



A STUDY TO ACCESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING ILL EFFECT OF THE PLASTIC USAGE AMONG HOMEMAKERS OF PANDIKKAD PANCHAYATH

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Abstract

Plastic consists of a wide range of synthetic or semisynthetic organic compounds that are malleable and so can be moulded into soluble objects. Plastic pollution has the potential to poison animals, humans, plants, ecosystem, and environment. In the present study, we assessed the effectiveness of structured teaching programme on knowledge regarding ill-effects of plastic among homemakers of Pandikkad panchayath. Quantitative pre-experimental one group pre-test post-test approach was used in this study. 60 samples were selected using convenient sampling.

technique. Structured knowledge questionnaire including demographic variables was used for the study. Pretest result shows that 19 (31.6%) of home makers having poor knowledge, 38 (63.3%) were having average knowledge and only 3 (5%) having good knowledge post test result shows that no homemakers is having poor knowledge. 1.16% of homemakers having average knowledge and 98.3% is having good knowledge. The effectiveness of structured teaching programme is assessed by paired 't' test, value is ($t=27.3$), the calculated value is greater than the table value ($t_{59}=2.0010$), it shows that structured teaching programme was effective. There is no association between pretest knowledge and their selected demographic variable such as age, income, education, method of disposal, family.

Key word: ill effects of plastic use, homemakers

BACKGROUND OF THE STUDY

Plastic products are very common in our modern life. According to approximate, every year we use 1.6 million barrels of oil just for producing plastic water bottles. Plastic waste is one of the major concern now and many types of wastes that take too long to decompose. Normally, plastic products can take up to 1,000 years to decompose in landfills. Even According to estimates, every year we use approximately 1.6 million barrel of oil just for producing plastic water bottles. Plastic waste is one of many types of wastes that take too long to decompose. Normally, plastic items can take up to 1,000 years to decompose in landfills. Even plastic bags we use in our everyday life take anywhere from 10 to 1,000 years to decompose, and plastic bottles can take 450 years or more we use in our daily life take anywhere from 10 to 1,000 years to decompose, and plastic bottles can take 450 years or more. Therefore, plastic pollution became more hazardous nowadays. This research was successfully producing bioplastic sheet from our daily household waste materials as we throw away our household waste materials everyday.

In future prospects, bioplastic from household waste materials can be developed as plastic bag, plastic bottles and food packaging and will reduce the plastic pollution.

NEED AND SIGNIFICANCE OF THE STUDY

Plastics have transformed everyday life; usage is increasing and annual production is likely to exceed 300 million tonnes by 2010. It is evident that plastics bring many societal benefits and offer future technological and medical advances. However, concerns about hazards and disposal are diverse and include accumulation of waste in landfills and in natural habitats, physical problems for wildlife resulting from ingestion or entanglement in plastic, the leaching of chemicals from plastic products and the potential for plastics to transfer chemicals to wildlife and humans. '6'

Recent mathematical modelling studies have shown that even very small quantities of plastics could facilitate transport of contaminants from plastic to organisms upon ingestion. This could present a direct and important route for the transport of chemicals to higher animals such as seabirds. '7'

However, there is a clear need of more research in this area

REVIEW OF LITERATURE

A cross sectional study conducted in mangalore city in August 2013. The data was collected by interviewing any adult member in each of the selected household using an interview schedule. Sample size were 250. Mean age of the 250 participants was 32.8+10.8 years. majority 160(64%) were females educated up to undergraduate level or above 187(74.8%). Among the participants 216(86.4%) were aware of the health hazards associated with the use of plastic bags. There were 50(20%) participants reusing plastic bags for shopping after initial usage. The cloth bags were used for shopping in place of plastic bags by 13(5.2%) participants. Among the Participants 213(85.2%) were aware of the legislation banning the use of plastic bags and out of which 166(77.9%) were in its favour.

A cross-sectional study to assess the knowledge and practice on plastics among the professional course students of Annamalai University, Tamil Nadu, conducted by department of Community Medicine, Rajah Muthiah Medical College, Annamalai on 2019. A total of 563 students of professional courses were included in the study. Their knowledge in terms general aspects, ill effects, reuse and practice in terms of usage and disposal were assessed with a questionnaire. 46% of the students found having good knowledge. Only 27.6% were found to have good practice.

A descriptive study to determine the waste plastic recycling habits and management of waste in Ontario. The study revealed that Plastics represent 7-8% of the residential waste stream Plastic packaging represents 81% of total plastics found in the residential waste stream. Plastic bottle represent 31% of total plastic, non recyclable film at 29% recyclable film at 19% polystyrene at 10%, wide mouth tube at 6%, other rigid plastic 5% Polyethylene bottles are collected from 91% of household with recycling device Other plastic such as wide mouth tube, recycle film and polystyrene are collected from 1/3” (1.1 to 1.3 million) of household through recycling program. Hence, the investigator concluded that the plastics municipal commercial and industrial source are managed by recycling program in Ontario.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of structured teaching programme on knowledge regarding the ill effect of plastic usage among home makers of Pandikkad Grama Panchayath

OBJECTIVES

- Assess the pretest and posttest level of knowledge regarding ill effects of plastic usage among women homemakers in Pandikkad Grama panchayat
- Evaluate the effectiveness of structured teaching programme on knowledge regarding ill effects of plastic usage among homemakers in Pandikkad panchayat.

- Find out the association between post test knowledge level and selected demographic variables on knowledge regarding ill effects of plastic usage among homeworkers at pandikad panchayat.

HYPOTHESIS

H1-There is a significant difference between the mean pre-test and post-test knowledge of women homemakers regarding ill effects of plastic usage on Health.

H2- There is a significant association between Knowledge scores of women homemakers regarding ill effects of plastic usage on Health and selected demographic variables.

CONCEPTUAL FRAMEWORK

The present study is based on the concept of J.W. Kenny's open system model(1990). According to J.W. Kenny's all living system are open, they are in a continuous exchange of matter, energy and information, which results in varying degree of interaction with the environment from which the system receives input and gives output in the form of matter, energy and information.

Research methodology

Methodology to assess the effectiveness of stp on knowledge regarding ill effects of plastic usage among homemakers

Research approach: Quantitative approach

Research design: Quasibexperimental, one group pretest posttest design

Setting:Pandikad gramapanjayath, malapuram district

Sample:Homemakers of pandikad panjayath

Sample size:60

Sampling technique : non probability convenient sampling technique

Tools and technique : structured questionnaire

INSTRUMENTS

Section I – demographic data of home makers which include age, education, religion, monthly family income and method of waste disposal.

Section II – structured questionnaire. It consist of 20 structured questionnaires to assess the knowledge on Ill effects of plastic usage

Each correct answer was given a score of (1) and wrong answer was scored as(0). The total score were 20.

DATA COLLECTION PROCESS

Data collection is the observable and measurable facts that provide information about phenomenon under study. Formal permission has obtained from the institutional ethics Committee, and from panjayath.

Samples were drawn using non probability convenient sampling technique, during the 1 st visit the researcher introduced herself/himself and explained the purpose of the study and confirmed the willingness of homemakers to participate in the study by getting consent from them as per the inclusion criteria

□ Data collection procedure done for a period of one week and the time taken for each subject was 10-15 minutes. Pre assessment done using structured questionnaire and the STP were given on the same day for 20 minutes. In between the doubts of the study subjects were cleared. On the sixth day post assessment were conduct.

ETHICAL CONSIDERATION

After obtaining ethical clearance and permission from college ethical committee and panjayath all respondents are carefully informed about the purpose of the study and their part during the study. Informed consent for the study was obtained from all parcipants.

RESULTS

Section A: Description of demographic variables of selected samples.

The characteristics of the study population are:

- Total number of the samples for this study were 60 homemakers among that 10 (16.7%) belongs to 20 -30 years old, 23 (38.3%) were 31-40 years old and only 27 (45%) belongs to 41-50years old.
- All of the samples (100%) were belonging to homemakers
- In the given 60 samples with respect to education, 5 (8.3%) have no education, 53 (88.3%) have primary education, 2 (3.4%) are graduates
- Regarding type of family, 48 (80% %) are belongs to nuclear family, 12 (20%) are belongs to joint family.
- Regarding monthly income , 19 (31.66%) have an income 1000- 10,000 rupees per month, 31 (51.66%) have an income of 10,000 – 20,000 rupees per month, 10 (16.7%) have an income of greater than 20,000 rupees per month
- Regarding method of waste disposal, 0 (0%) have chosen land disposal, 1 (1.7%) have chosen burning and remaining 59 (98.3%) have chosen dustbin.

Section B: Effectiveness of structured teaching programme

The mean post test knowledge score 18.55 was higher than mean pretest knowledge score 10.66. The calculated 't' value (27.1) was higher than table value ($t * 59 = 2.001$) at 0.05 level of significance. Hence the research hypothesis was accepted, shows that structured teaching programme was effective in terms of improving the knowledge of samples regarding ill effects of plastic usage.

Section C: Description of knowledge scores of homemakers

The pretest knowledge scores of homemakers on ill effect of plastic usage shows that, 19 (31.6%) had poor knowledge, 38 (63.33%) had average knowledge and 3 (5%) samples had good knowledge.

The post test knowledge score on knowledge regarding ill effects of plastic usage shows that, the majority of samples 59 (98.3%) had good knowledge, 1 (1.6) had average knowledge and no samples had poor knowledge.

Section D: Association between demographic variables and pretest knowledge

The chi square value of age ($\chi^2 = 1.227$, table value = 9.49), education ($\chi^2 = 19.9$, table value = 9.49), type of family ($\chi^2 = 0.0192$, table value = 3.84), monthly income ($\chi^2 = 2.897$, table value = 9.49), method of waste disposal ($\chi^2 = 0.588$, table value = 5.99), chi square value of education is higher than the table value reveals that there was an association between pretest knowledge and education of homemakers. The other values are less than table value, so there was no association between other demographic variables and pretest knowledge.

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