Science Communication Through Posters: Developing Healthy Food Choices among Students

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ABSTRACT

Healthy people are always an asset to a nation. But with excessive hustle and bustle of today's life, people are inclined towards fast food and junk food. Following the elders, children also live with such foods that are satisfying their saliva. But such types of foods are harmful for health. If we can communicate the message properly to the students who are the future of the country, they will make a healthy nation.

Following this, the researcher attempted to create awareness about healthy food choices among students. The study is descriptive in nature. The sample comprised of fifty-nine class VI students of a school in Bhubaneswar. Posters and pictures based on the theme of healthy eating were developed. Discussions on food and nutrition were a part of the assembly class. Data collected through a questionnaire were analyzed statistically and after interpretation it was found that posters worked as an effective tool to communicate the message needed to develop healthy food choices.

KEYWORDS: Science communication, posters, healthy food choice

Introduction

Following the "Fit India Movement", the researcher had attempted to create awareness about healthy food choices among students. Healthy people are always an asset to a nation. But with excessive hustle and bustle of today's life, people are inclined towards fast food and junk food. Following the elders, children also live with such foods that are satisfying their saliva and saving the time for preparation. But such types of foods are

harmful for health. If we can communicate the message properly to the students who are the future of the country, they will make a healthy nation. Guided by such intention the researcher attempted to create awareness about healthy children among children.

Literature Review

Houts and others (2006)^[1] in their study of health instruction to the patients pointed that pictures can improve comprehension when they show relationships among ideas or when they show spatial relationships. Pictures can change adherence to health instructions, but emotional response to pictures affects whether they increase or decrease target behaviors. All patients can benefit, but patients with low literacy skills are especially likely to benefit. Patients with very low literacy skills can be helped by spoken directions plus pictures to take home as reminders or by pictures plus very simply worded captions.

Puri S. et al. (2008)^[2] conducted a research on the tiffin box of children and found parantha (stuffed chapatti) was in the tiffin of majority of subjects and only a few were getting vegetables or fruits. Most of the students preferred fast food in their lunch boxes over regular meals. Junk food (wafers and chips) were mostly taken by students of private schools. The school environment is recognized as having a powerful influence on students' eating behaviour.

The Expert Committee of the Indian Council of Medical Research (2011)^[3], taking into consideration the nutrient requirements, has recommended that every individual should consume at least 300 g of vegetables (Green leafy vegetable: 50 gm; Other vegetables: 200 gm; Roots and Tubers: 50 gm) in a day. In addition, fresh fruits (100 gm) should be consumed regularly.

As pointed out by Sachithananthan V. et al., (2012)^[4] nutrition education is an important measure to improve dietary habits and food choices. Their assessment on the impact of nutrition education on the nutritional and dietary profile revealed that nutrition education would help the adolescents and early adults to imbibe healthy eating habits.

Srivastava et al., (2012)^[5] in a cross-sectional study, explored nutritional status in school-age slum children and found that most of the school-age slum children had poor nutritional status. They recommended skills-based nutrition education, fortification of food items, effective infection control and training of healthcare workers.

In a paper presented by Dr. Corinna Hawkes (2013)^[6] and produced by the FAO Nutrition Division, nutritional education has been emphasized which includes public awareness campaigns, education in specific settings, skills training and changes to the food environment. The paper also says schools should be given more attention as a specific setting for nutrition education than any other key.

The socio-economic profile and food consumption pattern of school going children of 7–9 years of age was studied by Shakti and others (2013)^[7]. On the basis of data collected the study revealed that mean daily food and nutrient intake of school going children was lower than RDA. Nutritional product intake was also found higher in boys than girls. Intake of energy, iron, calcium and thiamine was marginally inadequate in the majority of school going children.

According to the Annual Health Survey report (2014)^[8], outlining the nutritional status of school aged children and adolescents (5-18 years), the percentage of undernourished population is comparatively higher than the over nourished population. This implies that under-nutrition rather than overnutrition is the major problem.

Significance of the Study

In the present study, the investigator tried to target the children directly and their parents indirectly in developing healthy food choices. For this illustrated posters were used. Eye catching posters can attract people towards the message and so create a critical thinking ability in the mind. Reaching out to illiterate people is somewhat easy through this than talks or meetings.

FAO seriously observes that "Nutrition is absolute ground zero for any serious discussion of economic and human development" and so to achieve Millennium Development Goal it aims at promoting nutritionally adequate diets for all. The Eat Right Movement ^[9] launched on 10 July 2018, focuses on empowering citizens to make the right food choices. To achieve this the Government of India celebrates the Rashtriya Poshan Maah in September each year. The vision of this is to address malnutrition with a targeted approach by 2022.

Objectives

The following are the objectives of the study:

- 1) To analyse the views of the students towards healthy food choices.
- 2) To analyse the views of the parents towards healthy food choices.
- 3) To analyse the change of behaviour towards healthy food choices.

Delimitations

- 1) The study is delimited to students reading in class VI.
- 2) The students are chosen only from a school in Bhubaneswar, Odisha.
- 3) The study is focused on use of posters for developing appropriate behaviour towards food choices.

Materials & Methods

The present study is descriptive in nature with qualitative and quantitative methods employed in data collection and analysis. The details of various steps followed in the study are discussed below.

Sample

The sample of the study was selected from the population of school aged children of Odisha. The sample consisted of 109 class VI students and their parents selected through a non-probability sampling technique from one Govt. High School. The student strength of class VI was 280 in the selected school.

Table 1: Sample of the study

Boys	Girls	Total
63	46	109

Design and tools

Majority of the students of the school were from nearby slums. The investigator being a teacher had good rapport with them. The researcher developed and used two questionnaires, one for the students and another for their parents. All the questions were open ended. Twenty posters were drawn by the students which were copied and distributed among the students. Ten selective posters were also pasted in the classroom. The questionnaire was given before after the poster sessions.

Research questions

The present study focused on these following research questions:

- 1) What type of food the students preferred in their tiffin box?
- 2) What is the view of the parents towards selecting a food for their children?
- 3) What are the various types of food they prefer for their children?
- 4) What are the challenges and problems in selecting a healthy food?

Results and Discussion

There were 10 questions in each questionnaire. The questions were asked before the poster session and again after the poster session (after 15 days). After the analysis and interpretation of collected data the result can be summarized as follows:

➤ In response to the first research question, all the sample students had different opinions. Some of them preferred noodles, some biscuits, some puris and so on. All these foods are in either fast food category or saturated with fats. Most of them agreed that they think the contemporary foods available in their home might not be so tasty like the ones they preferred to eat. However, most of them (95%) stated

that they have read about balanced diet, but they did not like to eat leafy vegetables. From the responses it can be seen that fast food is having a clear win in satisfying the taste buds of the small children.

- ➤ It was found out that nearly 80% of the sample parents opined that they select a food for their children keeping an eye on the time of preparation and cost of food. They live in slums and have to go for work early morning. So, they preferred such types of food that are easy to prepare.
- ➤ Though the parents sometimes want to prepare different types of conventional foods like idli and other types of cakes made from fermented rice and black-gram, or sattu (the powder of mixture of different types of roasted grains), their child did not like those. They think the children are biased by their peer group also in selecting a food.
- ➤ Regarding challenges in selecting a food, 95% of the parents stated today's hectic life schedule, their way of earning the livelihood and the children's own choice always have influence. 82% of the parents even blamed the television channels for shaping the food choice of their children.
- ➤ Before the students were exposed to the poster session their response towards the food choice in their tiffin box was inclined towards the fast foods like noodles and chips. But the choice changed after the poster session.

Conclusion

In summary, it is found that the poster making and exhibiting sessions made the students aware about healthy foods. Their choices were changed accordingly. Thus, posters had a measurable impact on the students. The students enjoyed drawing or helping to draw the posters. Their parents also appreciated the work. It seems that the posters brought a change in the way of decision making about food intake.

As per 2011 census ^[10], the children population in India is 29.5 percent of the total population of the country. Children are more prone to diseases and malnutrition. This will slow down the progress of the country. The health of a country depends upon the health of its citizens. Unless the parents and children

are aware of proper nutrition and develop the right and healthy food choices, it is very difficult to achieve the target of the Fit India Movement. Without improving the nutritional status of the children, we cannot make the India of our dreams.

Acknowledgements

The researcher thanks the students of class VI of Govt. High School, IRC Village, Bhubaneswar, for their cooperation during the study. She also thanks all staffs of her own institute for support and suggestions.

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