

Effectiveness of Planned Teaching Programme on Knowledge of Mothers of School-Aged Children on Prevention of Typhoid Fever in Selected Hospitals of Hassan, Karnataka.

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Abstract

Introduction: Typhoid fever is also known as enteric fever, is a systemic infection by salmonella typhi or by the related but less virulent salmonella paratyphi. Since ancient times this bacteria have thrived during war time and during the break down of basic sanitation. Salmonella typhi persists mostly in developing nations where sanitation is generally poor.

Methodology: The research approach for the study was a true experimental design in nature to assess the effectiveness of the planned teaching programme. The investigator had utilised probability sampling in which simple random technique had been used for the selection of the subjects. A sample of 100 mothers of school-age children were selected for the study by a lottery method and through randomization among the 100 mothers, 50 mothers were selected for the experimental while 50 mothers were selected for the control group. The instrument used for the study was structured knowledge questionnaire.

Results: The results showed that Pre-Test findings were 34.6% and 33.4% in experimental and control group respectively. While post-test score were 80.9% and 35.3% in experimental and control group respectively. Hence the post-test Mean knowledge score of the experimental group was significantly higher than the post-test knowledge score of control group. The paired student 't' test value was 53.52 which is highly significant and $p=0.001$ level. **Conclusion:** The knowledge level of mothers on prevention of typhoid fever is higher in experimental than control group.

Keywords: Knowledge, typhoid fever, Planned teaching programm

Introduction

Typhoid fever in children which is known as periodic fever from antiquity to people and health professionals.² According to WHO, about 1.7 crore people suffer from typhoid fever and about 6 lakh deaths occur each year due to it. It is estimated that in India about 800 people per lakh population suffer from typhoid fever each year. It can occur at any age, but children between 5-15 years are at maximum risk. Typhoid fever is becoming difficult to treat because these bacteria are developing resistance to the antibiotic drugs.⁶ Typhoid fever occurs in all parts of the world where water supplies and sanitation are sub-standard.⁷ Typhoid fever is a severe multisystemic illness characterized by the classic prolonged fever, sustained bacteremia without endothelial or endocardial involvement and bacterial invasion.⁶

Materials And Methods

The research approach for the study was a true experimental design in nature to assess the effectiveness of the planned teaching programme. The sample size for the study was 100 mothers. In that 50 for experimental and 50 for control was selected randomly by simple random sampling. Reliability coefficient was tested using test and Re-test method. The reliability value of the tool is 0.89. Hence the tool was found to be highly reliable. The reliability of the tool was estimated by the Karl – Pearson's Correlation formula represented by the symbol "r".

Data Collection Process

Formal written permissions were obtained from the authorities of hospitals where the study was conducted. The data was collected from 100 mothers who met the study criteria. The samples were informed about the purpose of the study and the consent was taken from them. The necessary instructions were given to each subject and tool was administered. On various days the investigator contacted the study subjects and administered the data collection tool individually. For experimental group planned teaching programme given immediately after the pre-test while for control group only pre-test was conducted. After 7 days post test was conducted individually for both experimental and control group. Both descriptive and inferential statistics were used to analyze data collection.

Table 1: Comparison of pre-test and post- test knowledge score

n= 50+50

Knowledge level	Experimental group(50)		Control group(50)	
	Pre-test	Post-test	Pre-test	Post-test
Inadequate	50(100%)	0	50(100%)	48(96%)
Moderate	0	20(40%)	0	2(4%)
Adequate	0	30(60%)	0	0

Table 2: Comparison of Knowledge score of the Experimental and Control group

n= 50+50

Knowledge of typhoid fever and its prevention	Pre-test Mean ± SD	Post-test Mean ± SD	Student paired t-test
Experimental group	8.66 ± 1.21	20.22 ± 2.00	t=53.52 P=0.001 Significant
Control group	8.36 ± 1.64	8.82 ± 1.61	t=1.11 P=0.27 Not Significant

The above table shows the comparison of pre-test and post-test knowledge score of experimental and control group. In the experimental group mothers, the pre-test out of 25 questions on an average only 18 questions they were able to answer. After having planned teaching program, the same mothers were able to answer 20 questions. So the mothers were able to answer 20 questions more after having received planned teaching program it was 20.22±2.00 in the experimental group mothers. The mean difference between pre-test and post-test is very large and there is statistically significant difference it was confirmed by using student paired “t” test.

In the control group, in the pre-test out of 25 questions, on an average mothers of the control group were able to answer only 8 questions. After the post-test mothers of the control group were able to answer only the same 8 questions the mean and standard deviation during pre-test it was 8.36±1.64 and during post-test it was about 8.82±1.61. The mean difference between pre-test and post-test is very meager. There were small difference and it was not a statistically significant which was confirmed by using student paired “t” test (P>0.07).

Table 3: Comparison of pre-test and post- test knowledge score

n= 50+50

knowledge	Experimental group Mean ± SD	Control group Mean ± SD	Student Independent t-test
Pre-test	8.66 ± 1.21	8.36 ± 1.64	t=1.04 P=0.30 Not Significant
Post-test	20.22 ± 2.00	8.82 ± 1.61	t=31.39 P=0.001 significant

The above table shows the comparison of knowledge scores of mothers of the experimental and control group. In the pre-test, out of 25 questions, on an average both the mothers of the experimental and control group have answered only 8 questions. Mean and Standard Deviation of mothers of the experimental group is 8.36±1.21 and control group is 8.36±1.64. The difference between Mean and Standard Deviation of the mothers of the experimental and control group is very meager.

In the post-test, out of 25 questions on an average the mothers were able to answer only answer 20 questions where as in the mothers of the control group were able to answer only 9 questions. The Mean and Standard Deviation of the control group is 8.82±1.61 and the mothers of the experimental group is 20.22±2.00. So the mean difference between mothers of the experimental control group is very large and there is statistical significant difference. It was confirmed by using student independent “t” test.

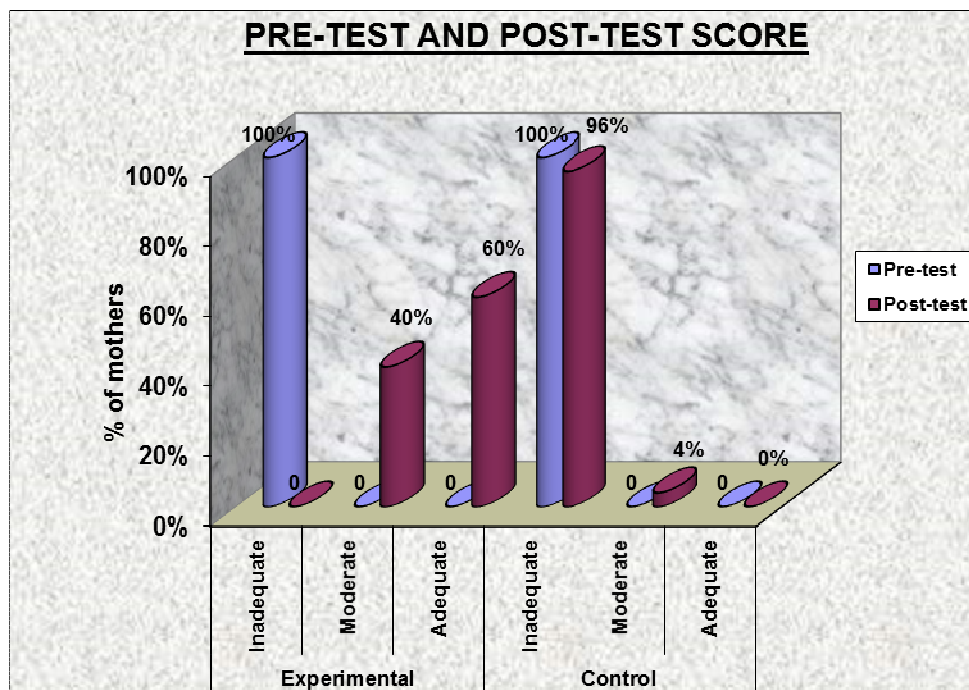


Table 4: Association between Demographic variables and Knowledge gain score in the Experimental group

n= 50+50

Socio-Demographic variables		PRE-TEST		POST-TEST		GAIN SCORE		SIGNIFICANCE
		MEAN	SD	MEAN	SD	MEAN	SD	
Age of Mother	21-30 yrs	8.68	1.156	19.86	1.779	11.18	1.389	F=3.26 P=0.05 SIGNIFICANT
	31-40 yrs	8.55	1.234	20.45	2.188	11.90	1.518	
	41-50 yrs	9.50	2.121	23.00	.000	13.50	2.121	
Residence	Urban	8.89	1.323	20.56	1.723	11.67	1.414	F=1.17 P=0.37 NOT SIGNIFICANT
	Rural	8.62	1.134	20.31	2.259	11.69	1.594	
	Sub-urban	8.17	1.169	18.83	.983	10.67	1.506	
Religion	Hindu	8.72	1.210	20.31	2.026	11.58	1.628	t=0.17 P=0.86 NOT SIGNIFICANT
	Muslim	8.50	1.225	20.00	2.000	11.50	1.286	
No. of children	One	9.00	.	23.00	.	14.00	.	F=1.22 P=0.31 NOT SIGNIFICANT
	Two	8.79	1.250	20.35	2.087	11.56	1.599	
	Three	8.43	1.089	19.93	1.592	11.50	1.286	
	Four and above	7.00	.	17.00	.	10.00	.	
Mother's Education	Primary Education	8.08	1.084	19.67	1.775	11.58	1.564	t=3.70 P=0.01 SIGNIFICANT
	Secondary Education	9.33	1.155	21.00	1.907	11.67	1.723	
	Graduation	9.50	.577	22.75	.500	13.25	.957	
	A school dropout	8.67	1.188	20.00	1.847	11.33	1.237	
	Never attended a school	7.50	.577	18.00	1.414	10.50	1.732	

The findings shows that statistical significant association was observed between the age of the mother, education, source of health information, previous history of typhoid fever among their children knowledge gain score after having planned teaching programme.

Discussion:

The study findings shows the post-test scores of the experimental and control group. In the mothers of the experimental group after the administration of planned teaching programme the post-test score was 80.9% and among the mothers of the control group during the post-test the knowledge score was 35.3%. So the difference between the experimental and control group is 45.6% in the post-test. This difference between the experimental

and control group is the net benefit of the mothers of the experimental group. This is mainly due to the planned teaching programme.

The above objective is supported by a study which was conducted on women's involvement in a rural Bangladesh water and sanitation project in which health impacts were compared between children in two areas; intervention and comparison areas. In intervention area people were provided with hand pumps, latrines and hygiene education whereas, in the comparison area, people did not receive these project inputs. Observation on women's involvement and their performances in the interventions areas are presented. About 89% of the pumps maintained by women (n=30), and 86% of those maintained by project workers (n=49) were found to be good working condition. Socio-cultural factors were not barriers to women's involvement and performance. The findings have policy implications for effective involvement of rural women towards the development of sustainable programs.⁴⁷

Limitations:

1. The study was confined to specific geographical area which imposes a limit on generalization
2. Hence practice was not used, which limits the study only to the knowledge area.

Recommendations:

- A study can be conducted on mothers of under-five children.
- A study can be conducted on school-age children regarding healthy practices to prevent the occurrence of typhoid fever
- A study can be conducted on prevention and control of food and water borne diseases

References

1. Nancy. F, crum. MD. MPH. Current trends in typhoid fever. Current gastroenterology reports. 2003; Page no. 279-286. www.pubmed.com.
2. World Health Organization; Communicable diseases; Surveillance and response vaccines and Biologicals; May 2003.
3. Staff and experts from the cluster on communicable disease and the water. Water-sanitation and health, world health organization (W.H.O.). 2001. www.google.com.
4. Hogue B A, Aziz K M, K Z, Sack R B; Women's involvement in a rural Bangladesh water and sanitation project; Southeast Asian Journal Trop medical public health; 1994 March; 25(1); 67-73.

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