

A Study to Evaluate Effectiveness of Planned Teaching Programme on Selected Healthy Habits in Terms of Knowledge and Attitude among Mothers of School Age Children in Select Rural Areas of Ahmedabad District

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Abstract

“A Study to Evaluate Effectiveness of Planned Teaching Programme on Selected Healthy Habits in Terms of Knowledge and Attitude among Mothers of School Age Children in Select Rural Areas of Ahmadabad District.” The objectives of the study were: 1) To assess the knowledge of mothers of school age children before and after administration of planned teaching programme regarding selected healthy habits in selected rural area of Ahmadabad District. 2) To assess the attitude of mothers of school age children before and after administration of planned teaching programme regarding selected healthy habits in selected rural area of Ahmadabad District. 3) To find out association between pre test knowledge of mothers of school age children regarding selected healthy habits with selected demographic variables. 4) To find out association between pre test attitudes of mothers of school age children regarding selected healthy habits with selected demographic variables. Pre Experimental approach was used with one group pre-test post-test design. The study was conducted in selected rural areas of Ahmadabad district. The investigator used multi stage random sampling technique for selecting 50 samples; a planned teaching programme on selected healthy habits was prepared. A Structured Knowledge Questionnaire was prepared to assess the

knowledge of the samples. Summated Likert’s scale used to assess attitude of samples. Content validity of the developed tool and planned teaching programme was established before the data collection. Reliability of the knowledge tool was ascertained by test retest method using spearman Rank correlation formula (0.8) and for attitude Cronbach alpha formula used (0.7) Data were analyzed using descriptive and inferential statistics. The mean pre-test knowledge score of samples on selected habits was (11.72) where as post-test knowledge score was (19.18) with mean difference 7.46. The calculated ‘t’ (25.7) was greater than tabulated ‘t’ (2.01) at 0.05 level of significance. The mean post test Attitude score (81.68) was higher than the mean Pre-test Attitude score (58.26) with the mean difference of (23.42). The calculated ‘t’ (10.07) was greater than tabulated ‘t’ (2.01) at 0.05 level of significance. There is significant association between pre-test knowledge score with the demographic variables like education (10.0), occupation (6.8) at 0.05 level of significance. There was significant association between pre-test attitude score with the demographic variables like education (7.85) at 0.05 level of significance. From the above findings, researcher concluded that samples knowledge as well as the attitude improved after implementation of planned teaching programme on selected healthy habit.

Keywords: Healthy habits; Planned Teaching Programme; Mothers; School age children.

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Introduction

Children are inheritance from the God. Every child has right to grow up in the healthy home, school and community. The future development of our children or their world depends on their enjoyment of the health. Habit means a recurrent, often unconscious pattern of behavior that is acquired through frequent repetition.

Healthy habits consider as health related action or behavior that performs automatically by person and it helps the person to be healthy and prevent diseases and improve quality of life. (Dorland's dictionary, 2004).⁵

A behavior that is beneficial to one's physical or mental health, often linked to a high level of discipline and self-control. Examples good habits Regular exercise, sleep, hygiene etc. (Taber's dictionary, 2006).¹⁶

Health related action or behavior that performs automatically by person and it helps the person to be healthy and prevent diseases and improve quality of life.

School age children in between age 6-8 years, start going to school, start to interact with peers and teacher. (Marlow, 2005).⁶

Kids generally have healthy habits when they are in the protected environment of the home. In school, they get exposed to unhealthy habits. There is also peer pressure to do the things that other kids are doing. Once a strong foundation for healthy habits have been set, it is very likely that the child will carry these habits all the way through their lives. (USAAE Foundation, 2012).⁴⁶

School age children are able to correlate the principles of healthy habits taught to them at school and home. They can be easily convinced by their peers, teachers and parents for healthy habits, that's why this age children need to learn healthy habits. (Tambulwadkar, 1990).¹⁵

School age children are able to understand and follow the healthy habits taught by parents, as well as they can understand reasons behind the habits. Their power of thinking and understanding regarding principles of healthy habits is more than non school age group as per their biological growth and development. (Wong's and whely, 2006).¹⁶

As per 2011 census, 15.95 % population of Ahmadabad districts lives in rural areas of villages. The total Ahmadabad district population living in rural areas is 1,149,436 of which male and female are 595,094 and 554,342 respectively. The child population comprises 13.87 % of total rural

population of Ahmadabad district. Directorate of census operation Gujarat, child population 2011 Rural and Urban respectively 48, 24,903 and 29,52,359. Ahmadabad child population 2011 Rural and Urban respectively 1, 61,607 and 6,80,911. 40% of India's population is below the age of 18 years which at 400 million is the world's largest child population. (Census India, 2011).⁵³

Objective of the Study

- To assess the knowledge of mothers of school age children before and after administration of planned teaching programme regarding selected healthy habits in selected rural area of Ahmadabad.
- To assess the attitude of mothers of school age children before and after administration of planned teaching programme regarding selected healthy habits in selected rural area of Ahmadabad.
- To find out association between pre test knowledge of mothers of school age children regarding selected healthy habits with selected demographic variables.
- To find out association between pre test attitudes of mothers of school age children regarding selected healthy habits with selected demographic variables.

Hypotheses

H_1 = The mean post test knowledge score of mothers of school age children will be significantly higher than their mean pre test knowledge score after administration of planned teaching programme regarding selected healthy habits as evidenced by structured knowledge questionnaire at 0.05 level of significance.

H_2 = The mean post test attitude score of mothers of school age children will be significantly higher than their mean pre test attitude score after administration of planned teaching programme regarding selected healthy habits as evidenced by summated Likert's scale at 0.05 level of significance.

H_3 = There will be significant association of pre test knowledge score of mothers of school age children regarding selected healthy habits with selected demographic variables.

H_4 = There will be significant association of pre test attitude score of mothers of school age children regarding selected healthy habits with selected demographic variables.

Variables of Study

Independent Variable: Planned teaching programme on selected healthy habits.

Dependent Variable: Knowledge and attitude of mothers of school age children on selected healthy habits.

Research Approach: A Pre experimental research approach was used in the “study to assess the effectiveness of a planned teaching programme on selected healthy habits in terms of knowledge and attitude among mothers of school age children in selected rural area of Ahmedabad district.”

Research Design: Research design selected for the present study was one group pre test post test design.

Materials and Methods

The investigator had developed structured knowledge questionnaire and summated Likerts scale for evaluation of pre test and post test. This design helped the investigator to manipulate the independent variable planned teaching programme and to observe its effect on the dependent variables knowledge and attitude among samples.

Research Setting: The present study was conducted in the selected rural Areas of Ahmedabad district. There are ten talukas coming under Ahmedabad district. Mandal, Detroj - Rampura, Ranpur, Dhandhuka, Dholka, Barwala, Sanand, Daskroi, Bavla, Viramgam.

The selected rural areas were as under:

Table 3.1: Selected rural areas from Ahmedabad district.

Name of Talukas	Selected Talukas	No. of Villages	No. of Selected Villages
Mandal			
Detroj - Rampura			
Dhandhuka,	Sanand	68	2-Upardal, Zolapur.
Dholka			
Ranpur			
Barwala			
Sanand			
Daskroi	Daskroi	80	2-Singarva, Kanbha.
Bavla			
Viramgam			

The setting for the study was undertaken at selected rural areas from ten talukas of Ahmedabad district. From talukas of Ahmedabad district two talukas selected Sanand and Daskroi randomly

selected. From each talukas two villages, Sanand (Zolapur, Upardal), Daskroi (Kanbha, Singarva) were selected. The rationale for selecting these rural Areas was familiarity with setting, locality, availability of samples, feasibility of conducting the study, easy accessibility of the Samples and also each rural Areas has same infrastructure and population distribution of conducting the study.

Target Population: In this study, the target population consisted of mothers of school age children residing in selected rural areas of Ahmedabad district.

Table 3.2: Target populations for selected samples in Ahmedabad district.

Name of Taluka	No. of Villages	Name of Selected Villages	Total No. of Mothers of School age Children
Sanand	68	Zolapur	283
		Upardal	215
Daskroi	80	Kanbha	320
		Singarva	294

Sample Size and Sampling Technique

The sample consisted of fifty samples of mothers having school age children residing selected rural Areas of Ahmedabad district. The Investigator adopted Simple Random multistage random Sampling Technique to select the samples. Samples who met the criteria for sample selection were selected. The steps for the sampling technique that the investigator adopted were as follows: First stage out of ten talukas of Ahmedabad district, investigator selected two talukas Sanand and Daskroi by lottery method. Second stage Investigator made list of villages under talukas and two villages selected from each talukas by lottery method. From selected villages list of samples prepared and from that sample selected by lottery method in proportionate way. Shown in table 3.3.

Selection of Tool for Data Collection

Structured knowledge questionnaire

According to Fox (1970) questioning helps to elicit factual information. Multiple choice Questionnaire helps to elicit factual information about knowledge. Relatively simple method for collection of data. It offers the possibility of anonymity and group administered. Knowledge test are least time consuming. The closed ended questions are

efficient and easy to administer. It covers a large group within a short period of time. For above all reason structured questionnaire was considered the most appropriate tool for the collection of data for the present study.

Structured Summated Likert's Scale for measurement of Attitude

The investigator reviewing the Literature pertaining to measure attitude found that structured summated Likert's scale was the appropriate for collection of data regarding attitude of mothers on selected healthy habit. A review of Literature, expert's opinion and investigator's experience and planned teaching programme were the basis for the construction of the structured summated Likert's scale.

Likert's scale helps to elicit factual information to find Attitude. Relatively simple method for collection of data. It offers the possibility of anonymity and group administered. Summated Likert's scale was least time consuming. It covers a large group within a short period of time. For above all reason structured summated Likert's scale was considered the most appropriate tool for the collection of data for the present study.

For the present study, the tool used was structured knowledge questionnaire and summated Likert's scale.

Description of the Tool

The development of tool was a step by step procedure in order to make the tool more practical oriented. The investigator reviewed the literature on selected healthy habits such as books, articles, published and unpublished thesis to develop the tool to assess the Knowledge and Attitude of samples on selected healthy habits. The investigator selected the following tool for data collection according to the objectives of the study.

Development of Planned Teaching Programme

A planned teaching programme was developed for the Samples from Selected rural Areas of Ahmedabad district by an extensive research and non-research literature and also took the opinion of the experts. For developing the planned teaching programme, content was selected and organized. Research guides and experts validated the content.

The planned teaching programme was arranged in terms of specific objectives, content, teaching learning activities, A.V. Aids and evaluation.

The content was divided in to broad three units with pictures. The material was developed in simple Gujarati language. It was made interesting by illustrating figures. The planned teaching programme was divided in four units. The first unit, Introduction, The second unit purposes of healthy habits, The third unit needs of healthy habits the fourth unit ,each selected five healthy habits with its benefits and hazards. Lecture cum discussion was adopted as the method of teaching.

Development of Structured Knowledge Questionnaire

Development of Structured Knowledge Questionnaires to assess the knowledge of the Samples on selected healthy habits in selected rural areas of Ahmadabad district.

A structured Multiple choice questionnaires on knowledge developed with possible right options from that samples have to select most appropriate one.

Total items were 30 and maximum score was 30. Every correct answer was given a score of one and wrong answer was given zero score. The thirty questions divided in six areas such as Introduction, hygiene, prevention of infection, eating habits, sleep and exercise.

The responses given by the sample was addressed by putting tick mark (√) on tool prepared. In area related to introduction, the questions are related to the definition, need. Hygiene area includes questions related to oral care, hair care, nail care, and bath. Prevention of infection area includes questions related to hand wash and care during sneezing and coughing. Eating habits area includes questions related to breakfast, lunch, and diet. Sleep area includes questions related to frequency, benefits. Exercise area includes questions related to duration, types.

Development of Summated Likert's Scale for attitude

A summated Likert's scale prepared regarding different aspects of selected healthy habits. It Consists of Twenty Statements in attitude measurement tool for measuring the attitude. Items are structured statements There are 10 positive and 10 negative statement on a five point scale as Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. The total score ranged between 20-100. The ranking system of Positive Statement on the basis of Strongly Agree-5, Agree-4, Undecided-3, Disagree-2, Strongly Disagree-1 and

the ranking system of Negative Statement on the basis of Strongly Agree-1, Agree-2, Undecided-3, Disagree-4, Strongly Disagree-5. The responses of mothers were given by putting tick mark (√) on the scale. The overall minimum score for the test was 20 and maximum score was 100.

Descriptions of Tools

The final tool consisted of following three sections:

Section-I: Demographic Variables of the Samples. This section consisted of items for obtaining personal information about samples such as Age, No. of Children, Type of Family, Education, Occupation, Family Income Per Month, Dietary Pattern and Source of Information.

Section-II: Structured knowledge Questionnaires. This section consisted of structured Multiple choice questions focused on different aspect of selected healthy habits like Introduction, hygiene, prevention of infection, eating habits, sleep and exercise.

Total items were 30 and total maximum score was 30. Each item carried one mark. Every correct answer was given a score of one and for wrong Answer zero score was given. Blue print for Structured Knowledge Questionnaire was prepared.

Section-III Summated Likert’s Attitude scale. In this section investigator had also prepared statements on different aspect of selected healthy habits. There were five points scale and each point having 5-1. There were total 20 items which express attitude of sample. The samples were asked to respond to each statement in terms of 5 degree of agreement is used. 5 to 1 score indicates Strongly Agree, Agree, and Undecided, Disagree and Strongly Disagree.

Validity

The content validation of the tool was done by thirteen experts. Experts were Master of Pediatric Nursing and Community Health nursing, Faculties,

Table 3.4: Blue print on areas, number of items and level of Knowledge on Structured Knowledge Questionnaire for Samples.

Areas	Level of Knowledge			Total no of questions	Max marks	Percentage %
	Knowledge	Comprehension	Application			
Introduction	1	-	2	2	2	6.7
Hygiene	5,6,7,8,9,10,11,12,13,14,15	3	4	13	13	43.4
Prevention of infection	16,17,19	18	20	5	5	16.6
Eating habit	21,23	22	24	4	4	13.3
Sleep	25,26	-	27	3	3	10
Exercise	28,29	-	30	3	3	10
Total	21	3	6	30	30	
	70%	10%	20%			100

Table 3.5: Blue print on areas, number of items and level of Attitude on summated Likert’s Scale for Samples.

Areas	Level of Attitude			Total no. of items	Percentage (%)
	Valuing	Receiving	Responding		
	No. of items	No. of items	No. of items		
Introduction	3	1,2	-	3	15
Hygiene	9,12	5	4,6,7,8	7	35
Prevention of infection	10,11,13	--	--	3	15
Eating habit	--	--	14,15,16,17	4	20
Sleep	18	--	--	1	5
Exercise	--	--	19,20	2	10
Total	7	3	10	20	
Percentage	35%	15%	50%		100%

guide and pediatrician. The experts were selected on basis of their clinical teaching experience and interest, in the problem being studied. They were requested to give their opinions and suggestions for the items of the tool. Out of the items most of the items were accepted. Some of the items were modified.

Reliability

The reliability is a criterion for measuring adequacy, consistency, accuracy of tool. The reliability of structured knowledge questionnaire and Likert's Scale was determined by carrying out an initial try out in Vagad.

The reliability of structured knowledge questionnaire was determined by test retest method using Spearman's rank correlation and attitude reliability checked by Cronbach's alpha method.

The reliability coefficient of the knowledge questionnaire was 0.88 which is more than 0.5; hence the questionnaire was determined by Cronbach's Alpha method found to be reliable. The reliability was of the summated Likert's attitude scale was 0.7 which is more than 0.5. Hence the attitude Scale was found to be reliable.

Result

Frequency, percentage and distribution of demographic variable of samples like age of mother, no of children, type of family, income of family, education of mothers, occupation of mother, dietary pattern, source of information.

Majority 32(64%) have 2 children, 12(24%) have 1 children, 5(10%) have 3 children, minor samples about 1(2%) have more than 4 children.

Majority 30 (60%) samples belongs to joint family, minor samples about 20(40%) belongs to nuclear family.

Majority 27(54%) have income of $\leq 5,000$ Rs / Month, 19(38%) have income 5,001-10,000 Rs / Month, minor samples about 4(8%) have $\geq 10,001$ Rs/month.

Majority samples had completed primary education 32(64%), 12(24%) completed secondary education, 4 (8%) completed higher secondary education, minor samples about 2(4 %) completed graduation.

N=50

Demographic Variables	Frequency (f)	Percentage (%)
Age of mother (in years)		
≤ 25 years	26	52
26-30	19	38
≥ 30 years	5	10
Total	50	100
No of Children		
1	12	24
2	32	64
3	5	10
4 or more	1	2
Total	50	100
Type of Family		
Nuclear	20	40
Joint	30	60
Total	50	100
Income of Family		
$\leq 5,000$ Rs / Month	27	54
5,001-10,000 Rs/Month	19	38
$\geq 10,001$ Rs/month	4	8
Total	50	100
Education of Mothers		
Primary education	32	64
Secondary	12	24
higher secondary education	4	8
Graduation	2	4
Total	50	100
Occupation of Mothers		
Employed	3	6
Self employed	17	34
House wife	30	60
Total	50	100
Dietary Pattern		
Vegetarian	22	44
Non vegetarian	22	44
Eggitarian	6	12
Total	50	100
Source of Information		
Mass media	26	52
Health personal	20	40
Friends	4	8
Total	50	100

Majority 30 (60%) samples were housewife, 17 (34%) self employed, minor samples about 3(6%) were employed.

Majority 22 (44%) samples were taking vegetarian and non vegetarian diet, minor samples about 6(12%) were taking eggitarian.

Majority of samples 26 (52%) acquired information regarding selected healthy habits from

Table 2: Area-Wise Mean score, Mean Percentage, SD, Mean Difference, Gain percentage and 't' test value of Pre-Test and Post-Test Knowledge Scores.

N=50

Area of Content	Max Score	Pre-Test Knowledge			Post-Test Knowledge			Gain %	Mean Difference	't' value
		Mean Score	Mean %	SD	Mean Score	Mean %	SD			
Introduction	2	1	50	0.61	1.86	93	0.35	43	0.86	8.68
Hygiene	13	5.56	42.77	1.08	9.46	72.7	1.3	30	3.9	18.88
Prevention of infection	4	1.66	33.2	0.59	2.08	41.6	0.83	8.4	0.42	2.88
Eating habit	4	1.04	26	1.05	1.2	30	0.57	4	0.16	0.929
Sleep	2	0.96	48	0.2	1.62	81	0.49	33	0.66	0.837
Exercise	4	1.52	38	0.54	2.96	74	0.2	36	1.44	16.65
Total	30	11.72	39.06	2.42	19.18	63.9	2.83	24.87	7.46	17.09

mass media, 20 (40%) got through health personnel and minor samples about 4 (8%) got from friends.

Table: 4.2 Shows that Pretest Mean Score was 11.72 (39.06%) and Post Test Mean score was 19.1 (63.93%). Hence mean difference noted in this area was (24.87%).

Area wise result related to introduction: pretest mean 1 (50%), post test mean 1.86 (93%) it shows gain knowledge percentage 43 % and calculated 't' value is 8.68.

Hygiene: pretest mean 5.56(42.7%), post test mean 9.46(72.77%), it revels gain knowledge percentage

30% and calculated 't' value is 18.8. Prevention of infection: pretest mean 1.66 (33.2%), post test mean 2.08 (41.6%), it revels gain knowledge percentage 8.4% and calculated 't' value is 2.8. Eating habit: pretest mean 1.04 (26%), post test mean 1.2 (30%), it revels gain knowledge percentage 4% and calculated 't' value is 0.92.

Sleep: Pretest mean 0.96 (48%), post test mean 1.62(81%), it revels gain knowledge percentage 33% and calculated 't' value is 8.37.

Exercise: pretest mean 1.52(38%), post test mean 2.96 (74%), it revels gain knowledge percentage 36% and calculated 't' value is 16.15.

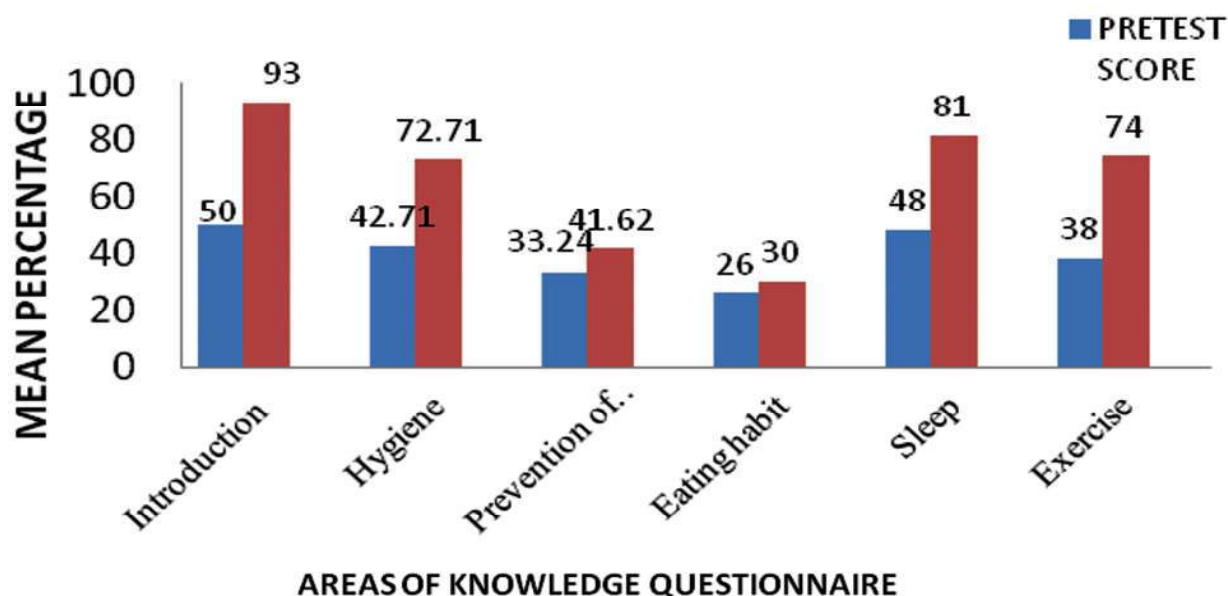


Fig. 4: Bar Graph Showing area wise mean percentage of pre test and post test knowledge scores of samples on selected healthy habits.

Table 4.3: Mean, Mean Difference, Standard Deviation (SD) and 't' Test Value of the Pre-test and Post-test Knowledge Scores of Samples.

N=50					
Knowledge Test	Mean Score	Mean Difference	S.D	Calculated Value of 't'	Table Value of 't'
Pre Test	11.72	7.46	2.05	25.74*	2.01
Post Test	19.18	-	-	-	-

* 0.05 level of significance with 49 degree of freedom.

Table no. 4.3 shows that the mean post-test Knowledge score(19.18) was significantly higher than the mean Pre-test Knowledge scores(11.72). difference between mean score was 7.46. Standard deviation is 2.05. The calculated "t" value ($t = 25.7$) was greater than the tabulated "t" ($t = 2.01$) at significance of 0.05 level.

That is statistically proved which depicts that planned teaching programme on selected healthy habits is effective in terms of Knowledge among the samples. More over as, the calculated't' (25.7) was greater than the tabulated't' (2.01) so, the Investigator can conclude that the null hypothesis H_{01} was rejected and research hypothesis H_1 was accepted.

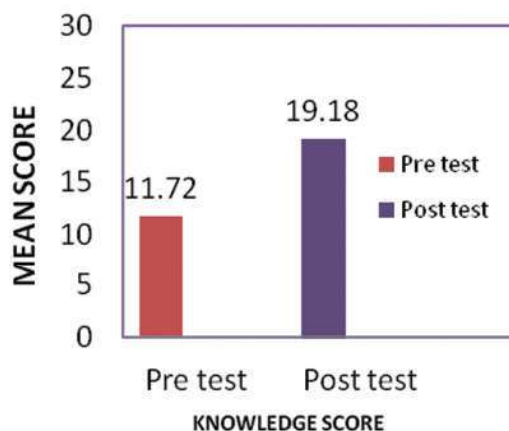


Fig. 5: Bar graph showing mean score of pre-test and post-test mean knowledge scores.

Table 4.4: Distribution of favorable and unfavorable attitude based on pretest and post test attitude score of samples.

N=50					
Attitude	Classi- fication	Pretest		Post Test	
		Freq- uency (f)	Percen- tage (%)	Freq- uency (f)	Percen- tage (%)
61-100	Favorable	22	44	42	84
20-60	Unfavorable	28	56	8	16
Total		50	100	50	100

Table no 4.3.1 shows that frequency percentage of favorable attitude of samples for pretest 22(44%) and post test 42(84%). Frequency percentage of unfavorable attitude of samples for pretest 28(56%) and 8(16%) for post test.

Table 4.5: Mean, Mean Difference, Standard Deviation (SD) and 't' test Value of the Pre-Test and Post Test Attitude Scores of Samples.

N=50					
Attitude Test	Mean Score	Mean difference	SD	Calcu- lated Value of 't'	Table value of 't'
Pre test	58.26	23.42	16.43	10.07 *	2.01
Post test	81.68	-	-	-	-

* 0.05 level of Significance with 49 degree of freedom.

Table no 4.5 reveals that the mean post-test attitude score (81.68) was significantly higher than the mean Pre-test attitude scores (58.26). Difference between mean score was 23.42. Standard deviation was 16.43. The calculated "t" value ($t = 10.18$) is greater than the tabulated "t" ($t = 2.01$) at significance of 0.05 level.

That was statistically proved which depicts that planned teaching programme on selected healthy habits was effective in terms of attitude among the samples. More over as, the calculated't' (10.07) was greater than the tabulated't' (2.01) so, the Investigator can conclude that the null hypothesis H_{02} is rejected and research hypothesis H_2 is accepted.

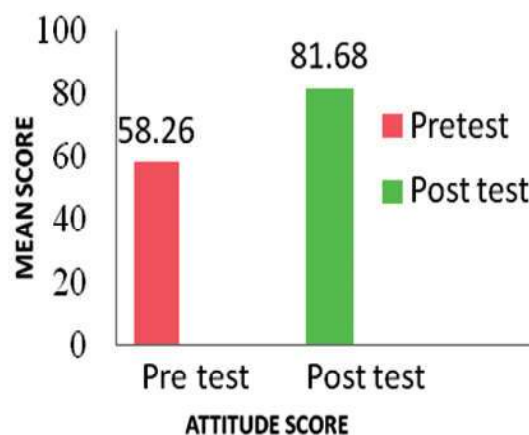


Fig. 6: Bar Graph showing Mean score of Pre-Test and Post-Test Mean Attitude Scores.

Table 4.6: Frequency Distribution And Chi-Square Association of Pre-Test knowledge with Demographic Variables of Samples. N=50

Demographic variables	Frequency	χ^2		df
		Calculated value	Table value	
Age of Mothers				
≤25 years	26	0.55	5.9	2
26-30	19			
≥ 30 years	5			
No of Children				
1	12	3.62	7.82	3
2	32			
3	5			
4 or More	1			
Type of Family				
Nuclear	20	0.03	3.84	1
Joint	30			
Income of Family				
≥ 5,000 Rs /Month	27	0.77	5.99	2
5,001-10,000 Rs/ Month	19			
≥ 10,001 Rs / month	4			
Education of Mothers				
Primary education	32	10.07*	7.82	3
Secondary	12			
higher secondary education	4			
Graduation	2			
Occupation of Mothers				
Employed	3	6.08*	5.99	2
Self employed	17			
House wife	30			
Dietary Pattern				
Vegetarian	22	1.26	5.99	2
Non vegetarian	22			
Eggitarian	6			
Source of Information				
Mass media	26	5.08	5.99	2
Health personal	20			
Friends	4			

* Association at 0.05 level of significance

Table no 4.6 shows that demographic variable age of mother have calculates value of χ^2 (0.55) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was non significant, age of mother having no association with pretest knowledge of samples.

Demographic variable no of child have calculates value of χ^2 (3.62) that was lower than table value of (7.82) with (3) degree of freedom at 0.05 level of significance, so it was not significant so No of child has no association with pretest knowledge of samples.

Demographic variable type of family have calculates value of χ^2 (0.33) that was lower than

table value of (3.84) with (1) degree of freedom at 0.05 level of significance, so it was not significant so type of family having no association with pretest knowledge of samples.

Demographic variable income of family have calculates value of χ^2 (0.77) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant so income of family has no association with pretest knowledge of samples.

Demographic variable education of mother have calculates value of χ^2 (10.07) that was higher than table value of (7.82) with (3) degree of freedom at 0.05 level of significance, so it was significant,

education of mother having association with pretest knowledge of samples. Demographic variable occupation have calculates value of χ^2 (6.08) that was higher than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was significant so occupation has association with pretest knowledge of samples.

Demographic variable dietary pattern have calculates value of χ^2 (1.26) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant, dietary pattern having no association with pretest knowledge of samples.

Demographic variable source of information have calculates value of χ^2 (5.08) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant, source of information having no association with pretest knowledge of samples. Hence Null hypotheses H03 rejected research hypotheses H3 accepted. Planned teaching programme was effective.

Table no 4.7 shows that demographic variable age of mother have calculates value of χ^2 (2.02) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant, age of mother having no association with pretest knowledge of samples.

Table 4.7: Frequency Distribution and Chi-Square Association of Pre-Test attitude with Demographic Variables of Samples.

Demographic variables	Frequency	χ^2		df
		Calculated value	Table value	
N=50				
Age of Mothers				
≤25 years	26	2.02	5.99	2
26-30	19			
≥ 30 years	5			
No of Children				
1	12			
2	32	4.18	7.82	3
3	5			
4 or More	1			
Type of Family				
Nuclear	20	0.013	3.84	1
Joint	30			
Income of Family				
≥ 5,000 Rs/Month	27			
5,001-10,000 Rs/Month	19	4.74	5.99	2
≥ 10,001 Rs/month	4			
Education of Mothers				
Primary education	32			
Secondary	14	7.85*	7.82	3
higher secondary education	4			
Graduation	0			
Occupation of Mothers				
Employed	3			
Self employed	17	2.508	5.99	2
House wife	30			
Dietary Pattern				
Vegetarian	22			
Non vegetarian	22	1.791	5.99	2
Eggitarian	6			
Source of Information				
Mass media	26	1.970	5.99	2
Health personal	20			
Friends	4			

Demographic variable no of child have calculates value of χ^2 (4.18) that was lower than table value of (7.82) with (3) degree of freedom at 0.05 level of significance, so it was not significant so No of child has no association with pretest knowledge of samples.

Demographic variable type of family have calculates value of χ^2 (0.013) that was lower than table value of (3.84) with (1) degree of freedom at 0.05 level of significance, so it was not significant so type of family has no association with pretest knowledge of samples.

Demographic variable income of family have calculates value of χ^2 (4.74) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant so income of family has no association with pretest knowledge of samples.

Demographic variable education of mother have calculates value of χ^2 (7.85) that was higher than table value of (7.82) with (3) degree of freedom at 0.05 level of significance, so it was significant, education of mother having association with pretest knowledge of samples.

Demographic variable occupation have calculates value of χ^2 (2.50) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant so occupation has no association with pretest knowledge of samples.

Demographic variable dietary pattern have calculates value of χ^2 (1.79) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant, dietary pattern having no association with pretest knowledge of samples.

Demographic variable source of information have calculates value of χ^2 (1.97) that was lower than table value of (5.99) with (2) degree of freedom at 0.05 level of significance, so it was not significant, source of information having no association with pretest knowledge of samples. Hence Null hypothesis H04 rejected research hypothesis H4 accepted. Planned teaching programme was effective.

Summary

This chapter deals with the analysis and interpretation of data collected from fifty samples, to assess the Effectiveness of planned teaching programme on selected healthy habits in terms of Knowledge and Attitude. Descriptive and

inferential statistics methods were used to analyze the data. The mean Post test Knowledge score 19.1 was higher than mean Pre test Knowledge score 11.8 with the mean difference of 5.5. That was statistically proved which depicts that planned teaching programme on selected healthy habit was effective in terms of Knowledge among the samples. More over as, the calculated 't' (25.74) was greater than the tabulated 't' (2.01) on selected healthy habits.

The Mean Score of Post Attitude 58.26 was higher than mean Pre test Attitude scoring 81.2. with the Mean Difference of 23.42. That was statistically proved which depicts that planned teaching programme on selected healthy habits was effective in terms of Attitude among the Samples. More over as, then calculated 't' (10.18) was greater than the tabulated 't' (2.01) on selected healthy habits. After the administration of the planned teaching programme, knowledge and attitude of samples increased and resulted in a higher knowledge and attitude score. That was clearly indicates that the planned teaching programme was effective in improving the knowledge and attitude of the samples on selected healthy habits. There was significance association between demographic variables and pretest knowledge and attitude.

Demographic variables like occupation and education of mother having association with knowledge of selected healthy habits of mothers of school age children.

Demographic variables like education (7.85) have association with attitude of selected healthy habits of mothers of school age children.

Major Findings of the Study

The data were analyzed and interpreted in terms of objectives of the study. Descriptive and inferential statistics were utilized for the data analysis. After analysis of data major findings of the study were as follows:

Findings related to demographic variables of samples.

Majority 26 (52%) samples belongs to the age group ≤ 25 Years, 19 (38 %) in the age group 26-30 Years, minor samples about 5 (12.5%) in the age group ≥ 30 Years. Majority 32 (64%) have 2 children, 12(24%) have 1 children, 5 (10%) have 3 children, minor samples about 1 (2%) have more than 4 children. Majority 30 (60%) samples belongs to joint family, minor samples about 20(40%) belongs to nuclear family. Majority 27 (54%) have income

of ≤5,000 Rs / Month, 19 (38%) have income 5,001-10,000 Rs/Month, minor samples about 4 (8%) have ≥ 10,001 Rs/month. Majority samples had completed primary education 32(64%), 12 (24%) completed secondary education, 4 (8%) completed higher secondary education, minor samples about 2 (4%) completed graduation. Majority 30 (60%) samples were housewife, 17(34%) self employed, minor samples about 3(6%) were employed. Majority 22 (44%) samples were taking vegetarian and non vegetarian diet, minor samples about 6(12%) were taking egg vegetarian. Majority of samples 26 (52%) acquired information regarding selected healthy habits from mass media, 20 (40%) got through health personnel and minor samples about 4(8%) got from friends.

Findings related to knowledge of samples

The mean post test Knowledge score (19.18) was higher than the mean Pre-test Knowledge score (11.72) with the mean difference of 7.46 which was statistically proved and it revealed that the planned teaching programme was effective in terms of Knowledge among the Samples.

The calculated 't' (25.7) was greater than tabulated 't' (2.01) at 0.05 level of significance, so the Investigator concluded that there was significant increase in the mean post test knowledge score as compared to the mean pre-test knowledge score after the administration of a planned teaching programme which was statistically proved and so the null hypothesis H₀₁ was rejected and research hypothesis H₁ was accepted.

There is significant association between pre-test knowledge score with the demographic variables like education (10.0), occupation (6.8) at 0.05 level of significance.

Findings related to attitude of samples

The mean post test Attitude score (81.68) was higher than the mean pre-test attitude score (58.26) with the mean difference of (23.42) which was statistically proved and it revealed that the planned teaching programme was effective in terms of Attitude among the Samples. The calculated 't' (10.07) was greater than tabulated 't' (2.01) at 0.05 level of significance, so the investigator concluded that there was significant increase in the mean post test Attitude score as compared to the mean Pre-test Attitude score after the administration of a planned teaching programme which was statistically proved and so the null hypothesis H₀₂ was rejected and research hypothesis H₂ was accepted. There

was significant association between pre-test attitude score with the demographic variables like education (7.85) at 0.05 level of significance.

Conclusion

From the above findings, it was concluded that samples' knowledge as well as the attitude improved after implementation of planned teaching programme on selected healthy habit such as hygiene, prevention of infection, eating habit, sleep, and exercise. It showed that the planned teaching programme was an effective method in terms of improving knowledge and attitude among mothers of school age children on selected healthy habits.

Recommendations

The following recommendations are made on the basis of the findings of the present study.

- A similar study can be replicated on a large sample covering the different district of Gujarat state.
- A similar study can be replicated on sample to assess knowledge and practice covering the different district of Gujarat state.
- A similar study can be undertaken with a control group design.
- A similar study can be conducted on Asha worker or Anganwadi worker.
- A survey can be conducted on selected healthy habits among the School age children.
- A Study can be conducted on selected healthy habits among the primary school teachers.
- A study can be conducted to assess prevalence rate of infection due to unhealthy habits among the school age children.
- A similar study can be replicated with the illiterate sample through interview technique.

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