



# “A STUDY TO ASSESS THE EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING PERSONAL HYGIENE AND ITS IMPORTANCE AMONG THE PRIMARY SCHOOL CHILDREN IN SELECTED PRIMARY SCHOOLS AT BANGALORE”

Author's Name

1.R K Mahadevaswamy

2.Manasa H S

Author's Designation

1.Nursing Tutor, JSS School of Nursing, Ramanuja Road, Mysore.

2.Nursing Tutor, JSS School of Nursing, Ramanuja Road, Mysore.

## Abstract

The research design chosen for the study was one group pretest posttest design and the research approach was an quantitative approach. This study Design: The approach of the study was descriptive survey approach with case and control research design was utilized to conduct this study. undertaken in Sri Lakshmi Public School at Bangalore. The data was collected through the tool which is prepared by the investigator. The sample size consists of 60 primary school children. The collected information was organized, tabulated, analyzed and interpreted using descriptive and inferential statistics. Analysis was done based on the objectives and hypothesis of the study. The level of significance was set at 0.05 levels.

**RESULT :** Pre-test assessment of level of knowledge indicates that only one-fifth of the subjects were having a moderate amount of knowledge. Remaining 80% were having inadequate level of knowledge and none was holding adequate knowledge. The Mean, SD and Mean% of the pretest general knowledge of primary school children are 12.1, 4.1, and 40.3% respectively Post-test level of knowledge has an amazing 46.6% subjects showed adequate level of knowledge and the remaining 53.3% showed moderate level of knowledge. No subjects appeared with inadequate knowledge post-testily. Mean found 20.7 SD found to be 2.7 and mean percentage, after treatment, changed to 69.1.8%: Compares pretest and posttest levels of knowledge, before self-instructional module 80% of the subjects had inadequate level of knowledge and the remaining 20% had moderate level of knowledge. However, after self-instructional module the subjects' level of knowledge improved significantly. 46.7% of the subjects, after self-instructional module showed adequate level of knowledge and the remaining 53.3% showed moderate knowledge. Paired t test was

calculated to analyze the difference in pre and post-test knowledge scores of student nurses which show significant difference between the overall scores. Hence the hypothesis H1 is accepted and it can be interpreted that the difference observed in the mean score of the pre and post score were true difference. **Conclusion** : The primary school children in rural primary school have lacked knowledge regarding personal hygiene and its importance. The pre-test mean score was 20.7. The self-instructional module was very effective in improving the knowledge, since post-test score was found to be significant (46.7). From these findings it could be concluded that, self-instructional module is an effective strategy in improving the knowledge of primary school children regarding, personal hygiene and its importance

**Key Words** : Personal Hygiene, Primary School children

**Introduction** : Personal hygiene involves those practices performed by an individual to care for one's bodily health and well-being, through cleanliness. Motivations for personal hygiene practice include reduction of personal illness, healing from personal illness, optimal health and sense of well-being, social acceptance and prevention of spread of illness to others. What is considered proper personal hygiene can be cultural-specific and may change over time.<sup>1</sup> India has one of the largest groups of primary school going children, especially in rural areas. There are about 6.3 lakh rural schools both primary and upper primary with 80 million primary school going children. But it is also a fact that only 8 percent of schools have the sanitation facilities in school premise. Out of 6.3 lakh primary and upper primary rural schools, only 44 percent have water supply facilities, 19 percent have urinals and 8 percent have lavatory facilities. Only 19 percent have separate urinals and 4 percent lavatory facility for girls. Under these conditions schools and community environment become unsafe places where diseases are transmitted.<sup>2</sup> A study conducted on prevalence of various infectious conditions of skin and observed were tinea versicolor (8.35 Percent ), warts (2.5 Percent ), pyoderma (2.06 Percent ), scabies (2.4 Percent ) routine school survey should be carried out every year for the early diagnosis and treatment of skin infections and improve the practices of personal hygiene.<sup>3</sup> According to WHO globally 200, 335, 280 teeth are either decayed, missing due to the caries. In National survey almost 10% of low-income children had need for dental care. More than 30% reported not seeing dentist in the preceding years. Between 11% to 72% of poor children have been found to have early childhood caries only 19% of the children received preventive dental services. This is for one year age group the 12 yr old and presented in database in February (2004 WHO organization). And 1.7 million deaths in 2004 occurred due to diarrheal diseases and 90% of these occurred among children. Almost 88% of diarrheal diseases are attributed due to in-adequate hygiene.<sup>4</sup>

A cross-sectional study was undertaken in rural Peshawar to determine the frequency of intestinal infestation in primary school children. The study population included 200 primary schoolchildren aged five to ten years. Data was collected by stool examination. The results showed 45.5% (91 cases) prevalence of *Ascaris lumbricoides*, less than eight percent (16 cases) of *Hymenolepis nana*, less than four percent (16 cases) of *Enterobius vermicularis*, less than three percent (7 cases) of hookworm, less than four percent (7 cases) of whipworm, and less than seven percent (3 cases) prevalence of tapeworm. The researcher concluded that there was a primary percent of primary school children in need of health education on promotion of personal hygiene and possibly mass treatment.<sup>5</sup> A study was conducted on oral health

knowledge, attitudes and practices among 11-12 yrs old school children in a government aided missionary school of Bangalore city. The study group comprised of 212 children (male: 108, Female: 104) who were in the agegroup of 11-12 years. Data on oral health KAP were collected by means of a self-administered questionnaire statistical significance was determined by Chi-square test. Result was 38.5% of the Children brush their teeth two (or) more times a day. Pain is discomfort from teeth (35.1%) were common while dental visit were in frequent fear of the dentist was the main causes of irregular visit in 46.1% of study participants. High proportion of study participants reported having hidden sugar at least once a day. Soft drinks (32.1%) milk with sugar (65.9%) and tea with sugar (56.1%). It was found that 5.4% and 3.9% of study participants smoke and chew tobacco result of this study suggest that oral health of study participants are poor and needs to be improved systematic. Community oriented oral health promotion programs are needed to improve oral health of school children.<sup>6</sup>

### Material and Methods:

The research design used for the study was pre experimental one group pretest posttest design. Research setting refers to the place or physical setting where the study is conducted. Based on the investigator's familiarity with the settings and availability of the samples, the present study was conducted at Sri Lakshmi Public School at Bangalore. The research problem needs to be broken in to set of questions that will extract the desired answers from a chosen unit of population. Sample adopted for the present study is 60 primary school children of selected primary schools.

### Result :

#### DESCRIPTION OF SOCIO DEMOGRAPHIC VARIABLES OF PRIMARY SCHOOL CHILDREN

**Table 1:** Frequency and percentage distribution of primary school children according to demographic variables.

SINo	Demographicvariables	No	%
1	<b>Age(inYears)</b>		
	a)6-7years	7	11.67
	b) 8-9years	18	30
	c)10-11years	30	50
	d)12-13years	5	8.37
2	<b>Gender</b>		
	a)Male	28	46.67
	b)Female	32	53.33
3	<b>Type of family</b>		
	a)Nuclear family	42	70
	b)Joint family	12	20
	c) Extended family	6	10
4	<b>Occupation of the father</b>		

	a)Government employee	21	35
	b)Private employee	12	20
	c)Business	24	40
	d)Other	3	5
<b>5</b>	<b>Monthly family income</b>		
	a)Rs.10,000-15,000	26	43.33
	b) Rs.15,001-20,000	12	20
	c)Rs.20,001-25,000	12	20
	d) > Rs.25,000	10	16.67
<b>6</b>	<b>Area of living</b>		
	a)Rural area	7	11.67
	b) Urban area	53	88.33

**Table 1:****Percentage distribution of primary school children according to age**

The data presented in shows that the age of primary school children varied from 6-13 years. In the self instructional module maximum of the subjects 30(50%) were in the age group of 10-11years , 18(30%) were in the age group of 8-9 years, 7(11.67%) were in the age group of 6-7 years, 5(8.37%) were in the age group of 12-13 years

**Percentage distribution of primary school children according to gender**

The data presented fig-4 shows that maximum subjects 32(53.33%) were females and 28(46.66%) were males.

**Percentage distribution of primary school children according to types of family**

The data presented in fig-5 shows that maximum subjects 42(70%) were belongs to nuclear family, 12(20%) belongs to joint family, and 6(10%) belongs to extended family

**Percentage distribution of primary school children according to occupation of the father**

The data presented in fig-7 shows that maximum subjects 24(40%) were having business, 21(35%) were government employee,12(20%) were private employee, and 3 (5%) were doing otheremployee.

**Percentage distribution of primary school children according to family monthly income.**

The data presented fig-7 shows that income of maximum of the subjects 26(43.33%) were having Rs. 10,000-15,000, 12(20%) were having Rs.15,000-20,000, 12(20%) were having Rs.20,001-25,000and 10(16.67%) were having above > Rs.25,000.

**Percentage distribution of primary school children according to area of living**

The data presented in fig-8 shows that maximum of the subjects 53(88.33%) were i living in urban area, 7(11.67) were living in rural area.

**Knowledge level of primary school children regarding the personal hygiene and its importance before implementing self-instructional module**

**Table 2:** To assess the knowledge level of primary school children regarding the personal hygiene and its importance before implementing self-instructional module

Knowledgelevel	Range	No. of recipient	
		No.	%
a.Adequateknowledge	75-100%	0	0
b.Moderateknowledge	51-74%	12	20
c.Inadequate knowledge	50% and below	48	80

### Percentage distribution of primary school children by their level of knowledge – pretest

Pre-test assessment of level of knowledge, as is shown in the graph, indicates that only one-fifth of the subjects were having a moderate amount of knowledge. Remaining 80% were having inadequate level of knowledge. Surprisingly none was holding adequate knowledge.

**Table 3:** Mean, SD and Mean% of the existing knowledge primary school children regarding personal hygiene and its importance.

Domain	Max statement	Max score	Range	Mean	SD	Mean %
Informationaboutpersonal hygiene and its importance	25	25	5--22	12.12	4.199	40.39

### Percentage distribution of Mean, SD, Mean % of pretest knowledge

The Mean, SD and Mean% of the pretest general knowledge of primary school children are 12.1, 4.1, and 40.3% respectively.

### Assessment of post- test knowledge of primary school children regarding personal hygiene and its importance

**Table 4:** To assess the post- test knowledge of primary school children regarding personal hygiene and its importance

Levelofknowledge	Range	Noofrecipient	
		No	%
Adequate	75-100%	28	46.7
Moderate	51-74%	32	53.3
Inadequate	50%andbelow	0	0

### Distribution of primary school children by their Level of knowledge- post test

The graph shows post-test level of knowledge. An amazing 46.6% subjects showed adequate level of knowledge and the remaining 53.3% showed moderate level of knowledge. No subjects appeared with inadequate knowledge post-testily.

**Table 5:** Mean, SD and Mean% of post-test knowledge on primary school children regarding personal hygiene and its importance

Domain	Max statement	Max Score	Range	Mean	SD	Mean%
Information about personal hygiene and its importance	25	25	16-28	20.7	2.74	69.1

### Percentage distribution of Mean, SD, Mean% of Post-test knowledge

Above graph illustrates mean, SD, and mean percent of post-test knowledge. Mean found 20.7 SD found to be 2.7 and mean percentage, after treatment, changed to 69.1.8%.

### Overall comparison of pretest and posttest knowledge of primary school children

**Table 6:** To compare pre-test and Post-test level of knowledge of primary school children regarding personal hygiene and its importance.

Domain	Pre-test		Post-test	
	No	%	No	%
Adequate	0	0	34	46.7
Moderate	12	20	26	53.3
Inadequate	48	80	0	0

### Percentage distribution of overall level of knowledge pretest and posttest

The above graph compares pretest and posttest levels of knowledge. Before treatment 80% of the subjects had inadequate level of knowledge and the remaining 20% had moderate level of knowledge. However, after treatment the subject's level of knowledge improved significantly. 46.7% of the subjects, after self-instructional module, showed adequate level of knowledge and the remaining 53.3% showed moderate knowledge.

**Evaluate effectiveness of self-instructional module on knowledge with their statistical significance**

**Table 7:** To evaluate effectiveness of self-instructional module regarding personal hygiene and its importance.

Domain	Pre-test		Post-test		Enhancement		t-test
	mean	Mean%	Mean	Mean%	mean	mean%	
Information regarding personal hygiene and its importance.	12.12	40.39	20.72	69.06	8.6	28.67	23.54* S

\* S- Significant at 0.05 level (P<0.05 level)

Paired t test was calculated to analyze the difference in Pre and Post-test knowledge scores of student nurses which show significant difference between the overall scores. Hence the Hypothesis H1 is accepted and it can be interpreted that the difference observed in the mean score of the pre and post score were true difference.

**Association of effectiveness of self-instructional module on knowledge with their demographic variables.**

**Table 8:** To find out association between the level of knowledge with their selected socio- demographic variables

SIN o	Demographic variables	No	%	Level of knowledge				Chi- square
				Inadequate		Moderate		
				No	%	No	%	
1	<b>Age(in years)</b>							
	a)6-7 years	7	11.67	5	10.42	2	16.67	
	b)8-9 years	18	30	15	31.25	3	25	
	c)10-11 years	30	50	24	50	6	50	0.759
	d) 12-13 years	5	8.37	4	8.283	1	8.333	
2	<b>Gender</b>							
	a)Male	28	46.67	24	50	4	33.33	1.071
	b) Female	32	53.33	24	50	8	66.67	
3	<b>Type of family</b>							
	a)Nuclear	42	70	33	68.75	9	75	
	b)Joint	12	20	10	20.83	2	16.67	0.179
	c)Extended	6	10	5	10.42	1	8.333	
4	<b>Occupation of the father</b>							
	a)Government employee	21	35	17	35.42	4	33.33	
	b)Private employee	12	20	10	20.83	2	16.67	0.106
	c) Business	24	40	19	39.58	5	41.67	
	d) Other	3	5	2	4.167	1	8.333	
5	<b>Monthly family income</b>							
	a)Rs.10,000-15,000	26	43.33	20	41.67	6	50	
	b) Rs.15,001-20,000	12	20	12	25	0	0	7.3*S
	c)Rs.20,001-30,000	12	20	7	14.58	5	41.67	
	d) > Rs.30,000	10	16.67	9	18.75	1	8.333	
6	<b>Area of living</b>							
	a)Rural area	7	11.67	3	6.25	4	33.33	6.83*S
	b)Urban area	53	88.33	45	93.75	8	66.67	

Chi-square was calculated to find out the association between the knowledge scores of the primary school children with their demographic variables. The findings of the present study showed that there is a significant association between the monthly family income and area of living. There is no significant association with other selected demographic variables such as age, gender, type of family and occupation of the father.

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