



Central Kitchen Model - An Alternative Mode of School-Based Feeding Program (SBFP): An Evaluation

Luzviminda G. Rivera, RN, LPT, DPA
Department of Education –Tarlac Province/Division Office
riveraluz71@yahoo.com

Abstract: Basic education institution has a significant role to support the national nutrition health agenda by promoting nutrition programs to help improve nutrition health status of their students. This study evaluated the implementation of the Central Kitchen Model Feeding Program (CKM) as an alternative mode of the School-Based Feeding Program (SBFP) in the Schools Division of Tarlac Province using CIPP Model. The data were collected through survey, face to face interview, focus group discussions and field observations to 16 program administrators (school heads) 16 Program implementers (feeding coordinators) and 16 program beneficiaries (represented by parents). Additionally, a documentary analysis of (nutritional status assessment before and after feedings) of the beneficiaries was carried out. The study revealed that the CKM's complementary activities such as "Gulayan sa Paaralan" and the "Essential Health Care Program" were highly implemented for four lead central kitchen that served 16 schools for 742 severely wasted pupil and 1,208 wasted pupil beneficiaries for 120 days. These programs helped improved the nutritional status of 55.77% of students diagnosed with "severely wasted" and "wasted" condition prior to the implementation of the programs. Additionally, the programs helped improved school participation and student's attitude and behaviour towards health and nutrition. These results suggest the effective implementation Central Kitchen Model despite several issues and challenges encountered during its implementation. A proposed action plan is formulated to help improve the implementation of the alternative mode of the School-Based Feeding Program (SBFP) in the School Divisions of Tarlac.

Key Words: Central Kitchen Model; School-Based Feeding Program; Essential Health Care Program,

INTRODUCTION

The alarming statistics of malnutrition particularly undernutrition has been a challenge in the provision of feeding programs that is cost and management effective and will help in addressing the malnutrition problem worldwide.

Currently, overweight and obesity are rising coincide with the undernutrition resulting to double burden of malnutrition. Statistics showed that 1.9 billion adults are overweight or obese, while 462

million are underweight. 52 million children under 5 years of age are wasted, 17 million are severely wasted and 155 million are stunted, while 41 million are overweight or obese. Around 45% of deaths among children under 5 years of age are linked to undernutrition (World Health Organization, 2018).

In the Philippines, the latest data on the nutritional status of the Food and Nutrition Research Institute (FNRI) showed that country's nutrition situation remains a public health problem. One of the reasons was due to lack of access to appropriate



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services, resulting in poor growth and failure to reach their full human potential, majority of target populations are in the rural areas and among low-income groups. The data showed that underweight prevalence has not changed from 2003 to 2015; prevalence of wasting or thinness among preschool children slightly decreased from 5.1% in 2013 to 3.9% in 2015 while prevalence of stunting, or underheight, increased greatly from 33% in 2013 to 2015. (IRRI, 2016).

According to DepEd Order No. 51, s. 2016, the Department of Education through the School Health Division-Bureau of Learners Support Services (SHD-BLSS), shall implement the School-Based Feeding Program for SY 2016-2017 to address undernutrition and short-term hunger among public school children to improve the nutritional status of the beneficiaries by at least 70% at the end of the 120 feeding days. Secondly, it aims to increase classroom attendance by 85% and improve the children's health and nutritional status.

Another challenge in the school-based feeding program implementation is the modalities that would fit the feeding beneficiaries. According to Dep Ed Order No. 51, s. 2016, various SBFP models/modalities were developed through a series of consultation participated in by Dep Ed administrators, feeding coordinators and health personnel of Dep Ed, as well as partner LGUs and NGOs. The major consideration in conceptualizing the feeding models is to ensure that the schools will adopt the feeding models applicable and appropriate to the local setting while the primary objective is to lessen that burden on teachers and or feeding coordinators specifically in the procurement, accounting and liquidation process.

In the Department of Education- Tarlac Province Report of the Nutritional Status Assessment SY 2016-2017 of the learners in the elementary level, there are 6,772 (severely wasted) 13,524 (wasted) total of 20,296 malnourished learners.

For SY 2016-2017, the DepED Tarlac-Province implemented the SBFP with the budget of P45,180,720.00 and 6,161 severely wasted and 12,058 wasted pupil beneficiaries. For the central kitchen model beneficiaries, 742 severely wasted pupil and 1,208 wasted pupil beneficiaries. Lead Kitchen was located at Pinasling Central Elem. School, Capas East Central Elem. School and Capas East Central Elem. School and Cristo Rey East Central Elem. School

Furthermore, this research was conceived for the purpose of evaluating the implementation of the program particularly in the achievement of its goal, outcomes of the complementary activities, problems encountered on the implementation of the program and proposed policies and proposed action plan to improve the implementation of the program for the succeeding years.

STATEMENT OF THE PROBLEM

This study evaluated the implementation of Central Kitchen Model Feeding Program (CKM) in the Schools Division of Tarlac Province.

Specifically, the study seeks to answer the following questions:

- 1.) How may the Centralized Kitchen Model Feeding Program be evaluated in terms of its complementary activities
- 2.) To what extent has the implementation of CKM attained its goals?
3. What are the problems encountered in the implementation of the program?
4. What action plan could be proposed to improve the implementation of the CKM feeding Program in the succeeding years?



SIGNIFICANCE OF THE STUDY

This study aimed to evaluate the implementation of the Central Kitchen Model Feeding Program in the School Division of Tarlac Province so that better feeding program implementation would be rendered in the schools of the division.

For the Department of Education – Tarlac Province, the findings of this study will provide a framework of reference, guide and bases in all aspects of the feeding program implementation. This can be used to further improve the implementation of central kitchen model feeding programs in the division for the succeeding years.

For the Program Administrators and Program Implementers. This study will serve as their basis in the preparation of better scheme, plans and adoption of strategies that would facilitate the successful implementation of CKM feeding in the schools of the division.

For the Learners and Community. This study aims to provide information, deeper understanding, appreciation and recognition of the efforts exerted by the department of education in implementing feeding program. To achieve excellent academic performance among learners through decreasing incidence of malnutrition in the schools.

For the Health and Nutrition Personnel, the outcome of this study would provide a better perspective of the implementation of the central kitchen model feeding program in the schools of the division.

For Future Researchers, the information that will be generated from this study will serve as a baseline and framework of reference that will give them a better perspective in conducting further studies to improve the CKM implementation in the succeeding years..

METHODOLOGY

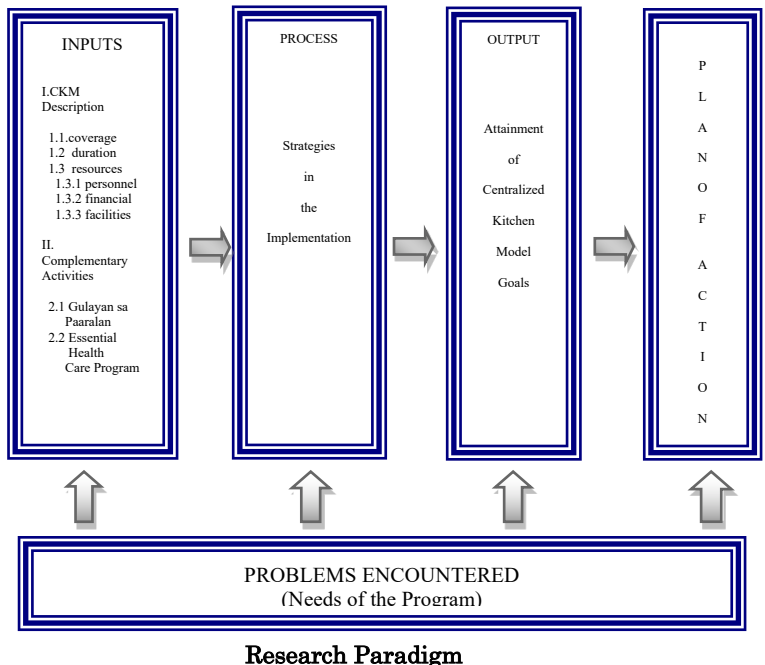
The study used the descriptive design (quantitative method) of research using the questionnaire as

instrument of gathering the data needed. CIPP model was used in the study.

It also used documentary analysis and focus group discussions (FGD). The respondents of the study were categorized into three (3): Program Administrators, (16 school heads), Program Implementers (16 feeding/nutrition coordinators/pupils' adviser) while Program Beneficiaries (16 parents of the learner beneficiaries.). Total enumeration was done in the study and the researcher adopted the research tool of the research entitled: The implementation of the School-Based Feeding Program in the Schools Division of Tarlac Province by Dr. Luzviminda G. Rivera which was structured, pre-tested, validated and reliability tested using the Cronbach's Alpha Based on Standardized items was .971 with 42 items which is highly reliable.

CONCEPTUAL FRAMEWORK

The study is a program evaluation study that utilized the Context- Input- Process and Product (CIPP) Model.





DATA ANALYSIS

In relation to the Central Kitchen Model Feeding Program's (CKM) implementation of its complementary activities and attainment of goals.

Numerical Rating	Interpretation
5	Attained 81% - 100% implementation/ very high implementation or /fully attained
4	Attained 61%-80% implementation/attainment/high implementation/almost fully attained
3	Attained 41%-60% implementation/attainment or/moderate implementation/moderately attained
2	Attained 21%-40% implementation/ attainment or less implementation/slightly attained
1	Attained 0%-20% implementation./attainment or least implementation/poorly attained

Table 2
 Scale for Problems Encountered by the Respondents

Percentage	Descriptive Rating
81-100%	Always a Problem
61-80%	Almost Always a Problem
41-60%	Occasionally a Problem
21-40%	Seldom a Problem
0-20%	Never a Problem

RESULTS AND DISCUSSION

1. The Evaluation of the Central Kitchen Model Feeding Program Implementation:

The Central Kitchen Model (CKM) as an alternative mode of School - Based Feeding Program (SBFP) implementation was evaluated according to its complementary activities.

1.1 Complementary Activities of Central Kitchen Model Feeding Program

The complementary activities of the program are Gulayan sa Paaralan and Essential Health Care Program.

1.1.1 Gulayan sa Paaralan

Gulayan sa Paaralan as to growing of vegetable in the garden was rated 3.67 (high implementation)m utilization of the vegetables for CKM feeding program was rated 3.58 (high implementation) and availability of the vegetables for CKM feeding program was rated 3.58 (high implementation) with the grand mean of 3.56 (high implementation). According to the respondents, the Gulayan sa Paaralan was able to augment the need for vegetable for CKM implementation however it is not sufficient enough to support the whole duration of the feeding.

1.1.2 Essential Health Care Program

The handwashing with soap was rated 4.42 (high implementation), deworming of pupils was rated as 4.23 (high implementation) and toothbrushing with fluoride toothpaste was rated as 4.02 (high implementation).

According to the respondents, handwashing was not able to accomplish a very high implementation due to some constraints such as no standard handwashing facilities that could accommodate 10-15 pupils, the activity are eating so much time especially during examination and other activities in the schools while deworming was not fully implemented because of the controversy of the DOH programs, they had a hard time conducting the activity to the beneficiaries. Furthermore, toothbrushing with fluoride toothpaste was done after the feeding. However, the goal of the activity is its internationalization and it's carry-over in the home and community as well.

2. Central Kitchen Model (CKM) Goals

Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding was rated 4.42 (high attainment) while ensuring 85% to 100% classroom attendance of beneficiaries was rated as 4.58 (very high attainment) and improving the children's health and nutrition values and behavior was rated as 4.17 with the grand mean of 4.38 (high attainment).



2.1 Rehabilitating at least 70% of the SW and W beneficiaries to normal nutritional status at the end of the 120 feeding days.

Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding was rated 4.42 (high attainment). According to the respondents, the high attainment but not very high attainment was a result of stoppage of feeding implementation after six months because the supplier refused to continue supplying the program due to delayed payment and low cost of the commodities to be delivered. The first supplier completed only the first 60 days of implementation due to delayed payment and failure to estimate the increase of the cost of goods to be supplied. Furthermore, the second 60 days was completed by another supplier requested by the division to complete the CKM implementation.

Furthermore, this high attainment of goal is consistent with the nutritional status of the beneficiaries before and post feeding nutritional status. The program terminal report of the CKM for SY 2017-2018 indicates that from 1,379 sw and wasted beneficiaries, only 769 or 55.77% were rehabilitated to normal.

2.2 Ensuring 85% to 100% classroom attendance of beneficiaries.

According to the respondents, 85-100% attendances of the beneficiaries were ensured during the feeding. In addition, according to them, the required percentage in classroom attendance must be attained for the successful rehabilitation of the nutritional status of the beneficiaries.

2.3 Improving the children's' health and nutrition values and behavior.

The goal of improving the children's' health and nutrition values and behavior was rated 4.38 (high attainment). According to the respondents, the high attainment of the childrens' health and nutrition values and behavior can be attributed to the

improvement noticed during the program implementation.

3.Problems Encountered

There were problems encountered in the implementation by the program by the administrators, implementers and beneficiaries namely: delayed release of budget for feeding, dislike of beneficiaries of vegetables, pupils did not eat vegetable and rely only for ration of the CKM, indifference of pupils to the feeding program, irregular attendance of parents during the preparation of meals, disciplining of pupils during feeding time and transfer of school administrators from one school to another and transportation of the cooked foods.

CONCLUSIONS

The conclusions derived from the findings of the study.

1. The study revealed that the CKM implementation on s complementary activities such as Gulayan sa Paaralan and Essential Health Care Program were highly implemented.
2. The study revealed that there was a very high attainment for ensuring the 85% to 100% classroom attendance of beneficiaries while high attainment on the CKM goals in the rehabilitation of at least 70% of the severely wasted beneficiaries to normal and improving the children's health and nutrition values and behavior
3. After 120 feedings days, 55.77% of the beneficiaries were rehabilitated to normal nutritional status and attendance were improved from 96.71 to 98.23. Attainment of improving the health and nutrition values and behavior is also generally high.
4. There were problems encountered in the implementation of the CKM namely: delayed release of budget for feeding, dislike of



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beneficiaries of vegetables, beneficiaries did not eat breakfast and rely only for ration of the CKM, indifference of learner beneficiaries to the feeding program, irregular attendance of parents during the preparation of meals, disciplining of learner beneficiaries during feeding time and transfer of school administrators from one school to another and transportation of the cooked foods.

5. Furthermore, an action plan was developed to address the problem encountered.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were offered:

- 1) The Department of Education- Tarlac Province shall continue to implement the CKM as alternative mode of SBFP successfully in terms of its complementary activities and the very high attainment of goals.
- 2) Intensify the linkages and partnership to the Provincial Government of Tarlac and Local Government Units through Memorandum of Agreement (MOA) for the sustainability of the program through the provision of additional budget per pupil, transport of foods ration and honoraria for the Central Kitchen managers and helpers.
- 3) A unified cycle menu based on the DepED Standardized Recipes using malunggay. Food Safety and standards should be observed at all times and intensify the use of the CKM monitoring form as tool for monitoring and evaluation.
- 4) The problems encountered in the implementation of CKM should be addressed through a proposed consultative meeting, conferences and orientation will be conducted by and between the budget officer, accountant, health and nutrition personnel, administrative aids, program administrators (school heads)

program implementers (feeding and nutrition coordinators) , pupils and parents.

- 5) Outstanding Implementer of the Central Kitchen Model must be awarded in the central and non-central category.
- 6) Division Planning and Implementation Review (PIR) must be done at the end of SY implementation as one way of evaluating the CKM implementation and sharing of best practices from the school beneficiaries
- 7) In case of beneficiaries who became obese, they will be under the Project anti-obesity which was proposed by the researcher, adapted and had its initial implementation on SY 2016-2017 in the division through the approved Division Memorandum No. 142, s. 2016.
- 8) Adoption of Project "NUTRIENTS" to help augment the implementation of the CKM in the elementary level and promotion of feeding program in the secondary level.
- 9) Evaluation of the program; effective carry-over of the health and nutrition values and behavior learned in the school to the home and community' and determine the impact of the program on the academic performance of the CKM beneficiaries.

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