection criteria are a pre-requisite for effectively fostering and adopting PD approach.
- Leaving the PD local trainers working in isolation without linking them to the Food Security Committee or the Nutrition Department of the State Ministry of Health is a reason for failure.

8. Recommendations:

- It is recommended to conduct a comprehensive study on the positive deviant approach. This means investigating the feeding, caring and health seeking practices of infants and young children and identification of positive deviant mothers.
- It is advisable to maintain an effective local or community-based monitoring system for nutritional status of infants and children. This requires collaboration with the Nutrition Department of the State Ministry of Health.
- It is advisable to continue the PD training for highly potential candidates and refreshment training for the previous trainees with focus on community based trainers.
- Connection of PD with other food security and livelihoods interventions is strongly recommended.
- It is advisable to develop a PD module from the best practices of the positive deviant mothers than to apply the ready-made package of the Ministry of Health.
- It is recommended to have an annual plan for the CHV where each CHV conduct 1 training session per week for 10 mothers.