Effectiveness of Video Assisting Teaching Programme on Knowledge Regarding Hazards of Plastic And Its Safe Disposal Among General Population At Kalarampatty Village

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Abstract- *To improve the knowledge regarding hazards of plastic and its safe disposal among general population . The study aim to evaluate the effectiveness of video assisting teaching programme on knowledge regarding hazards of plastic and its safe disposal among general population at kalarampatty village the design is pre experimental one group pre-test and post-test research design was used to study the result shows that mean value is pre test is 10.8 and post test is 15.6 and their standard deviation pre test is 3.68 and post test is 2.72 and also t- values is 12. 26 its is significant at p≤0.05 this show the effect of video assisted teaching program was effective in improving the knowledge regarding hazards of plastic and its safe disposal among general population.*

I. INTRODUCTION

Human exposure to it grows with increasing plastic production and use. Research into human health impact of plastic to date have focused narrowly on specific moments in the plastic lifecycle, from wellhead to refinery, from store shelves to human bodies, from disposal to on-going impacts as air pollutants and ocean plastic.so we talk about "plastic" as though it's a single material but there are in fact many different plastics. Thus, polyethylene terephthalate and polyvinyl chloride are commonly referred to as PET and PVC. Many kinds of molding processes are in practice, and the combination of two is known as blowing molding (extrusion and injection molding). Another solution is to recycle more plastic, but that also involves better public education, and it presents practical problems to the need to sort plastics so they can be recycled effectively without contamination. A third solution is to develop bio plastics and biodegradable plastics that can break down.It is the accumulation of plastic objects (e.g... plastic bottles and much more) in the Earth's environment that adversely affects wildlife, habitat and humans.

NEED FOR THE STUDY:

The evolution of annual global plastic production, measured in tonnes per year.This is shown from 1950 through to 2015.In 1950 the world produced only 2 million tones per year. Since then, annual production has increased nearly 200-fold, reaching 381 million tones in 2015.Primary plastic production does not directly reflect plastic waste generation.This was followed by the United States at 38 million, Germany at 14.5 million and Brazil at 12 million tonnes.TAMIL NADU generated approximately 1, 50,323 tons of plastic waste during the year 2015-16.Plastic is one of the major toxic pollutants of present time. Being composed of toxic chemicals and most importantly a non-biodegradable substance, plastic pollutes earth and leads to air pollution and water pollution.. A whole host of carcinogenic, neurotoxic, and hormone disruptive chemicals are standard ingredients and waste products of plastic production and they inevitably find their way into our ecology through water, land, and air pollution.It includes contact with plastic debris (with exceptions of entanglement) including collisions, obstructions, abrasions or use as substrate. There are multiple scenarios where this can have an impact on organisms.

STATEMENT OF THE PROBLEM:

''A study to evaluate the effectiveness of video assisting teaching programme on knowledge regarding hazards of plastic and its safe disposal among general population at Kalarampatty village."

OBJECTIVES:

- To assess the pretest and posttest level of knowledge about the hazards of plastic and its safe disposal among general population.

- To evaluate the effectiveness of video assisted teaching program on knowledge regarding hazards of plastic and its safe disposal among general population
- To associate the pretest level of knowledge of the general population with their selected demographic variables.

HYPOTHESES:

H_1: There will be a significant difference between the pre-test and post-test score on knowledge regarding hazards of plastic and its safe disposal among general population.

H_2: There will be a significant effectiveness of video assisted teaching programme on knowledge regarding hazards of plastic and its safe disposal among general population.

H_3: There will be a significant association between the pretest level of knowledge and selected demographic variables of general population.

RESEARCH METHODOLOGY

The research methodology is a way to solve the problems systematically. It may be understood as a science of studying how research is done scientifically. It explains why a particular method or technique is used in the study.This chapter deals with the research design, the variables of the study, the setting, the population, sample, sample size, sample technique, selection criteria development and description of tool, content validity, pilot study, reliability, data collection procedure and plan for data analysis.The research approach adopted for this study is a quantitative evaluative approach. This study aims at evaluating the effectiveness of video assisted teaching program on the hazards of plastic and its safe disposal among general population residing at Kalarampatty village.The research design selected for the present study was pre experimental 1 group Pre-test post-test design.

VARIABLES

Independent variable – video assisted teaching program on hazards of plastic and its Safe disposal among general population.

Dependent variable – knowledge of general population.

SETTING OF THE STUDY

The setting is the physical location and condition in which data collection takes place.

(Polit and hungler, 1999)

This study was conducted in rural area (Kalarampatty) which belongs to Perambalur district and reason for selecting the place is availability of adequate sample.

STUDY POPULATION

Population is a complete set of persons or objects that possess some common characteristics that is of interest to the researcher.

Target population: In this study the target population is general population.

Accessible population: The accessible population of the study is the general population residing at Kalarampatty village.

SAMPLE SIZE

In this present study the sample size was 30 general population residing atKalarampatty village.

SAMPLING TECHNIQUE

Non probability convenient sampling technique was used for this study.

RESEARCH TOOL AND TECHNIQUE

Description of the tool:

It has two sections A and B

Section A:

Demographic data which include

- Age in year
- Sex
- Educational status
- Occupation
- Religion
- Family income and
- Method of waste disposal

Section B: Structured questionnaire.

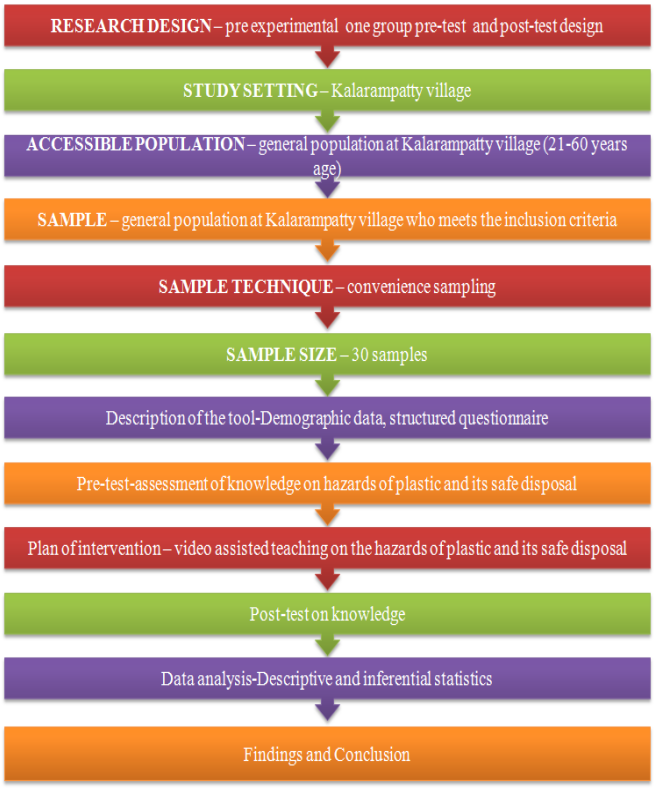
Section B – It consist of 20 statements to evaluate the knowledge regarding hazards of plastics and its safe disposal among general population. Each correct answer was given a score of one (1) and wrong answer was scored as zero (0). The

total score as 20. The scoring of the tool is interpreted as follows.

TABLE SCORING KEY TO INTERPRET THE LEVEL OF KNOWLEDGE

S.NO	LEVEL OF EXISTING KNOWLEDGE	SCORE
1	Inadequate knowledge	0-9
2	Moderately adequate knowledge	10-14
3	Adequate knowledge	15-20

Fig 3.1: Schematic Representation of Research Methodology



DATA ANALYSIS:

Analysis is process of organizing and synthesizing data I such a way that research questions can be answered and hypothesis tested.Analysis enables the research to reduce, summarize, organize, evaluate, interpret and communicate numerical information.

(Polit and hunger, 2003)

This chapter deals with analysis and interpretation of data collected from 30 samples among the general population in Kalarampatty village, to assess the knowledge on hazards of plastic and its safe disposal among general population.The data findings have been analyzed and tabulated according to plan for data analysis and interpretation under the following heading.

Section A:

Distribution of the general population according to their demographic variables.

Section B:

Level of knowledge regarding hazards of plastic and its safe disposal among general population.

Section C:

Effectiveness of video assisted teaching regarding hazards of plastic and its safe disposal among general population.

Section D:

Association between pretest scores on knowledge regarding hazards of plastic and its safe disposal among general population with their selected demographic variables.

SECTION A: DISTRIBUTION OF GENERAL POPULATION ACCORDING TO THEIR DEMOGRAPHIC VARIABLES.

Table 4.1: Frequency and percentage distribution of the general population according to their demographic variables

S.NO	DEMOGRAPHIC VARIABLES		FREQUENCY (N)	PERCENTAGE(%)
1	Age in year	a) 21-30 years	12	40
		b) 31-40 years	9	30
		c) 41-50 years	7	24
		d) 51-60 years	2	6
2	Sex	a) male	7	24
		b) female	23	76
3	Education	a) Illiterate	5	17
		b)Primary education	3	10
		c) Higher secondary education	17	56
		d) Graduate	5	17
4	Occupation	a) Farmer	9	30
		b) Coolie	14	47
		C) Private worker	1	3
		d) Others	6	20
5	Monthly income	a) Below Rs.500	16	54
		b) Rs.5000-10000	9	30
		c) Rs.10000-15000	4	13
		d) Rs.15000-20000	1	3
6	Religion	a) Hindu	30	100
		b) Christian	0	-
		c) Muslim	0	-
		d) Others	0	-
7	Methods of waste disposal	a) Dumping	3	10
		b) Dust bin	21	70
		c) Burning	6	20
		d) others	0	-

(N=30)

Table 4.1shows the frequency and percentage distribution of general population according to their demographic variables.

Regarding their age group, 12(40%) were 21-30 years, 9(30%) were 31-40 years, 7(24%) were 41-50 years&2(6%) were 51-60 years.

Regarding their sex, 7(24%) were males& the test 23(76%) were females.

Based on their educational status, 5(17%) of them had illiterate, 3(10%) of them had primary education and 17(56%) members had higher secondary education, 5(17%) were graduated.

It was found that, 9(30%) the subject were farmer, 14(47%) of them were coolie, 1(3%) was private worker, 6(20%) of them engaged in other jobs.

It was evident that, 16(54%) of them had a family monthly income of Rs.5000, 9(30%) of them had family monthly Rs.5000-10000& 4(13%) had family monthly income Rs.10000-15000, only 1(3%) had family monthly income Rs.15000-20000.

The total samples all the 30 samples were Hindus.

It was found that, 3(10%) of them disposed their waste by dumping, 21(70%) used dustbin for waste disposal & 6(20%) of them burnt their waste.

Figure 4.1: Frequency and Percentage distribution of age of thegeneral population

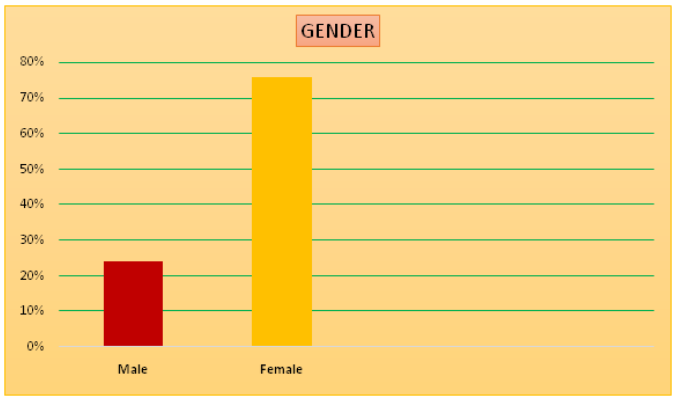


Figure4.2: Frequency and Percentage distribution of gender of the general population

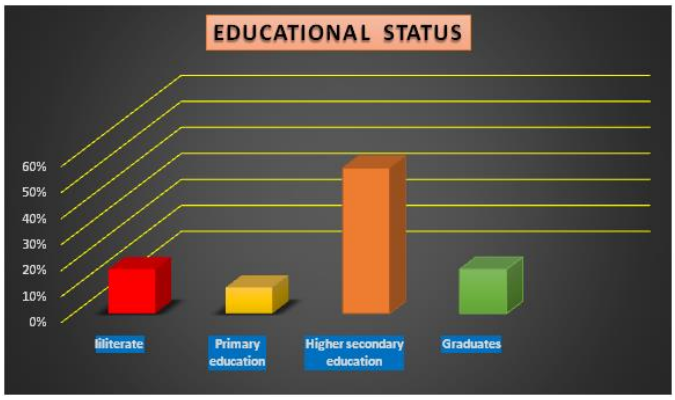


Figure 4.3: Frequency and Percentage distribution of educational status of the general population

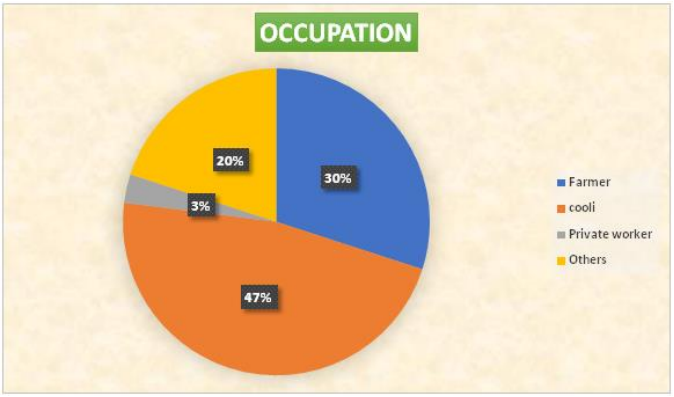


Figure 4.4: Frequency and percentage distribution of occupation of the general population

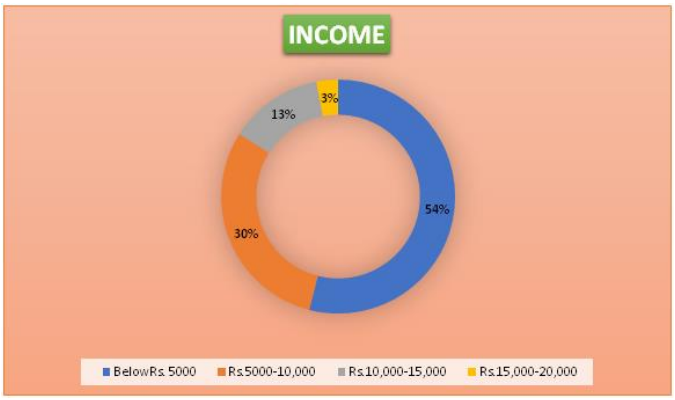


Figure 4.5: Figure 4.5 Frequency and Percentage distribution of monthly income of thegeneral population

Figure 4.6: Frequency and Percentage distribution of methods of waste disposal of the general population

SECTION II

TABLE 4.2 LEVEL OF KNOWLEDGE REGARDING HAZARDS OF PLASTIC AND ITS SAFE DISPOSAL AMONG GENERAL POPULATION

S.NO	LEVEL OF KNOWLEDGE	PRETEST		POSTTEST	
		FREQUENCY	PERCENTAGE %	FREQUENCY	PERCENTAGE %
1	INADEQUATE KNOWLEDGE	14	47	0	0
2	MODERATE ADEQUATE KNOWLEDGE	16	53	11	37
3	ADEQUATE KNOWLEDGE	0	0	19	63

Table 4.2: Showed that in pretest, 14 (47%) of them had inadequate knowledge and 12 (53%) of them moderate adequate knowledge and none of them had adequate knowledge regarding hazards of plastic and its safe disposal in pretest.

In posttest none of them had inadequate knowledge and 11(37%) of them had moderate adequate knowledge and 19(63%) of had adequate knowledge regardinghazards of plastic and its safe disposal.

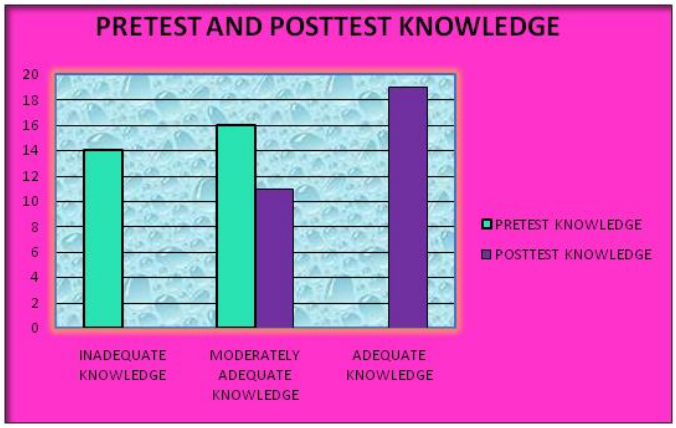


Figure 4.7: Level of knowledge of general population regarding hazards of plastic and its safe disposal in pretest and posttest.

SECTION-III

TABLE 4.3:Effectiveness of video assisted teaching program on knowledge regarding hazards of plastic and its safe disposal among general population.

	MEAN	SD	MEAN DIFFERANCE	T-VALUE	TABLE VALUE/ df	LEVEL OF SIGNIFICANT
PRETEST	10.8	3.68	4.8	12.26	2.05 df=29	significant
POSTTEST	15.6	2.720.				

Table showed that the pretest and posttest mean is 10.8 and 15.6 and their SD 3.68 and 2.72 respectively. The calculated t-value is 12.26 which was found significant at

P≤0.05 this indicated that the video assisted teaching program is effective in improving the knowledge regarding hazards of plastic and its safe disposal among general population.

SECTION IV

TABLE- 4.4
ASSOCIATION OF PRETEST LEVEL OF KNOWLEDGE REGARDING HAZARDS OF PLASTIC AND ITS SAFE DISPOSAL AMONG GENERAL POPULATION WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

S.NO	DEMOGRAPHIC VARIABLES		LEVEL OF PRETEST KNOWLEDGE			
			DF	TABLE VALUE	CHI SQUARE VALUE	LEVEL OF SIGNIFICANCE
1	Age in years	21-30years	6	12.59	4.23	NS
		31-40years				
		41-50years				
		51-60years				
2	Sex	Male	2	5.99	0.42	NS
		Female				
3	Educational status	Illiterate	6	12.59	2.29	NS
		Primary education				
		Higher secondary education				
		Graduate				
4	Occupation	Farmer	6	12.59	1.6	NS
		Coolie				
		Private worker				
		Others				
5	Family Monthly income	Below 5000	6	12.59	20.52	S
		5000-10000				
		10000-15000				
		15000-20000				
6	Method of waste	Dumping	6	12.59	1.59	NS
		Dustbin				

(N=30)

NS= NOT SIGNIFICANT
S= SIGNIFICANT

DISSCUSION:

This chapter deals with the discussion which was based on the findings obtained from the statistical analysis and its relation to the objectives of the study, the theoretical frame work and the related review of literature.

A study was done to evaluate the effectiveness of video assisting teaching program on knowledge regarding hazards of plastic and its safe disposal among general population at Kalarampatty village.

OBJECTIVES

- To assess the pretest and posttest level of knowledge about the hazards of plastic and its safe disposal among general population.
- To evaluate the effectiveness of video assisted teaching program on knowledge regarding hazards of plastic and its safe disposal among general population.
- To associate the pretest level of knowledge of the general population with their selected demographic variables.

1. The first objective of this study was to assess existing knowledge regarding hazards of plastic and its safe disposal among general population.

H_1: There will be a significant difference between the pre- test and post-test score on knowledge regarding hazards of plastic and its safe disposal among general population.

In pretest, 14 (47%) of them had inadequate knowledge, 12 (53%) of them moderate adequate knowledge and none of them had adequate knowledge regarding hazards of plastic and its safe disposal in pretest.

In posttest none of them had inadequate knowledge, 11(37%) of them had moderate adequate knowledge, 19(63%) of had adequate knowledge regarding hazards. Hence H_1 was accepted.

The present study was supported by M.Sc. Nursing students (2008), in an analysis which was conducted among hundred peoples about the harmful effects of plastic and its management. Primary data was collected through questionnaire. The overall response pattern in very good.

2. The second objective was to evaluate the effectiveness of video assisted teaching on knowledge regarding hazards of plastic and its safe disposal among general population.

H_2: There will be a significant effectiveness of video assisted teaching programme on knowledge regarding hazards of plastic and its safe disposal among general population.

The pretest and posttest mean is 10.8 and 15.6 and their SD 3.68 and 2.72 respectively. The calculated t-value is 12.26 which was found significant at P≤0.05. Hence H_2 was accepted.

The present study was supported by shiny Mary, D. (2011) conducted a quasi-experimental study on the effectiveness of the video assisted teaching in practice of post-operative exercise among selected LSCS mothers. The result shows the excellent effectiveness of video assisted teaching program.

3. The third objective was to find out the association between pretest knowledge score regarding hazards of

plastic and its safe disposal among general population with their selected demographic variable.

H_3: There will be a significant association between the pretest level of knowledge and selected demographic variables of general population.

Table4.4: Showed association of the pretest knowledge score of the general population with their selected demographic variable. It was found that pretest knowledge score of general population were influenced only by their monthly income and not by any other demographic variables.Hence H_3 was accepted for monthly income and was rejected for all other variables.

SUMMARY:

The focus of **THE STUDY WAS TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTING TEACHING PROGRAM ON KNOWLEDGE REGARDING HAZARDS OF PLASTIC AND ITS SAFE DISPOSAL AMONG GENERAL POPULATION AT KALARAMPATTY VILLAGE.**

The objectives formulated for this study were,

- To assess the pretest and posttest level of knowledge about the hazards of plastic and its safe disposal among general population.
- To evaluate the effectiveness of video assisted teaching program on knowledge regarding hazards of plastic and its safe disposal among general population.
- To associate the pretest level of knowledge of the general population with their selected demographic variables.

MAJOR FINDINGS OF THE STUDY:

The major findings of the study were presented under the following headings;

- The pretest showed that the knowledge mean score of the general population was found to be (10.8), standard deviation (3.68).
- The posttest showed that the knowledge mean score of the general population was found to be (15.6), standard deviation (2.72), paired 't' value was observed 12.26. Tabulated value is lower than the calculated value of paired t test level.

CONCLUSION:

The present study evaluate the effectiveness of video assisted teaching on knowledge regarding hazards of plastic and its safe disposal among general population. The result of the study conducted that the level of knowledge on hazards of plastic and its safe disposal among general population was improved by video assisted teaching.

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