Immediate Effectiveness of Planned Teaching on Knowledge and Practice Regarding Household Waste Management among the Rural Community People

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Abstract

Background: The generation of the waste and collection, processing, transport and disposal of waste - the process of ‘waste management’ - is important for both health’s of the public and aesthetic and environmental reasons. The study uncontrolled hazards waste from the industry after mixing with municipal waste create potential risk to human health. Objectives: 1. To assess the knowledge and practice regarding household waste management among the rural community 2. To Assess Effectiveness of Planned Teaching on Knowledge and Practice Regarding Household Waste Management among the Rural Community People in Selected Area of Wardha District. 3. To correlate the study finding with demographic variable. Materials and Methods: This study was based on one group pre-test post-test experimental research study. The population was the rural community people from Sawangi and Salod in the Wardha district. The subject consisted of 50 community people of 18-50 years of age in the selected rural community of Wardha district. Results: The minimum score in the posttest was 13 and the maximum score was 18, the mean score for the posttest was 16.04±1.10 with a mean percentage score of 89.11±6.14. The tabulated value for n=50-1 i.e. 49 degrees of freedom was 2.00. The calculated ‘t’ value is much higher than the tabulated value at 5% level of significance for overall knowledge score of community people which is a statistically acceptable level of significance.

Keywords: Assess, Effectiveness, Planned teaching, Knowledge, Practice.

Introduction

Household waste management generally defined as waste generated by normal household activities. Household waste is a waste that is generated is the day to day to operations of a household. It can include everything from lawn clipping to burn out light bulbs. A busy household can generate a great deal of waste and the amount of household waste can increase radically it developed nation which relies heavily on the packaging for a wide variety of products. ¹²³

The household solid waste is one of the most difficult sources of solid waste to manage because of its diverse range of composite materials. A substantial portion is made up of garbage, a term for the waste. The matter that arises from the preparation and consumption of food and consists of waste food, vegetable peelings, and other

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organic matter. Other components of solid waste include plastics, paper, glasses, textiles, cellophane, metal’s and some hazardous waste from household product. Such as paint, garden pesticides, pharmaceuticals, fluorescent tubes, personal care products, batteries containing heavy metals and discarded wood treated with dangerous substances such as antifungal and anti-termite chemicals. Household waste management is the generation, prevention, characterization, monitoring, treatment, handling, reuse and residual disposition of solid waste. 4,5,6,7

With rising urbanization and change in lifestyle and food habits, the amount of household waste has been increasing rapidly and its composition changing. In 1947, cities and towns in India generated an estimated 6 million tones of solid waste; in 1997 it was about 48 million tone’s. More than 25% of household waste is not collected at all; 70% of Indian cities lack adequate capacity to transport it and there are no sanitary landfills to dispose of the waste. The existing landfills are neither well equipped nor well managed and are not lined properly to protect against the contamination of soil or groundwater. 8 Certain types of household waste are also hazardous and could be highly toxic to humans, animals, and plants. India generates around 7 million tonnes of hazardous waste every year, most of which concentrated in 4 states (Andhra Pradesh, Bihar, Uttar Pradesh, Tamilnadu). 9,10

Assumptions

1. The community people may have knowledge about household waste management.
2. The community people may have good practices regarding household waste management

Hypothesis

H1: There may be a significant difference between pre-test and post-test knowledge regarding household waste management among the community people in a selected area of Wardha district.

Materials and Methods

This study was based on one group pre-test post-test experimental research study. The population was the rural community people from Sawangi and Salod in the Wardha district. The subject consisted of 50 community people of 18-50 years of age in the selected rural community of Wardha district. Study Design: was one group pre-test post-test research design. Sample was from rural community people from Sawangi and Salod in Wardha district. Sample size was 50.

Inclusion Criteria: Both males and females are included, Age group 18-50 years. People available during the period of data collection. Who is willing to participate in the study is included. Who can read and write Marathi.

Exclusion Criteria: The people who are attained the classes on household waste management. The mental and physical disabled people.

Results

Section A: This section deals with the distribution of rural community people in a selected area of Wardha district concerning knowledge and practice regarding household waste management with regards to their demographic characteristics. A convenience sample of 50 subjects was drawn from the study population, who were from the selected area of Wardha district. The data obtained to describe the sample characteristics including age, educational status, type of family, no of family members, type of house, occupational status, monthly family income (Rs) religion and source of information regarding health respectively.

Section B: This section deals with the assessment of knowledge and practice before planned teaching regarding household waste management among the community people in a selected area of Wardha district. The level of knowledge and practice is divided under the following heading of poor, average, good, and excellent. pre-test 5(10%) of the community people were having poor knowledge, 66% of them had average, 22% had good and only 2% of them had an excellent level of knowledge score. The minimum score in pre-test was 4 and the maximum score was 21, the mean score for the pre-test was 10.50 ± 2.92 with a mean percentage score of 43.75 ± 12.17. pre-test practice score 15(30%) of the community people were having average practice, 64% of them had good and only 6% of them had an excellent level of practice score. The minimum score in pre-test was 8 and the maximum score was 14, the mean score...
for the pretest was 10.42±1.60 with a mean percentage score of 57.88 ± 8.91

Section C: The post test knowledge score and practice regarding household waste management among the community people in a selected area of Wardha district. The level of practice was divided under the following heading of poor, average, good, and excellent. In posttest 11(22%) of the community people were having average knowledge, 68% of them had good and 10% of them had an excellent level of knowledge score. The minimum score in the posttest was 8 and the maximum score was 21, the mean score for the posttest was 14.22±2.80 with a mean percentage score of 59.25±11.67.

Post-test practice score: In posttest 49(98%) of the community people were having excellent practice and only 2% of them had good practice scores. The minimum score in the posttest was 13 and the maximum score was 18, the mean score for the posttest was 16.04±1.10 with a mean percentage score of 89.11±6.14.

Section D: This section deals with the effectiveness of planned teaching program on knowledge and practice regarding household management among the rural community people in a selected area of Wardha district. The hypothesis is tested statistically with the distribution of pretest and posttest mean and standard deviation and means score percentage. The levels of knowledge during the pretest and posttest are compared to prove the effectiveness of planned teaching program. The significance of difference at 5% level of significance is tested with a ‘t’ test and tabulated ‘t’ value is compared with calculated ‘t’ value. Also, the calculated ‘p’ values are compared with acceptable ‘p’ value i.e. 0.05.

The analysis shows that 34% study subject was in the group of 36-45 years. Most of the sample 56% had education up to the higher secondary. The majority of the samples 68% were from a nuclear family. Most of the samples 54% having 2-4 family members. The majority of the samples 64% were lived in the pakka house. Majority of sample 74% were a farmer. The majority of 64% of the sample had 3000-6000 Rs per month. The majority of the samples 82% were to Hindu. The majority of the sample 50% got health information from a health worker.

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In pretest 15(30%) of the community people were having average practice, 62% of them had good and only 8% of them had an excellent level of practice score. The minimum score in pretest was 8 and the maximum score was 14, the mean score for the pretest was 10.42±1.60 with a mean percentage score of 57.88 ± 8.91 whereas in posttest 49(98%) of the community people were having excellent practice and only 2% of them had good practice score. The minimum score in the posttest was 13 and the maximum score was 18, the mean score for the posttest was 16.04±1.10 with a mean percentage score of 89.11±6.14.

Pretest and post test knowledge scores of community people in the selected area of Wardha district regarding household waste management. Mean, standard deviation and mean difference values are compared and student’s paired’ test is applied at 5% level of significance. The tabulated value for n=50-1 i.e. 49 degrees of freedom was 2.00. The calculated ‘t’ value is much higher than the tabulated value at 5% level of significance for overall knowledge score of community people which is a statistically acceptable level of significance. Hence it is statistically interpreted that the planned teaching program on overall knowledge regarding household waste management among community people in a selected area of Wardha district was effective. Thus the H1 is accepted.

Discussion

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Conclusion

The following conclusion can be drawn from the study finding, which is supported by evidence from other literature.

The study was done to assess the knowledge and practice of waste management among the rural community people. The people were actively participated and cooperative. While assessing knowledge it shown that the sample of the age group 36-45 years had more knowledge regarding waste management.

Conflicts of Interest: Nil

Source of Funding: Nil

Ethical Clearance: taken from institutional ethics committee

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