



A study to assess the effectiveness of a planned teaching programme on knowledge regarding prevention and management of childhood allergies among mothers of under five children residing in Waghodia taluka, Vadodara

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Abstract

Background of the Study: Child gets allergies when he exposes to allergens. Allergy can be inhaled, eaten, or injected or they can come into contact with the skin. Allergy tends to run in families. If a parent has an allergy, there is a more chance that his or her child also will have that allergy. This risk increases if both parents are having allergy. Typically, children under age three do not have allergies. If one parent has allergies, there is a fifty percent chance that their child will have allergies too. If both parents have allergies, that chance will increase up to seventy five percent.

Aims and Objectives: The aim of the study to assess the effectiveness of planned teaching programme on knowledge regarding prevention and management of childhood allergies among mothers of under five children residing in waghodiya, vadodara.

Material and Methods: Pre experimental one group pre test post-test research design, and a non probability convenient sampling technique was adopted to achieve the goal of the study. The tool consists of two parts. First part consists of demographic data of the sample and the second part consists of structured knowledge questionnaires regarding prevention and management of childhood allergies. The sample was 60 mothers of under five children residing in waghodiya, vadodara.

Results: The collected data was tabulated and analyzed by using descriptive and inferential statistics. In the pretest mean score was 9.82 and post test mean score 26.23. The post test level of knowledge mean score is significantly greater than the pre test knowledge mean score. The 't' value 45.91 is more than tabulated value at 0.05 level of significance.

Conclusion: According to the calculation of both pre test and post test score study reveals that there was improvement in knowledge level of mothers of under five children after administrating the planned teaching programme on knowledge regarding prevention and management of childhood allergies. Hence it indicates that the planned teaching programme was effective.

Keywords: Knowledge, Effectiveness, Planned Teaching Programme, Mothers of Under five Children.

Introduction

An allergy happens when the body's immune system overreacts to something which is harmless

to us. The immune system recognizes the substance such as an allergen and tries to fight with it, which causing symptoms that can range

from acute to serious or life-threatening. In order to protect the body, the immune system makes antibodies called immunoglobulin E (IgE). These antibodies then react on certain cells to release chemicals like histamine into the bloodstream to defend against the allergen that causes allergic reactions. These reactions can affect the eyes, nose, throat, lungs, skin, and gastrointestinal tract and so that Future exposure to that same allergen will trigger this allergic response again.

Many allergies are seasonal and can be occurred only in specific seasons of the entire year. For e.g. when some pollen counts are very high, others can be occurred anytime when someone comes into contact with an allergen. So, when a child with a food allergy eats those specific foods or someone who are having allergy to dust is come in contact to them, they will have allergic reaction. The propensity to develop allergies may often genetic, that means it can be transfer through genes from parents to child. But just because somebody, their partner, or one of their children might have allergies does not mean that all of their children will surely get them, too. And someone generally does not inherit a specific allergy, just the likelihood of having allergies. Some children are having allergies even if they are not belonging to the family with history of allergy and those who are allergic to one substance are likely to be allergic with another.

Objectives of Study

1. Assess the existing knowledge regarding prevention and management of childhood allergies among mothers of under five children.
2. Plan and administer planned teaching programme on prevention and management of childhood allergies.
3. Evaluate the effectiveness of planned teaching programme.
4. Find out the association between existing knowledge and selected demographic variables.

Hypotheses

H₁: There will be a significant difference between pre-test and post-test knowledge score regarding prevention and management of childhood allergies among mothers of under five children.

Methodology

Research Approach: Quantitative Evaluatory approach.

Research Design: One group pre test -post test pre-experimental research design.

Variables under the Study

Independent variables: In the study, Planned Teaching Programme on knowledge regarding prevention and management of childhood allergies is independent variable.

Dependent variables: In this study, Dependent variable refers to the knowledge of the mothers of under five children regarding prevention and management of childhood allergies.

Research Setting: Selected Villages of Waghodia.

POPULATION: Mothers of under five children residing in selected villages of Waghodia.

Sample and Sampling Technique: The sample of the study comprised of 60 Mothers of under five children residing in selected villages of Waghodia. In this study, Non-probability convenience sampling technique was used.

Data Collection Techniques and Tools: Data collection instrument was structured knowledge questionnaire.

Data Collection Tool

Section 1: Demographic variables include characteristics of mothers of under five children such as age, education, occupation, types of family, living area, number of children and any family history of allergies.

Section 2: Self structured questionnaire was used to assess the knowledge regarding prevention and management of childhood allergies among the mothers of under five children residing in selected villages of Waghodia.

Results

Findings are Organized in the Following Section

Section I: Analysis of socio demographic characteristics of the respondent.

Distribution of the respondents according to age shows that among 60 participants 16(26.67%) belonged to the age group of < 20 years, 18(30%) belonged to the age group of 21-25 years, 15(25%) belonged to the age group of 26-30 years, 11(18.33%) belonged to the age group of 31-35 years. Distribution of the respondents according to education shows that among 60 participants 28(46.67%) were having education up to primary level, 22(36.67%) were having education up to secondary level and 10(16.66%) were graduate. Distribution of the respondents according to occupation shows that among 60 participants 19(31.67%) were employed and 41(68.33%) were unemployed. Distribution of the respondents according to type of family shows that among 60 participants 29(48.33%) belongs to joint family and 31(51.67%) belongs to nuclear

family. Distribution of the respondents according to number of children shows that among 60 participants 20(33.33%) were having one child, 17(28.33%) were having two children, and 23(38.34%) were having three or more than three child. Distribution of the respondents according to living area shows that among 60 participants 23(38.33%) belongs to urban area and 37(61.67%) belongs to rural area. Distribution of the respondents according to family history of allergy shows that among 60 participants 9(15%) belongs to family with history of allergy and 51(85%) belongs to family with no history of allergy.

Section II: Assessment of knowledge regarding prevention and management of childhood allergies

The overall distribution of Pretest knowledge regarding prevention and management of childhood allergies shows that among 60 participants 37(61.67%) had inadequate knowledge, 23(38.33%) had moderate knowledge regarding prevention and management of childhood allergies in the pre-test.

Distribution of level of knowledge among mothers regarding childhood allergies. (Pre-test)

N=60

| GRADE | SCORE | FREQUENCY | PERCENTAGE (%) |
|------------|-------|-----------|----------------|
| Inadequate | 0-10 | 37 | 61.67% |
| Moderate | 11-20 | 23 | 38.33% |
| Adequate | 21-30 | 0 | 0.00% |

The overall distribution of Post test knowledge regarding prevention and management of childhood allergies shows that among 60

participants 0 (0%) had inadequate knowledge, 0 (0%) had moderate knowledge, and 60 (100%) had adequate knowledge.

Distribution of level of knowledge among mothers regarding childhood allergies. (Post-test)

N=60

| GRADE | SCORE | FREQUENCY | PERCENTAGE (%) |
|------------|-------|-----------|----------------|
| Inadequate | 0-10 | 0 | 0% |
| Moderate | 11-20 | 0 | 0% |
| Adequate | 21-30 | 60 | 100% |

SECTION – III: Effectiveness of planned teaching programme on knowledge regarding prevention and management of childhood allergies.

Mean, Standard Deviation, Mean Difference and ‘t’ value of pre test and post test score.

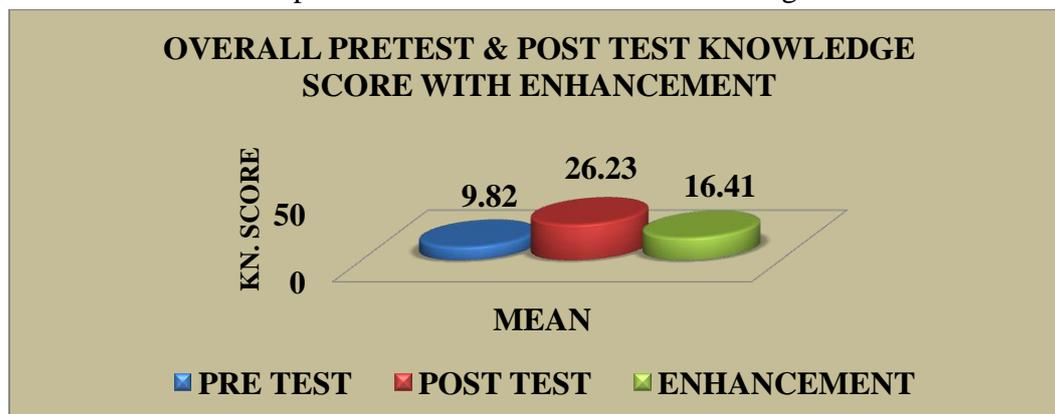
N=60

| VARIABLES | MEAN | MEAN DIFFERENCE | SD | t-VALUE | INFERENCE |
|------------|-----------|-----------------|------|---------|-----------|
| Know ledge | Pre test | 16.41 | 2.28 | 45.91 | S |
| | Post test | | 1.29 | | |

t (0.05, df:59)

The mean of the post test (26.23) is higher than the mean score (9.82) of pre test, were as the mean difference is 16.41 between pre test and post test and standard deviation of the pre test is 2.28

and 1.29 is of post test, with that the 't' value is 45.91 which indicates that the planned teaching programme on prevention and management of childhood allergies was effective.



SECTION IV: Association between selected demographic variables and pre test knowledge score

The obtained χ^2 value 8.63 is more than the table of χ^2 at 0.05 levels for age. Hence the obtained χ^2 value is significant. There is significant association between age and pre-test knowledge. The obtained χ^2 value 0.11 is less than the table of χ^2 at 0.05 levels for education. Hence the obtained χ^2 value is not significant. There is no significant association between education and pre-test knowledge. The obtained χ^2 value 0.01 is less than the table of χ^2 at 0.05 levels for occupation. Hence the obtained χ^2 value is not significant. There is not significant association between occupation and pre-test knowledge. The obtained χ^2 value 4.24 is more than the table of χ^2 at 0.05 levels for type of family. Hence the obtained χ^2 value is significant. There is significant association between type of family and pre-test knowledge. The obtained χ^2 value 0.24 is less than the table of χ^2 at 0.05 levels for number of children. Hence the obtained χ^2 value is not significant. There is no significant association between number of children and pre-test knowledge. The obtained χ^2 value 2.74 is less than the table of χ^2 at 0.05 levels for living area. Hence the obtained χ^2 value is not significant. There is no significant association between living area and pre-test knowledge. The obtained χ^2 value 0.95 is less than the table of χ^2

at 0.05 levels for history of allergies. Hence the obtained χ^2 value is not significant. There is no significant association between family history of allergies and pre-test knowledge.

Recommendations

Based on the finding of the present study recommendations offered for the future study are:

1. Similar study can be conducted on a larger sample to generalize finding.
2. A comparative study can be conducted with control group.
3. A comparative study may be conducted to find out the effectiveness between self structured modules and planned teaching programme on same topic.
4. A similar study can be conduct on the nursing degree course students, staff nurse.
5. A descriptive study can be conducted to assess the knowledge regarding prevention and management of childhood allergies.

Conclusion

Analysis reveals that the total mean of the post-test knowledge score was observed to be significantly higher than the total mean of pre-test knowledge score. Thus, the research hypothesis H1 was accepted.

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