Efficacy of Structured Teaching Programme on Hazards of Plastic Waste Among Rural People in Selected Area at Namakkal District

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Abstract:-

➢ **Background:-**

Plastic is the general common term for extensive variety of artificial or semi artificial natural amorphous stable substances derived from oil and herbal fuel. . Plastic is utilized on a daily basis in the sector. Plastic is utilized on a daily basis worldwide.. The hazards of plastic wastes are numerous due to the plastic wastes the human, animal, environment are affected. Methods This study was conducted using a quantitative evaluation perspective, which involved a pre-experimental one-group pretest and post-test design.. The study was conducted in the rural area of Manickampalayam. In order to identify the pattern, a non-probability convenient sampling method. approach was utilized for a sample size of 50 rural people. The study participants were provided with an explanation of its nature and oral consent was obtained. Demographic variables were used to gather the data, which included age, sex, training, profession, earnings, faith, type of circle of relatives, marital popularity, and dependent questionnaires. The post was changed to be conducted on the 7th day. The facts have been scrutinized. Results: A significant difference has emerged during the understanding phase of putting up a test. The structured teaching program was effective among rural people due to the calculated paired 'T' test value 8.891 being significantly The table value of 1.96 is not as high as it should be at p < 0.05.. The acceptance of hypothesis H1 was granted.

Keywords:- *Effectiveness, Hazards, Plastic Waste, Rural People.*

I. INTRODUCTION

Permit all and sundry now assume and act as a accountable of the earth,looking for selections in biosphere,pecuniary matters and moral code so that it will furnish a eco friendly ,take away adulteration destitution and brutality,wake up the marvel of existence and affording amicable progress inside the human - John McConnell, founder of International earth day.

Recycling plastic waste in India is done in an unorganized manner. Even though it is not utilised, 40% of the plastic waste is recycled back into substances for processing into patron merchandise. The general population in India cannot access guidelines and laws. Our capacity to address issues related to plastic manufacturing, use, and disposal has diminished..

There are many dangers to plastics. Plastic bags cause the land to become littered.The drainage gadget is blocked because of theROW AWAY culture. The charge of rain water percolating is reduced by this littering. The plastic in the soil causes the fertility to decline.

II. LITERATURE REVIEW

Ram Proshad (2018) carried out a observe to evaluate the toxic results of plastic on human health and surroundings. This examine makes a speciality of the poisonous results of plastic on human fitness and environment and feasible outcomes of health danger assessment in Bangladesh. The human health issues like inflammation in the attention, imaginative and prescient failure, breathing problems, breathing issues, liver disorder, cancers, pores and skin sicknesses, lungs troubles, headache, dizziness, birth impact, reproductive, cardiovascular, genotoxic, and gastrointestinal causes for using toxic plastics. Plastics occur extreme environment pollutants along with soil pollution, water pollution, and air pollutants. software of proper policies and policies for the production and use of plastics can lessen poisonous consequences of plastics on human fitness and surroundings. The study concluded that the plastic waste can affect the human and environment.

Maher Ali (2014) carried out a subject Survey concerning the effect of Plastic bags on the surroundings in town Of Sana'a and the surrounding regions, Yemen. lots of plastic factories are generating heaps of plastic luggage that are very popularly utilized by the human beings for buying purposes because of its ease, cheapness and comfort of use however their very hazardous negative impact is in no way highlighted or, not less than, brazenly mentioned in a greater severe tone. Economic deprivation in the United States of America worsens the situation in Yemen. many countries have banned plastic luggage due to public challenge over the extreme bad impact on the environment and agriculture, specifically, in agricultural countries, such as Yemen, Bangladesh, India, Pakistan, South Africa, and so forth. The purpose of this study paper was to survey the Sana'a sector

and record the quantity of plastic baggage that was accumulated. Examining the variety of factories producing plastic bags and debating the causes and consequences of plastic bags. Examining various answers to ensure a comfortable environment for us and our future generations. The identification of remote microbial traces has been made using cultural, morphological, and biochemical characteristics. Please take a look.

Henna Malik (2015) A descriptive study was undertaken to evaluate the knowledge and attitude of teenagers about controlling plastic waste in Nelamangala, a chosen community area. The non-experimental descriptive layout has been implemented at the moment. Take a look. It's simple. The 60 youth were selected using the random sampling method. A dependent know-how questionnaire and a mind-set questionnaire regarding plastic waste control are used to pre-check the expertise of teenagers. end result shows that, majority of the teens 37 [61.67%] had inadequate information regarding plastic waste management followed by using 23 [38.33%] children who had slight information; whilst none of them had ok understanding regarding plastic waste management and mindset evaluation turned into carried out with the aid of Likert rating scale, forty five [75%] youth had superb mindset closer to plastic waste management, observed by means of 15[25%] young people who neutral mindset. The The study's findings confirmed that the youngsters had inadequate knowledge about plastic waste control and a positive attitude towards plastic waste management.

III. STATEMENT OF THE PROBLEM

"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON HAZARDS OF PLASTIC WASTE AMONG RURAL PEOPLE IN SELECTED AREA AT NAMAKKAL DISTRICT,TAMILNADU".

➢ *Objectives*

- To assess the level of knowledge before and after structured teaching programme about the hazards of plastic waste among rural people.
- To determine the effectiveness of structured teaching programme about the hazards of plastics among rural people.
- To find out the association between post test level of knowledge among rural people with selected demographic variables.

➢ *Hypothesis*

- **H₁ :** There is a significant difference in the level of knowledge before and after Structured teaching programme.
- **H₂ :** There is a significant association between the post-test level of knowledge with their selected demographic variables among rural people.

IV. METHODOLOGY

- RESEARCH DESIGN: One-group pre-test and post-test design for pre-experimental testing.
- SAMPLE: The selected pattern have been rural humans dwelling in Manickampalayam
- SAMPLE SIZE: The sample size became 50 rural people living in Manickampalayam
- SAMPLING TECHNIQUE: Non probability convenient Sampling technique
- SELECTION AND DEVELOPMENT OF THE TOOL
- DEVELOPMENT OF THE TOOL:
- SECTION A: SOCIO DEMOGRAPHIC PROFOMA
- SECTION – B: STRUCTURED QUESTIONARRIES
- (GENERAL ASPECTS ON HAZARDS OF PLASTIC WASTE)
- DATA COLLECTION PROCEDURE: The examiner were given consent acquired from the clinical messenger, Namakkal. facts collection process turned into completed for a duration of five weeks. The researcher delivered herself and elucidate the intend of the observe and authenticate the preparedness of the agricultural people to take a part within the examine by get oral consent from them as in keeping with the insertion standards. Samples have been drawn the use of Non possibility, convenient Sampling method. Pre assessment turned into executed the usage of based questionnaire; eventually based teaching turned into given through using flash card on equal day for 30 minutes. on the seventh day post assessment was performed the usage of the same dependent questionnaire.

V. RESULTS

➢ *SECTION I:* DEPICTION OF SOCIO DEMOGRAPHIC VARIABLES OF RURAL PEOPLE

Table 1: Distribution of Rural People According to their Demographic Variables

N=50

S.no	Demographic variables	(F)	(%)
1	Age		
	18-22	10	20
	23-27	10	20
	28-32	17	34
	>32	13	26
2	Sex		
	Male	13	26
	Female	37	74
3	Education		
	1-6 std	14	28
	7-12 std	16	32
	Diploma	7	14
	Degree	13	26
4	Occupation		
	Coolie	22	44
	Business	12	24
	House wife	5	10

5	Farmer	11	22
	Income		
	<Rs2000	12	24
	Rs 2001-5000	10	20
	Rs 5001-10000	13	26
	>Rs 10000	15	30
6	**Religion**		
	Hindu	35	70
	Muslim	5	10
	Christian	10	20

➤ *SECTION-II:* PRIOR TO TEACHING WITH FLASH CARDS, THE LEVEL OF KNOWLEDGE AMONG RURAL RESIDENTS REGARDING THE RISKS ASSOCIATED WITH PLASTIC WASTE WAS ASSESSED.

Table 2: Pre Test Level of Knowledge Among Rural People Regarding Hazards of Plastic Waste

Knowledge Level	Respondents	
	Frequency	**Percentage**
Inadequate	11	22%
Moderate	28	56%
Adequate	11	22%
Total	50	100%

Table 3: The overall Pre Test Level of Knowledge Among Rural People Regarding Hazards of Plastic Waste

Aspect	Max .Score	Range Score	Respondent Knowledge		
			Mean	**Mean%**	**SD**
Pre test	22	8-19	13.56	61.63	3.346

➤ *SECTION-III*
ASSESSMENT OF LEVEL OF KNOWLEDGE AMONG RURAL PEOPLE REGARDING HAZARDS OF PLASTIC WASTE AFTER TEACHING WITH FLASH CARD

Table 4: Post Test Level of Knowledge Among Rural People Regarding Hazards of Plastic Waste

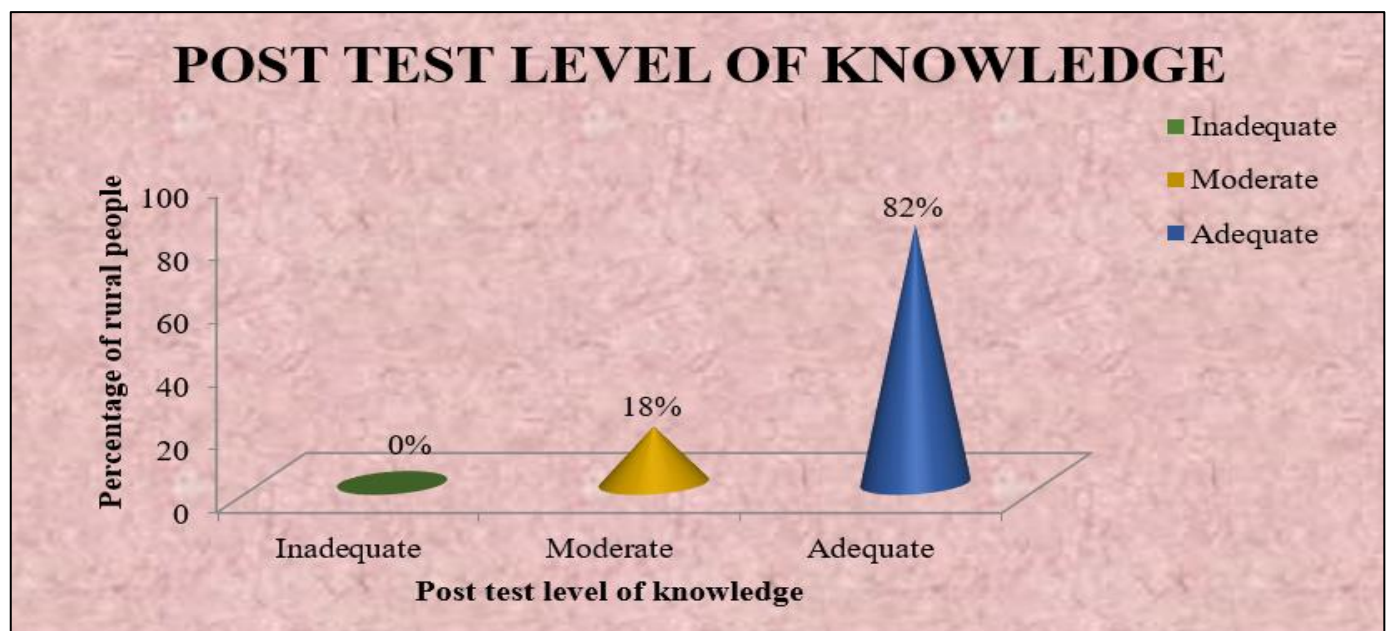| Knowledge Level	Respondents	
	Frequency	**Percentage**
Inadequate	0	0
Moderate	9	18%
Adequate	41	82%
Total	50	100%

Fig 1: Post Test Level of Knowledge Among Rural People Regarding Hazards of Plastic Waste

Table 5: The overall Post Test Level of Knowledge Among Rural People Regarding Hazards of Plastic Waste

Aspect	Max .Score	Range Score	Respondent Knowledge		
			Mean	**Mean%**	**SD**
Post test	22	15-21	18.1	82.27	1.47

➢ *SECTION-IV:* COMPARISON OF LEVEL OF KNOWLEDGE AMONG RURAL PEOPLE BEFORE AND AFTER STRUCTURED TEACHING PROGRAMME
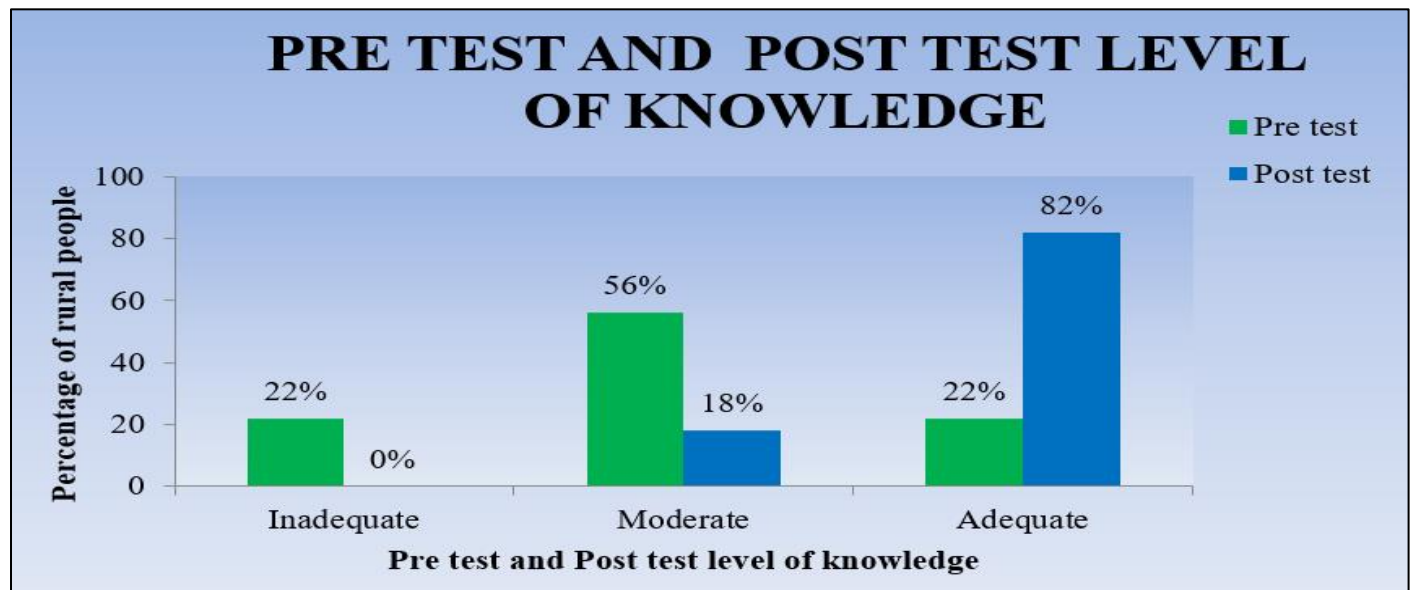

Fig 2: Pre Test and Post Test Level of Knowledge on Hazards of Plastic Waste Among Rural People

Table 6: Comparison of Pre Test and Post Test Level of Knowledge Score of Rural People Regarding Hazards of Plastic Waste

Aspect	Max Score	Range Score	Respondent Knowledge			t test
			Mean	Mean%	SD	
Pre test	22	8-19	13.56	61.63	3.346	8.891**
Post test	22	15-21	18.1	82.27	1.47	

**Significant at 5 % level (0.05) df=49

➢ *SECTION-V:* ASSOCIATION BETWEEN POST TEST LEVEL OF KNOWLEDGE WITH SELECTED SOCIO DEMOGRAPHIC VARIABLES

Table 7: Association between post test level of knowledge with selected socio demographic Variables Among Rural People

S.No	Variable	Category	Post test knowledge level			chi square value
			Inadequate	Moderate	Adequate	
1	Age	18-22	3	5	2	2.604 df=6 ,NS
		23-27	2	5	3	
		28-32	2	11	4	
		>32	4	7	2	
2	Sex	Male	4	8	1	2.263 df=2,NS
		Female	7	20	10	
3	Education	1-6 std	4	8	2	2.508 df=6,NS
		7-12 std	2	10	4	
		Diploma	1	4	2	
		Degree	4	6	3	
4	Occupation	Coolie	3	13	6	5.344 df=6,NS
		Business	2	8	2	
		House wife	2	3	0	
		Farmer	4	4	3	
5	Income	<Rs2000	3	5	4	2.74 df=6,NS
		Rs2001-5000	2	7	1	
		Rs 5001-10000	3	8	2	
		Rs>10000	3	8	4	
6	Religion	Hindu	8	19	8	1.76 df=4,NS
		Muslim	0	3	2	

7	Type of family	Christian	3	6	1	
		Nuclear family	11	25	9	0.95 df=2,NS
		Joint family	0	3	2	
8	Marital status	unmarried	5	14	3	8.07 df=4,NS
		Married	6	14	6	
		widow	0	0	2	

** Significant at 5 % level. S- Significant, NS-Not significant

VI. DISCUSSION

➢ *Discussion of Socio Demographic Variebles*

- Distribution of rural people according to their age among them majority 17(34%) of rural people were in the age of 28-32 years.10 (20 %) of rural people were in the age of 18-22, 10 (20 %) of rural people were in the age of 23-27, and 13 (26 %) of rural people were in the age of above 32 years.
- Distribution of rural people according to their sex shows that among 50 subjects, the majority of the subjects 37(74 %) were females and 13(26 %) were males.
- Distribution of rural people according to their education shows that among 50 subjects, 16 (32 %) were completed 7-12 th standard, 14 (28 %) were completed 1-6 th standard, 13 (26 %) were completed degree and 7 (14 %) were completed diploma.
- Distribution of rural people according to their occupation shows that among 50 subjects, 22 (44%) were coolie worker, 12 (24%) were business, 11 (22 %) were completed farmer and 5 (10 %) were completed house wife.
- Distribution of rural people according to their income shows that among 50 subjects, 15 (30%) were above Rs.10, 000, 13 (26%) were between Rs5001-10,000, 12(24%) were below Rs 2,000 and 10 (20 %) were between Rs 2001-5,000.
- Distribution of rural people according to their religion shows that among 50 subjects, 35 (70%) were Hindu, 10 (20%) were Christian, 5 (10%) were Muslim and none of them in the others.
- Distribution of rural people according to their type of family shows that, among 50 subjects, 45 (90%) were belongs to Nuclear family, 5 (10%) were belongs to joint family, 5 (10%) were belongs to Muslim and none of them in the others.
- Distribution of rural people according to their marital status shows that, 26 (52%) were married, 22 (44%) were unmarried, 2 (4%) were widow and none of them in the single parent.

TABLE 2 Depicts the pre test level of knowledge which shows that, 11(22%) of respondents had inadequate knowledge, 25(56%) of respondents had moderate knowledge and 11(22%) of respondents had adequate knowledge.

TABLE 3 Demonstrate the overall level of knowledge among rural people regarding the hazards of plastic waste prior to a structured teaching program. According to the mean knowledge score, it was 13.56 and the average percentage was 61.63 percent with an SD of 3.346.

TABLE 4 illustrates the post-test knowledge level, which reveals that none of the respondents had inadequate knowledge following a systematic training program, while nine respondents (18%) had intermediate knowledge and 41 respondents (82%), adequate knowledge.

TABLE 5 Displays the post-test level of awareness of plastic garbage risks among rural residents after a formal education program. With a variance of 1.47, the average percentage was 82.27%, and the average knowledge score was 18.1.

Fig 2 Demonstrates the respondent's understanding both before and after a planned teaching program. In the pre-test, 9 (18%) of respondents had sufficient knowledge, 41 (82%) had sufficient knowledge, and none of the respondents did not have adequate knowledge. 11(22%) of the respondents had a lack of knowledge, 25(56%) had moderate knowledge, and 11(22%) had adequate knowledge.

TABLE 6 Demonstrates the distinction between mean and standard deviation of pre- and post-test scores among rural individuals. According to the pre-test mean, the average percentage and standard deviation for rural individuals were 13.56 (61.63%) and 3.46, respectively. The post-test mean and SD showed that rural people were 1.47 in rural areas. The paired 'T' value was determined to be 8.891. The statistical paired 't' test implies that the difference in the pre test and post test knowledge score found to be statistical significant at 5% level p<0.05.The paired 't' test value which reveals that there was statistical significant in enhancement score indicating the impact of effectiveness structure teaching programme before and after administration. After a structured teaching program, rural people were able to improve their knowledge of plastic waste hazards. As a result, hypothesis H1 was accepted.

TABLE 7 Presents a complete description of chi-square analysis, which was employed to identify the connection between post-test knowledge and various socio-demographic variables. The selected socio demographic variables of age, sex, education, occupation, income, religion, type of family, and marital status did not have any association. Thus, hypothesis H2 was not accepted.

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