



A study to assess the effectiveness of planned teaching programme on knowledge regarding food borne disease & food safety among children at selected Schools, Mahisagar district, Gujarat

Krma Patel¹, Himali Prajapati^{2*}

¹ Department of Child Health Nursing, CM Patel College of Nursing, Gandhinagar, Gujarat, India

² Head, Department of Child Health Nursing, CM Patel College of Nursing, Gandhinagar, Gujarat, India

Abstract

Quasi- experimental one-group pre-test post-test research design was adopted and the study was conducted among children at selected government school of Mahisagar District, Gujarat. 60 children were selected by using Probability simple random sampling method. Pre-test level of knowledge of children of regarding food borne disease and food safety were assessed. Planned teaching programme was given for 60 minutes regarding food borne disease and food safety. After 7 days post test was conducted. The same questionnaire was used to assess the post-test knowledge of children. The data gathered was analysed by descriptive and inferential statistical method and interpretations were made based on the objectives of the study. The major findings of the study the mean knowledge pre-test score was 14.25 and mean knowledge post-test score is 22.6 regarding Food borne disease & food safety. The mean post-test knowledge score was significantly higher than the mean pre-test knowledge score with the mean difference of 8.35 and Calculated 't' value ($t = 13.01$) was greater than tabulated 't' value ($t = 2.00$) which was statistically proved at 0.05 level of significance. Therefore, the null hypothesis H_0 was rejected and research hypothesis H_1 was accepted and it revealed that the Planned teaching program was effective in increasing knowledge among Children.

Keywords: Effectiveness, planned teaching programme, knowledge, food-borne disease, food safety, children

Introduction

Food is an important basic necessity and it is a substance that supplies nutrients and energy for growth and development of humans. Good food is essential for good health and it is one of the greatest pleasures in life. Food is also rich in nutrients required by microorganisms and may be exposed to contamination by major sources like water, air, dust, sewage, insects, rodents, utensils, food handlers, preparation techniques as well as eating habits. The fact remains that they all have direct influence on health. Hence it is pertinent to keep food free from contamination. The food is the medicine when it is balanced and at the same time it is the vehicle of disease transmission, if it is liable to contaminate with harmful microbes such as bacteria, viruses, parasites or chemicals / toxins at any moment during its journey from the producer to the consumer.

Food borne disease has become one of the most widespread public health problems in the world today. Globally, billions of people are at risk of food-borne diseases and millions fall ill every year. Many also die as a result of consuming unsafe food. Food borne diseases are defined as infections which are toxic in nature, caused by harmful agents that enter the body through the ingestion of contaminated food and water. Food borne diseases are increasing throughout the world because of urbanization, industrialization, tourism, and also due to mass catering services.

Problem Statement

"A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Food Borne Disease & Food Safety Among Children at Selected Schools, Mahisagar District, Gujarat".

Aim of Study

To evaluate the effectiveness of planned teaching programme on knowledge regarding food borne disease & food safety among children.

Objectives

1. To assess the knowledge of children before administration of planned teaching programme on food born disease & food safety in selected schools, Mahisagar District, Gujarat.
2. To evaluate the effectiveness of planned teaching programme on Knowledge regarding Food borne disease and food safety among children in selected schools, Mahisagar District, Gujarat.
3. To find out the association between selected demographic variables with pre-test knowledge score among children in selected schools, Mahisagar District, Gujarat.

Metgodology

Research Approach: In this study, quantitative research approach was adopted.

Research Design: In this study, Quasi- experimental one-group pre-test post-test research design was adopted to determine planned teaching programme on knowledge regarding Food borne disease and food safety among children in selected schools.

Research Setting: In this study will be conducted in selected schools.

Variables under study

Dependent Variable: Knowledge of children regarding food borne disease and food safety.

Independent Variable: The Planned teaching programme regarding food borne disease and food safety was the independent variable.

Population: In the present study, population comprised of children in selected school.

Sample size and Sampling technique: The sample size for the study was 60 children was selected and using Probability simple random sampling techniques.

Description of tool

Section A: This demographic data like age, sex, standard, area of living, religion, parent's educational status, parent's occupation, and previous sources of information regarding food borne diseases and food safety.

Section B

Section- II (a): Food borne disease

Semi Structured questionnaires to assess the knowledge regarding food borne diseases among children. It consisted of Definition, Types of pathogen, Causes, Causative agents, types of contamination, Mode of transmission, Sign & Symptoms and Prevention.

Section –II (b): Food Safety

Semi Structured questionnaires to assess the knowledge regarding food safety including Introduction, Meaning, Principles, Steps, When & How-to washing hands, safe food handling, Guidelines for food handling, food preservation types & Principles.

Reliability: The reliability of semi structured knowledge questionnaire was established by testing the stability. The stability for semi structured knowledge questionnaire was determined by Test Re-test Method (Spearman's rank correlation formula) using this formula and it was 0.8.

Results and Discussion Finding related to the demographic variables of samples

1. In Age 20 (33.33%) samples were 11 years, 21 (35.00%) samples were 12 years, 19 (31.66%) samples were 13 years.
2. In Sex 23 (38.33%) samples were Male, 37 (61.66%) samples were Female, 00 (00.00%) samples were Transgender.
3. In Standard 21 (35.00%) samples were 6th Standard, 23 (38.33%) samples were 7th Standard, and 16 (26.66%) samples were 8th Standard.
4. In Area of Living 18 (30.00%) samples were Urban Area and 42 (70.00%) samples were Rural Area.
5. In Religion 58 (96.66%) samples were Hindu, 02 (03.33%) samples were Muslim, 00 (00.00%) samples were Christian and 00 (00.00%) samples were Other Religion.
6. In Parents Educational Status 14 (23.33%) samples were Primary Education for Father, 30 (50.00%) samples were Primary Education for Mother, 23 (38.33%) samples were Secondary Education for Father, 18 (30.00%) samples were Secondary Education for Mother, 14 (23.33%) samples were Higher Secondary Education for Father, 12 (20.00%) samples were Higher Secondary Education for Mother, 09 (15.00%) samples were Degree Education for Father,

00 (00.00%) samples were Degree Education for Mother.

7. In Parents Occupation 07 (11.66%) samples were Unemployed For Father, 20 (33.33%) samples were Unemployed For Mother, 21 (35.00%) samples were Daily wages For Father, 17 (28.33%) samples were Daily wages For Mother, 11 (18.33%) samples were Private Employee For Father, 19 (31.66%) samples were Private Employee For Mother, 17 (28.33%) samples were Government Employee For Father, 04 (06.66%) samples were Government Employee For Mother, 04 (06.66%) samples were Business For Father, 00 (00.00%) samples were Business For Mother.
8. In Previous sources of information regarding Food Borne Disease & Food Safety 18 (30.00%) samples were no information, 24 (40.00%) samples were Information from Friends/ Relatives, 08 (13.33%) samples were Information from Teachers, 09 (15.00%) samples were Information from Mass Media, 01 (01.66%) samples were Information from Electronic Media.

Findings related to knowledge of sample regarding food borne disease & food safety

The mean knowledge pre-test score was 14.25 and mean knowledge post-test score is 22.6 regarding Food borne disease & Food safety. The mean post-test knowledge score was significantly higher than the mean pre-test knowledge score with the mean difference of 8.35 and Calculated 't' value ($t = 13.01$) was greater than tabulated 't' value ($t = 2.00$) which was statistically proved at 0.05 level of significance.

Therefore, the null hypothesis H_0 was rejected and research hypothesis H_1 was accepted and it revealed that the Planned teaching program was effective in increasing knowledge among Children.

Association with pre-test knowledge scores children and demographic variables

There was no significant association between the Age, Sex, Standard, Area of Living, Religion, Parents educational status, Parents occupation, Previous source of information regarding food borne disease and food safety with the pre-test score of the children with the pre-test score of the children.

Conclusion

The present study assessed the effectiveness of planned teaching programme on knowledge regarding food borne diseases and food safety among children in selected schools, Mahisagar District, Gujarat. Based on statistical findings, it is evident that, the total 45 (75.00%) of the samples had average, and 15 (25.00%) of samples had poor knowledge regarding Food Borne Disease & Food Safety in pre-test, where as in post-test knowledge level improved after administration of planned teaching programme about 02 (03.33%) sample had poor knowledge, 23 (38.33%) had average and 35 (58.33%) had good knowledge in post test score. Thus, investigator concluded that planned teaching programme was effective in gaining knowledge regarding Food Borne Disease & Food Safety.

References

1. Bisht A, *et al.* A surveillance of food borne disease outbreaks in India. Elsevier-Publication, 2018.
2. Chercos DH. Factors affecting Food handling practice among food handlers of Dangila town Food & Drink. BMC Public Health, 2014.
3. Kumari N. A textbook of community health nursing-I. 3rd ed. New Verma Printers, 2011.
4. Salins O. Essentials of Nutrition,1st ed. New Delhi: Jaypee Publications, 2005.
5. Polit, Hungler. Nursing research principles and methods. 6th ed. Philadelphia: Lippincott Williams and Wilkins, 1999.
6. Patney S. Textbook of community health nursing,1st ed. New Delhi: CBS Publishers, 2008.
7. <http://statpages.org/anova1sm.html>
8. <https://pubmed.ncbi.nlm.nih.gov/>
9. <https://www.cdc.gov/foodsafety/foodborne-germs.html>