

# Strengthening Eating Habits through a Communication Program. Case Study: Colegio Inter Canadiense de Puebla

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**Abstract:** In the current decade, obesity and malnourishment cases in urban and rural zones of Mexico have increased dramatically. Consequently, the number of diseases spread through this main symptom, such as diabetes and cholesterol, could aggravate the living conditions for Mexican inhabitants in a few years. This is what makes evident for the country, the need to reorient vulnerable communities about how to accomplish better and healthy eating habits as well as urge populations to achieve a better quality of life. Considering that one of the most vulnerable communities, facing eating habit problems, is the teenage population, this Project has focused on the case study of students from junior high school, belonging to the Colegio Inter Canadiense de Puebla. The aim of this project is to design a communication program which supports and reinforces eating habits inside the school community. To design the effective communication program, a quantitative diagnosis, through 41 question survey, has been developed. This has been in order to (1) identify (internal/external) factors which affect the nutrition of the school community, (2) to determine the student's and parent's needs of information on related food and nutrition topics, and (3) to identify the media which may allow an adequate dissemination for the communication program. Through this instrument has been possible to recognize the problems and issues in which the communication program must proceed, besides its results will help to trace the objectives and characteristics of the implementing program.

**Key words:** Health communication, communication program, obesity and malnourishment.

## 1. Introduction

As part of sustainability development projects, Latin American governments have been aware of nutritional development of children and adolescents at school age. Consequently, in recent decades they have implemented a series of programs aimed to meet the economic needs of certain sectors vulnerable to malnutrition. Yet, research and design of successful programs to guide school populations toward healthy

eating habits are still absent.

In relation to the major public health issues, every year educational institutions, supported by ministries of health, receive large amount of information related to public health concerns. Conferences, posters and brochures are given at schools in order to engage students to these problems. With the aforementioned, it is intended that affected populations get oriented towards good health practices and lifestyles. Currently, scholars, since a very early age, get informed about problems which affect adults such as: smoking, alcoholism, eating disorders, AIDS; however, the scenario of reaction or action seems to be another. Despite research and observations of specialists in health planning, it has been found that high doses of

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information have definitely failed in the control and reduction of these health problems.

Over the last decades, a number of campaigns to inform and/or to teach populations how to prevent illnesses were broadcast in most media. In this way, AIDS, any kind of cancer, cholera and so on... became well-known problems in the major communities of rural and urban areas. However, these communities faced a new problem related to the lack of participation and willingness to follow public policies which may allow them to avoid or reduce cases of any eventual illness. Recent research has demonstrated that people are aware of the major health problems; however, this knowledge is not necessarily leading to behavior change [1]. Thus, what some of the specialists have agreed, it is on the need to encourage people to act; to encourage populations not only conscious about the risks, but also to be real deviants or agents of change at the front of any health problem.

It is from this problem that this research work seeks the intervention of another approach to influence and generate behavior change and transformation in eating habits. The proposal is the design of a Communication Program based on the new tendencies in Health Communication and Development Communication.

Discarding traditional communication models, this project proposes the creation of an alternative tool based on the practical and methodological view where all actors get involved in a real participating society, which evaluates their needs, and takes advantages of its environment. The achievement of its impact is expected in the research community, the *Colegio Inter Canadiense de Puebla*, from where it is possible to obtain revisions and experiences that may be carried on other school communities.

The first phase of the project has been limited to the assessment and evaluation of the community of study. The results and discussion presented in this paper is focused on this first part. The results of this research work contributed for the design of the communication program in 2010.

## **2. Discussion and Revision**

Health and nutrition problem all over the world is not a new issue. Since some years ago, governments have invested capital in the creation of projects which seek ways to reduce the numbers of people affected by malnutrition. Since the early 1970s, within the development of the paradigm of modernity in Latin America, most people in the isolated parts of Mexico had been covered by a piece of help, expected to solve housing, food and health problems. It has been money or any other material good the mean to solve starvation in Mexico. As long as social aid programs have seemed to be the solution for most of the problems, State does not hesitate to give people what they need to fulfill their needs.

Because the paradigm of modernity was not really sure about what could have happened today as a real consequence of capitalistic policies, "Give money and goods" seemed to be the solution for what Mexican society required to be happy and have progress. In this way, Mexico could solve malnourishment in a large scale in poor rural and urban areas, what means, a large part of the population was able to get something to eat. Most isolated communities got benefited from these development projects. Soon food, milk and cereals were provided by social institutions in order to abolish starvation and hunger. However, new nutritional problems started to take place in another sector of the Mexican society.

If it is true that most of the nutritional problems which affect Mexican Society have still too much to do with the acquisition of food, other series of causes have been attached to the problem. The nutritional panorama, in which Mexican society lives today, is absolutely different to the one of the 1970's. Forty years ago, a struggle to beat hunger had taken place. In contrast today, it is compulsory that Mexican authorities look for real solutions and strategies to change Mexican eating habits. The food challenges, which Mexican society faces today, have been mostly related to the Mexican lifestyles and habits acquired in recent

decades. According to Rodriguez, J. [2], sedentary lifestyles and poor nutrition have significantly affected the health of children, youth and adults, what makes evident that even nutritional development strategies were implemented successfully some time ago, new health risks such as the lack of physical activity and the unconsciousness to eat healthy are leading people into new health problems.

The recent panorama shows that in the last two decades, obesity in Mexico has increased by more than 30%, a percentage similar to the one achieved in the United States, what places Mexico as the second worldwide country with more patients with obesity and overweight [3]. In this way, it can be determined that even malnourishment was the main concern to promote good nutrition through health marketing campaigns, after all, people from all ages are still suffering an state of poor nutrition providing that what they eat is not really healthy, consequently this affects their bodies' main organic functions.

According to the World Health Organization [4], obesity and overweight currently contribute to a number close to 200,000 deaths per year, being the third leading cause of preventable deaths. Because of the rise of statistics, information related to the obesity problems started to be transmitted in different media. In spite of the dissemination of information, population has not shown any change in its food culture. On the contrary, soft drink consumption grew 34% in 2007 and the number of deaths caused by diabetes complications increased from 60,000-75,000 in 2008 [5].

The present generation of Mexican adults is suffering a series of complications because of the increase of obesity and overweight, and these complications are not only affecting Mexican population's lifestyles. There are some other consequences which have effect on other opportunities areas. Since government must protect and attend these health concerns, the annual expenditure for public health problems has grown in an exaggerated manner.

About 10% of the federal government's annual budget is spent to combat diseases associated with metabolic syndromes. If these figures are projected in the short and medium term, the money assigned to these health issues, will not be enough to attend new cases.

On the other hand, it is important to mention that poor nutrition and obesity in school children is not only resulting in more scholars suffering from dieting syndromes but also in the low educational progress. According to Leyva [6], students who do not have the appropriate height and weight are likely to fail constantly and can not take an efficient advantage of the school. These same authors have proven that both thin children and overweight children have learning and achieving problems at school. Therefore, the little cognitive development, caused by nutritional deficiencies, is slowing the effort achieved in the educational reforms. Besides, nutrient deficiency has significantly affected the physical development of school-age, growth and the quality of children's life.

If health communication strategies are not implemented, the rapid growth of obesity and overweight population could take place in Mexico in a less time than the expected. Thus, our country could be facing what the WHO has declared as "a national epidemic of obesity". Mexico, who ranks ninth place worldwide with the prevalence of diabetes, could take the seventh by 2025. As a result, it is important to strengthen the food practices and prevent misleading advertising to persuade the eating habits of vulnerable populations like children. If a series of changes in the eating and feeding behavior do not start now, Mexico will soon become the country number one in cases of obesity and overweight, with the largest number of patients and deaths from diabetes and other morbidities.

The concern and impact of poor nutrition problems in society has aimed at different disciplines to study the phenomenon searching for strategies to eradicate or prevent disease rates which year after year are increasing. The participation of the media in this issue

has not been an exception. In countries like the U.S., teams of doctors have become experts in designing communication programs that seek to encourage those affected people to change their habits into favorable behaviors.

If it is true that behavior change has been a process that has been culturally given through various means of information and disinformation as well as the influence of other factors, it is necessary to implement the redeployment of people into good habits through programs to raise awareness and motivate individuals to change their food culture. In these times when national crises have become a phenomenon of global pandemic, it is necessary for communication professionals to get involved as agents of change. The convergence of different disciplines in one project is more than necessary. New approaches of health communication strategies are avidly seeking to get this change.

The Pan American Health Organization [7] has stressed the importance of educational institutions as the main promoters in health care. Since these institutions enable students to spend much of their time in common spaces and share solidarity for the development of tasks, the school, as an organizational system, with goals, visions and values, has become the ideal place where communication strategists can interfere and support programs to diagnose, describe and solve the major challenges that obstruct scholar development.

The current role of communication and health programs within the organization is primarily to complete a developed process implemented a couple of years ago, when it was believed that just providing large amount of information could solve problems related to health issues. Then the intervention of health communication strategists and the redefinition of informative campaigns into effective communication programs seek not only to inform key publics about these health problems, but also to modify and reorient health behavior practices [8]. Encouraging every

individual to think or reflect about the information they receive and analyze which of the disseminated practices are accurately followed.

The convergence of communication with the area of health has been important to close the information process that for years has been carried out and to which it has been attributed a process of disinformation resulting in poor feeding practices [1]. Past generations were absolute recipients of messages that promoted the importance of a healthy diet (based on what was believed a good one). Many of these generations have transmitted the message to subsequent generations; however, most of these receivers have largely set aside the process to put "good eating habits" in practice.

The transformation and redesign of health campaigns from the communicational approach of this century, breaks completely the paradigm of "the one way communication-reduce to information-", and renews the role of communication in a more complete process, "the participatory one". This process changes its model, replacing the simple way to communicate (one way communication) in a more elaborate and structured model based on the social contexts of individuals, generating a two-way communication process in which every party is important [9].

Hence the reason why this work has been focused in the creation, design and implementation of communications programs that can fully cover each of the stages and needs of target audiences and not only get limited to the creation and dissemination of messages. The development of a communication program aimed to reorient the eating habits of young students of the Colegio Inter Canadiense de Puebla is the first step in a series of changes that can be carried out in mid-level educational institutions with the participation of students, teachers and parents together in a project which can combat one of the major health problems, obesity and overweight.

For management and development of this project it has been determined a series of steps following the general objective, "To develop a communication

program to strengthen the eating habits of students of the Colegio Inter Canadiense de Puebla (CIC). To elaborate this research work the following specific objectives were stated: A) To identify the factors (internal / external) that affect the nutrition of students at the CIC, B) Determine the student's needs of information on topics related to food and nutrition., C) Identify communication tools which may allow the adequate dissemination of the communication program within the CIC.

### *2.1 Communication, Health Communication & Communication Programs*

Usually, when we imply the terms Communication and Health Communication, we involuntarily assume the action of *informing*. We remind of those non-smoking posters, eat healthy brochures or cancer TV spots, which tell or describe us what the health problem is, how we can detect it or what we can do to avoid it. However the role and definitions of communication, in health and other studying areas, has clearly separated its conceptualization to the simple activity of informing. The development of the communication paradigm and the creation of new communication models have changed abruptly the conception of communication and the way of its practice.

Traditionally, communication has been described as the process of sharing or exchanging subjective states such as ideas, feelings, beliefs, usually by means of language [10]. This definition basically summarizes the annotations contributed by classical models of communication such as the Aristotelian or the Lasswell one, where there is a sender who gives a message that is encoded by a receptor who usually gives an answer. This basic conceptualization of communication rarely enhances the external factors which may interfere, contribute, affect or sustain every effort of communication among individuals. Providing that, we can not assume communication as a simple process (one way or limited process), the traditional definition

for what they used to call solely communication needed to make a 180° turn, and enclose another series of variables which may contribute to make the communication processes something richer, more meaningful and fruitful.

In this way, a new series of factors and appreciation were made for communication integrating to the simple act, important actions and element such as *culture*. One of the definitions which guide the vision of this project is the one provided by Marta Rizo [11]. Rizo has described communication as "a basic process for the construction of social life, such as triggering mechanism of dialogue and coexistence among social subjects. This means that the communication process should be seen as a process of exchange of values and beliefs rather than information. The aforementioned with the intention to sustain the impact that cultural elements such as: ideas, traditions, customs, beliefs and history have through the different communication processes amid the diffusion of any campaign.

Thus, authors specialized in Communication Development have argued about the importance of the creation of new models of communication and practice which may be directed in following or keeping track of these cultural processes. Once that communication process is based on dialogue, as claimed Rizo [11], this configures most social relations of today, identifies a cultural exchange and brings up a new culture. Inside the new trends in health communication, this is what is needed.

The health communication in relation to their historical context has been defined as much by the area of health as well as the area of communication. Currently, both areas of study have agreed on the definition of this as "the planned and systematic application of media assets for the achievement of active community behavior, compatible with the aspirations expressed in policies and strategies of public health" [12]. To exemplify, we do have all of those contributions made by the health marketing avidly grown in the beginning of the 1990s. Social and

Health marketing highly developed in the late 1980s and beginning of 1990s implied much of the use of an exaggerated media in order to persuade, force and obtain a fast behavior change in the growing societies. Moreover, it is important to mention that not everyone involved in these marketing communication practices had the proficiency level to implement or design accurately such campaigns. And it is because of this fact the concept of health communication got divided according to the observed characteristics.

According to Coe [8] the dichotomy of health communication got separated in two. The first definition as a social process of intervention which aims to provide knowledge and shape attitudes for public health, and the second one which describes itself as a practice that makes systematic use of media for purposes of marketing for the fulfillment of the objectives of public health programs. Apparently, both actions may seem similar; however, in their practice and in their objectives these two sub disciplines take different paths. The first one is strongly based on communication and social theories, which requires the approach, research and study of different disciplines. The second one is based on a series of tasks and techniques which may need the planning and design which not necessarily need to be linked to the study and research.

The aforesaid has had to be redefined through communicative approaches and models of the area of communication. Refs. [13] and [14]) have identified three basic models for understanding and implementing communication programs over the recent decades. These programs can be easily identified in the evolution of the study area. These include the diffusion of innovations model of Everett Rogers, the two-step model of Harold Lasswell and the dialogue or participatory action implemented in rural communities in the last decades.

New approaches to health communication models suggest this kind of “dialogical model” which could enable subjects to assume participatory roles and

belong to groups and/or organizations. These members together and goal oriented can look for real solutions and alternatives to the problems they are facing. To achieve this, models of health communication should be based on basic structures that firstly allow to identify the factors that affect people, then evaluate the information they need, and finally, define the strategies and action lines action to assess how relevant and successful it can be to implement a program of health communication.

Communication programs for health have been defined primarily as the use of mass media and / or an active citizen participation in order to educate and generate awareness among people in favor of public health care [13]. For the Pan American Health Organization [7] the main purpose of communication programs is to accompany the hearings on preventive action by ensuring that public, guided by the media, preventive care and follow recommendations for the care health. According to this organization the biggest push we could achieve the communication is to communicate with the public how to build, maintain and / or restore trust with their audiences.

Hence the reason why this research is aimed to create/design a sustained communication program based on the participatory model which is fully linked with the target audience. Thus, communication could be appreciated a vehicle for transmitting values and constructing of social realities. Through the programs of health communication, it is intended to initiate a process of dialogue among peers and communities that brings together all actors involved in the reflection of social changes which may improve individuals’ quality of life.

### **3. Methodology**

For the first part of this project, the methodological study implemented was a quantitative, descriptive and transversal. Data were collected during the month of November 2009. The stratified sample was 40 students and 40 parents of the second grade of the secondary

school of the Colegio Inter Canadiense de Puebla who were surveyed with 39 and 40 items and two open questions. Results were analyzed with the use of graphs and charts.

#### **4. Results**

The most significant results obtained through the instrument are described below and according to its nature they have set the guidelines for what will be the communication program.

About 80% of parents and students affirmed they know and recognize the products that belong to the food pyramid. Regarding the adequate intake of such products, 81% of students reported knowing the right quantities for consumption. In contrast, 53% of parents agreed that the consumption of the products of the food pyramid should be done in equal amounts, a fact that demonstrates that knowledge from the food pyramid is not as good as the parents had claimed.

On the other hand, in relation with the habit of learning about health and nutrition issues, 65% of parents fully agreed to do so, while 25% reported not doing it. Although the percentage of parents who have the habit of learning is not highly significant, 90% of parents reported that they often talk to their children about the risks of not following a good diet, even only 71% of students said their parents take such talks.

Nearly 80% of parents and students consider important to bring lunch to school. However, there is still the belief that "if students eat breakfast at home, it is not necessary to bring a snack to school (71% of parents)". In relation to the practice of giving money to buy lunch at school, 67% of parents did not agree that such event happen.

In relation to the factors that avoid students eating lunch well, 53% said they agree that the lack of appetite is one of those causes and it is not the lack of recess time to do it. As result, it can be determined that there a few students who eat lunch quickly in the recess or who eat between classes (30%), and only (35%) those who give higher priority to play instead of eating.

Another factor that respondents agreed affects their eating habits (with 56%) is the one regarded with extracurricular activities after school such as extra help classes, trainings, cultural activities among others. If it is recalled the percentage of parents who believe that breakfast is the only sufficient food for a school day (71%), this information would be similar to a large number students who remain at schools with an empty stomach, what makes obviously compulsory the need to consume some kind of food or snack which is not always necessarily healthy.

In terms of beliefs and food taboos that exist in the Colegio Inter Canadiense de Puebla school population 50% of the people surveyed agreed that overeating is not bad as long as they do some exercise. Moreover, a percentage of 51% of students said that eating too much sugar is as bad as eating too much fat, which is a sign that there is a degree of knowledge and awareness about eating habits, which is not really significant as the remaining 49% has the opposite belief.

One of the most controversial data is the one related to the action of preventive policies and campaigns taken by the school. Eighty-three percent of students surveyed believe that the school cares about their eating habits and this has been manifested through policies and campaigns. On contrary, 60% of parents firmly expressed ignorance about the promotional campaigns which inform about health and eating habits, and a 62% of them disagreed that the school cares about the good nutrition children and that this institutions expresses this with implementation of policies.

Since the parents' opinion was not as favorable as that of the students, 90% of parents agreed that it is necessary that schools takes preventive measures for the health of students. As a follow up item, 90% of them consider as a good option to take action in nutritional problems, let the students know about the benefits of disease prevention through a communication campaign. Regarding with the opinion of students, 88% of these consider that the school

needed to carry out preventive measures for health.

Ninty-three percent of students said they were willing to modify their food habits as long as they get informed how to follow healthy eating habits. On other hand, parents expressed a 90% of agreement. In relation to their opinion on whether a communication program would clarify their doubts about how to follow good eating habits, 83% of students expressed agreement, while parents in 86% affirmed to agree with this item. On the other hand, 90% of parents surveyed considered as good an option to know the benefits of disease prevention through a communication campaign. For its part, the students expressed in 81% agree that the media are capable of forming attitudes.

In terms of willingness to participate in the development of the program, 88% of parents agreed to do so, while 61% of students reported being willing to do it. Therefore, it is important to analyze how we are going to develop our program. A significant number of parents say will participate in the design; however, it is unclear whether they will have time to do so. It is necessary that the parents get involve parents in the process of creation and design. This would change the perception that the school does not care for/about their children. Furthermore, although the percentage of students who are willing to participate is not as high as parents, it would be important to involve them in the process.

Finally, in relation to the media that parents identified within the school, it was mentioned significantly: meetings, newsletters and personal talks, while the school magazine and bulletin board were not considered important. On the other hand, students marked the bulletin board and posters as the most identified, while the newsletters, class board and journal were identified scarcely by a 16%. In relation to the media that parents consider effective promoting health issues, they affirmed that lectures by specialists, posters and documentaries as potential options. On the other hand, students identified as efficient tools: posters, lectures by specialists, articles in the school

magazine and documentaries; in contrast, photographic exhibitions and plays were not significantly taken into account.

It is important to remember that this program takes into account the use of media to reach audiences as proposed by the Health Communication. However, the participation and interaction processes to maintain an effective and assertive communication with the involved public are important for its development. The information retrieved through the recollection instrument is truly significant. From this information we will be able to draw the main lines and actions which may lead the communication program for the school community.

## **5. Conclusions**

Even every surveyed person in the school community manifested different trends, preferences and eating habits, it is essential that the whole community chooses to enhance their health behaviors into favorable food habits. Achieving the objectives of a communications program to strengthen food habits may not be possible without modifying the behaviors, perceptions and thoughts that endanger communities' health. In this case, it is necessary that the program gets oriented into a cultural changed which promotes the benefits of a good diet, exercise and lifestyles, based on values, philosophy and vision.

The communication program for Colegio Inter Canadiense must target both parents and students who must be informed about what happens in relation to political campaigns and nutrition in the school. Then, it is necessary to involve the school community in information, decisions and practice. It is important to encourage everyone's participation in the health program, taking advantage of his commitment, availability, skills and knowledge.

Both students and parents have shown to be aware of what happens in relation to health problems; however, it is important that through the integration of the school community generate a significant knowledge and



collaborative work which may reinforce the team working and solving problem culture.

For years, there have been media campaigns whose messages are sent in one direction and produces results for a moment. Even functionalist models are essential to communicate and mediate in health campaigns, it is compulsory to manage programs which may lead communication in a reflective and participative manner, which is the objective on the second part of this project.

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