

## Logical Framework Approach for Obesity Management Programs: A Non-Clinical Review

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### Abstract

In spite of large resources that have been allocated to manage the obesity, growing obesity trend is still a warning. Some investigators have mentioned global trade liberalization, economic growth and rapid urbanization as factors that may be responsible for this. It seems that lack of using managerial techniques in obesity control programs may be the reason for unsuccessful attempts to stop growing obesity trends. Thus, a systematic review was performed in the field of obesity control programs and management in various databases and a commonly used management approach was explained which seems to be overlooked in the field of obesity management. In the end, an example of an obesity management model was given based on this approach and obesity issue was investigated through a new perspective.

**Keywords:** Logical Framework Approach (LFA), Management, Obesity

## Introduction

Governments are spending money and acting against increasing trends of obesity in their countries. A large number of researchers are working in the field of obesity prevention and treatment. A large percentage of the daily television programs are devoted to the obesity issue. Numerous health care professionals, public and private sectors are active in the field of weight loss globally. But still about 2.8 million people die around the world due to being overweight or obese (1). No region in the world remained intact by obesity epidemic. Global rate of obesity has doubled approximately since 1980 (2); and the prevalence of morbid obesity Body Mass Index (BMI >40 kg/m<sup>2</sup>) continues to be rising in recent years (3). Moreover, growing obesity rates in children (4) predict gradual increasing prevalence of adulthood obesity in future. In addition to global trade liberalization, economic growth and rapid urbanization (5), lack of using managerial techniques in obesity control programs may be the reason of these failures. This weakness is seen in all levels of officials dealing with obesity and is more tangible especially at the level of health care professionals who are expected to manage obesity projects. In this article, an attempt was made to provide a review of possible usages of Logical Framework Approach in obesity management programs and to concentrate on obesity issue through a new perspective. In this study, a common management approach is explained which seems to have been overlooked in the field of obesity management. And in the end, an example of obesity management model is given based on this approach.

## Materials and Methods

Using medical and non-medical bibliographic databases, a systematic review of literature on the fields of obesity control programs and management knowledge was performed. Data was collected by searching MEDLINE, PubMed, Scopus, Science Direct, CINAHL, EMBASE, and Academic Search Complete (EBSCO) databases.

Furthermore, the study expanded by searching databases in different languages including Index Medicus for the Eastern Mediterranean Region (IMEMR), Scientific Information Database (SID), Index Medicus for South-East Asian Region

(IMSEAR), Iran Medex, the Latin American and Caribbean System on Health Sciences Information (LILACS), and African Index Medicus (AIM).

The following various keywords related to obesity control programs and management were used: “obesity trends” and “management”; “obesity trends” and “logical framework approach”; “obesity trends” and “logical framework approach” and “management”; “obesity” and “logical framework approach” and “management”; “obesity” or “overweight” and “logical framework approach” and “management”; “obesity control program” and “management”; “global obesity control program” and “management”; “international obesity control program” and “management”; “increasing obesity trends” and “reason”.

Inclusion criteria were field trials or population based trials which specifically dealt with obesity issue and managerial techniques such as logical framework approach. No time limitation and language restriction in the search and selection process were applied.

## Results

### ***Current status of knowledge***

Surprisingly, no field trial or community based trial was found on the usage of managerial techniques in obesity management programs. However, our search continued on the field of pure management documents and the potential applicability of a fundamental management approach for obesity control programs was explained.

### ***Logical Framework Approach may be helpful in obesity management programs***

The Logical Framework Approach (LFA) was first created by Leon J. Rosenberg and used in United States military, the United States National Aeronautics and Space Administration (NASA) then adapted by the United States Agency for International Development (USAID) as a powerful management strategy for development projects over thirty years ago (6).

LFA is a highly effective project design, planning, implementation, monitoring and management methodology with wide application (7). It can be adapted and used widely in managing health promotion (7) as well as obesity control projects.

Logical framework approach integrates four key analytical and logical elements to help move throughout management process from the first step

to last (8-11):

**Problem analysis:** this method is identical to problem tree analysis and involves discovering the core problem and clarifies what the causes and effects are and how they are related (9).

**Stakeholder analysis:** this is the process of identifying every person, group, organization or system which affects or may be affected by the obesity control project. Brainstorming can be used to identify the stakeholders. The project manager also can map the interest and power matrix of stakeholders separately outside the LFA matrix (10).

**Analysis of objectives:** after the problem tree has been plotted, the objectives determination, hierarchy and objective tree should be completed (9)

**Analysis of strategies:** it refers to identifying and comparing different solutions for a problem in order to get to an especial objective (11).

The result of above analytical *approach* was used as the source for setting up the *Logical Framework Matrix*. This matrix consists of four columns and four or more rows (Table 1) which summarizes what the project plans to do and how, what the key assumptions are, and how outputs and outcomes will be monitored and evaluated. Here, beside the matrix, the sequence, dependency and duration of activities are determined, milestone activities are being set and responsibilities are assigned to each activity and then resources are

scheduled and allocated to activities carefully (9). An example of a Logical Framework Matrix for obesity management programs is presented in table 2.

It is recommended to avoid detailed list of activities in the matrix, since the aim of completing the matrix is to provide a concise summary of what the project intends to do. The full and detailed list of activities, their duration and resources allocation may be recorded in separate platforms (Table 3) and management softwares such as *Microsoft Project*.

The key point for successful obesity control project managements is team work approach from decision making and planning till achieving the goals. Colleagues from every relevant field to obesity and major stakeholders including governments, food industries, public and private investors, and the social mass media should be involved from A to Z of planning and implementing the obesity control projects and plans (12-14).

Another issue that challenges achieving the goal is the leadership of obesity control supreme programs which ought to be led by portfolio management in a single Project Management Office (PMO). Furthermore, the dynamic associations of obesity managerial process with Political, Economic, Social, Technological, Legal and Environmental (PESTEL) factors are highly important for program success (Figure 1).

**Table 1.** The product of Logical Framework Approach is a matrix (Logframe) which summarizes essentials of project, requirements, assumptions and hierarchy of objectives (Vertical logic; columns 1 and 4), the method for project's progress, outputs and outcomes (Horizontal logic; columns 2 and 3)

PROJECT SUMMARY	MEASURABLE INDICATORS	METHOD OF VERIFICATION	IMPORTANT ASSUMPTIONS
GOAL (Ultimate objectives): Overall goal which the project contributes to – at national or global level	Objective or subjective criterion for measuring / judging the achievement of goal	Method to assess the indicator(s)	(Goal to super-goal) Main peripheral factors essential for maintaining objectives in long term
PURPOSE (Immediate objectives): The change or immediate impact to be achieved by the project	Objective or subjective criterion for measuring / judging the achievement of the purpose	Sources of information / data which will be used to assess the indicator(s)	(Purpose to goal) Main peripheral factors concerning the purpose and goal linkage
OUTPUTS (Results): The definite, deliverable results of the project	Objective or subjective criterion for measuring / judging the achievement of the outputs	Sources of information / data which will be used to assess the indicator(s)	(Outputs to purpose) Main peripheral factors necessary for outputs to achieve project purpose
ACTIVITIES: The key tasks in proper order which are required for achieving the results	INPUTS (Resources): A summary of the project staff, equipment, budget and other key resources	Method which will be used to assess the indicator(s) / Cost: what are the cost of activities	(Activity to output) Main external factors affecting activities to achieve project outputs

Table 2. Example of a Logical Framework Matrix for obesity management programs; \*PESTEL stands for Political, Economic, Social, Technological, Legal and Environmental, †SWOT stands for Strengths, Weaknesses, Opportunities and Threats

PROJECT SUMMARY	MEASURABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>GOAL</b> Health promotion	%Contribution of obesity to total death rate	Standardized death due to obesity (Reduction of the percentage in which obesity contributes to total death rate)	<b>(Goal to super goal)</b> successful obesity control, portfolio management
<b>PURPOSE</b> Creating an environment that supports and promotes a physically active lifestyle and a healthy diet Increasing physical activity level Reducing the prevalence of overweight and obesity	% of children and adults consuming healthier food choices, taking at least 5 portions of fruit and veg per day % of children who spent at least two hours per week for physical activity or games at school % of women meeting the recommended physical activity levels % of sedentary adults % of overweight and obese children	Prevalence of obesity and over weight in children and adults reported by large observational studies Rates of physical activity reported by large observational studies	<b>(Purpose to goal)</b> Successful enrolment of all stakeholders and their contribution to reach the objectives
<b>OUTPUTS</b> Promoting the knowledge, attitude and practice of society members toward healthy eating habits and more physically active lifestyle Change the way of thinking toward food choices	%of manufactures reformulating Level of exposure of children and adults to advertisements on high sugar and fat products % of people having a healthy, nutritionally balanced diet; and to increase the percentage of the population regularly participating in physical activity	Ratio of manufactures reformulating Total hours of TV programs devoted to physical activity and sports Total hours of TV programs devoted to healthy eating habits and in contrast total hours devoted to the fattening junk foods KAP questionnaires Large observational nutrition and lifestyle investigations	<b>(Outputs to purpose)</b> Well management process of activities and tasks
<b>INPUTS and RESOURCES</b>			
<b>ACTIVITIES</b>		Year 1Year 2Year 3Year 4Year 5	
Encourage physical activity Community-based nutrition education Regulations imposed on food and drinks industries Vast educational programs TV programs and advertisements Balancing dietary intake with physical activity Promoting mental health and wellbeing Food regulations in schools	Supplies expended in amateur and professional sports No. of specialists and researchers that focus on community education Legislations which support this program No. of agencies and organizations dealing with obesity issue Funding and other resources that support this program Total cost	- -	(Activity to output) Program requirements were satisfied (Such as PESTEL* analysis and SWOT† analysis)

Table 3. Detailed list of activities and resources allocation to tasks

Activity	Sub-activity (Task)	Duration	Year					Responsibility (Name of person/unit)	Requirements	Materials and equipment	Cost Budget
			2013	2014	2015	2016	2017				
1.			→								
2.				→							
3.					→						
4. etc											

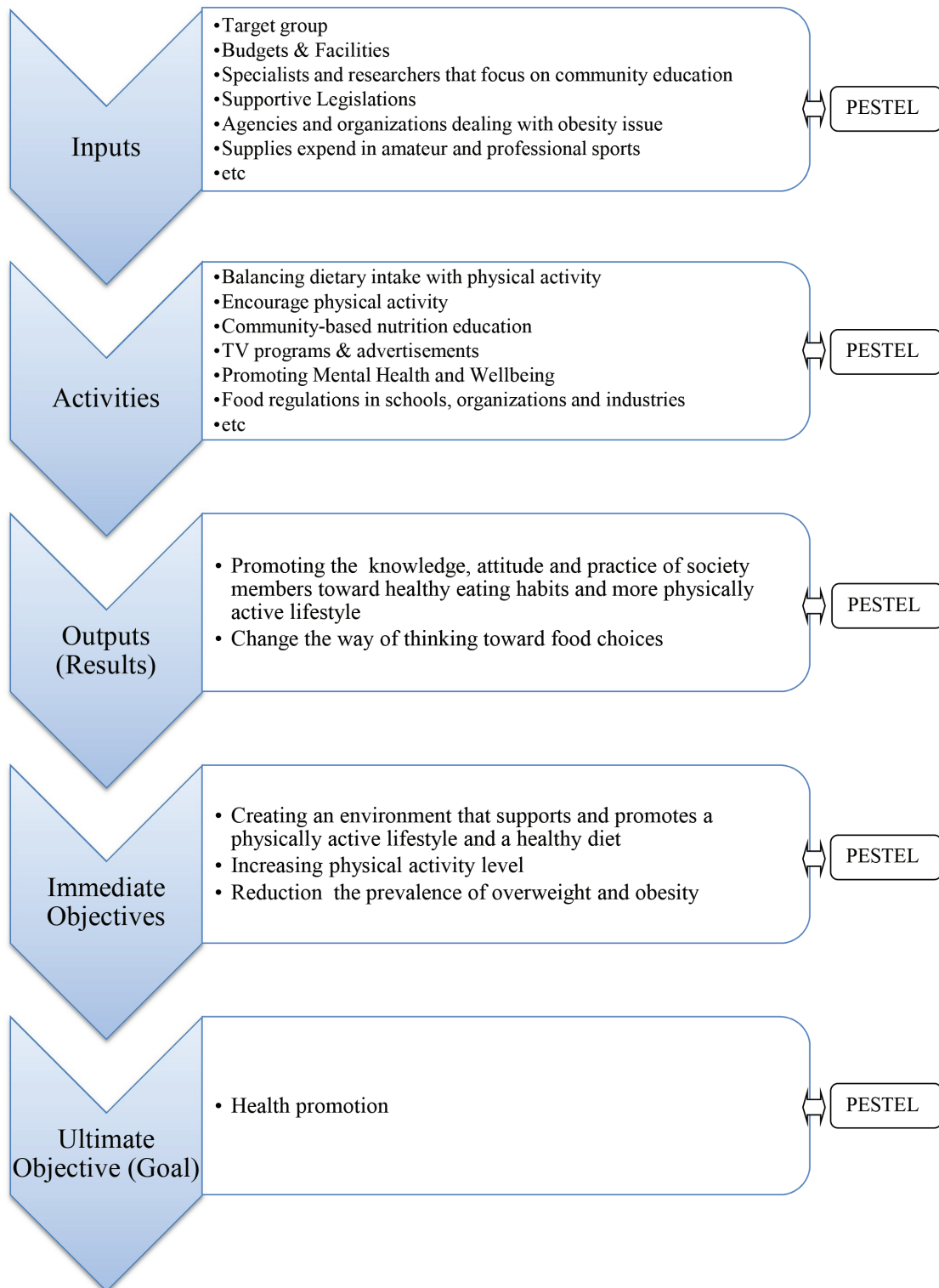


Figure 1. Obesity management process; ↔ indicates the dynamic association of obesity managerial process with Political, Economic, Social, Technological, Legal and Environmental (PESTEL) factors.

## Conclusion

Weaknesses are apparent in management process of obesity control programs. All persons involved with obesity control programs should have process view from input to ultimate objective (Goal). The

key points for developing obesity management plans are team work approach, stakeholder analysis and involvement, and powerful leadership portfolio. Logical framework approach is a way of analytical thinking which should be used continuously during

all management processes and project life cycle. It can also be practical in project designing, planning, execution, monitoring and management methodology. Field trials or population based trials of using the logical framework approach for managing obesity

control programs are highly recommended.

### Conflict of Interest

Authors declare no commercial conflict of interest related to this work.

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