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“A Study to Evaluate the Effectiveness of a Demonstration on Practices Regarding Domestic Waste Management Amon Housewives Staying, in Sangli, Miraj, Kupwad Areas.”

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*doi: 10.33472/AFJBS.6.6.2024.1576-1583***ABSTRACT:**

Introduction: Domestic waste has become one of the most significant causes of severe damage to the urban area because of the large amount of waste discharge and improper disposal. Therefore waste management is important because improperly stored refuse can cause health, safety, and economic problems. To maintain and improve the earth's ecosystem and maintain the high quality of life for the planet's inhabitants, humans must manage and store their waste efficiently and safely.

“A Study To Evaluate The Effectiveness Of A Demonstration On Practices Regarding Domestic Waste Management Among Housewives Staying, In Sangli, Miraj, Kupwad Areas.”

The objectives are 1. To assess existing practices, score regarding domestic waste management among the housewives. 2. To determine the post-test practices, score regarding domestic waste management among the housewives. 3. To compare pre-test and post-test practices scores regarding domestic waste management among housewives. Hypothesis H1- there is a significant change in practice scores in the pre-test and post-test regarding domestic waste management among housewives.

Material and methods: A pre-experimental research design was adopted for this study. The study was carried out at Sangli, Miraj, Kupwad Co-corporation area. The sample comprised of Total Housewives from each area 25 Sangli, 25 Miraj and 25 Kupwad. Samples were selected using a non-probability convenient sampling technique. Data collection was done using the Practices checklist and data was analysed using descriptive and inferential statistics. 16 experts did the content validity of the tool. The experts were selected from various fields based on the topic. The inter-rater method was used to check the tool's reliability.

Results And Conclusion: Show that the practices level, the mean score practices in the pre-test was 43.50, SD 20.50 and the post-test mean was 67.18 P value is 0.006 i.e. less than 0.05 to t-test is effective. Accepted H1, there is a significant difference in pre and post-score of practices regarding domestic waste management. A pre-test was followed by a demonstration of practices regarding domestic waste management of housewives and after that, a post-test was conducted. Practising domestic waste management is a simple practice but has many advantages. Health promotional activities will help to make it a habit.

Keywords; Evaluate, Demonstration on Practices, Domestic Waste Management, and Housewives

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1. Introduction and Background

Waste is generated as a consequence of household activities such as cleaning, cooking, repairing empty containers, packaging, and the huge use of plastic carry bags. Many times this waste gets mixed with biomedical waste from hospitals and clinics. The improper management and lack of disposal techniques of the domestic waste pollute to the environment.

A study was done to assess the level of knowledge and practice of household waste management among rural women, and to identify the association between the level of knowledge with selected socio-demographic variables of rural women.: Cross sectional descriptive study was conducted among women (210) residing the village Ramanathapuram, Pondicherry in the age group of 18–55 years. The knowledge level of the rural women regarding the disposal of waste was inadequate as the mean score was less than 50% of the total score (13). The practice of waste disposal was inappropriate. The study concluded that most of the women residing in the rural areas had inadequate knowledge, and the practice was inappropriate in most situation.¹

The total quantity of waste generated per day is about 1300 to 1400 metric tons (approximate generation per capita per day is 500 gm). Pune Municipal Corporation (PMC) is responsible for the collection, storage, segregation, transportation, and disposal of all solid waste generated in the city. This paper attempts to assess the attitude, perception, practices and general information regarding the collection, segregation, transportation, recycling, and disposal of household waste among housewives residing in selected urban areas of Pune city. Pune is the 8th largest city in India and the 2nd largest in Maharashtra with an area of 243.84 sq. km and a population of 36 lakhs as per the 2013 census. Pune generates 1500 to 1600 tons of solid waste per day, 122 trucks collect waste door to door, collecting an average of 137 organic tons per day; 56 per cent of households have door-to-door coverage; 44 per cent of households provide segregated waste. Ward wise average waste generated per capita per day is 350 to 750 grn. To make Pune a "Zero garbage discharge" city, the Pune Municipal Corporation (PMC) implemented rules for all societies in the city to construct their compost pit. PMC has given two small garbage bins white for wet and green for dry waste free of cost for better waste management. The output of daily waste depends upon the dietary habits, lifestyles, living standards and the degree of urbanization and industrialization. There is a correlation between improper disposal of solid wastes and the incidence of vector-borne diseases. In all civilized countries, there is an efficient system for its periodic collection, removal, and final disposal without risk to health. Women play an important role in household waste management in the family; if she has adequate knowledge on it, she can educate her children, family members and neighbors².

Domestic waste can be classified into various parts: recyclable waste, including plastic, paper, glass, etc, Kitchen waste, Hazardous waste, for example, waste batteries, fluorescent tubes, waste mercury thermometers, and expired drugs, Other garbage like brick and tile ceramics, dregs and other material, which need special and safe management. Waste disposal is the collection of waste from the home, processing of segregation, reduction, disposal and recycling or deposition of the waste materials. There are many methods of domestic waste disposal some of which are: landfill, incineration, and vermicomposting. Using these methods, we can control the hazardous effects of domestic waste on our environment.

Need of the study:-

Domestic waste means any non-putrescible wastes, consisting of combustible materials, such as paper, cardboard, yard clippings, wood or similar materials generated because of the ordinary day-to-day use of a domestic premise and are produced by the individual activity. Human activities are closely associated with the ambient environment through the accumulation of domestic waste. The waste which is generated because of household activities

such as washing, cooking repairing empty containers, packaging, huge use of plastic bags etc. Waste produced in households is heterogeneous.¹

Management of domestic reuse is the further use of products in their existing form for their original similar purpose. Ex., paper clips, used notebook, scrap paper, organic waste. Recycling is reprocessing waste material to produce new products. Ex., Newspapers, cardboard, glass bottles and jars, and food waste. Treatment is processing the waste to change its volume or character so it can be disposed of with no or reduced adverse environmental impact. Refuse is refusing disposal system technique for the collection disposal of waste community Ex., glass, paper, and clothes, wood. Reduce its help to prevent pollution and protect the environment Ex., reusable bags, and reused water bottles.⁴

Health problems related to domestic waste are a bite of the rat in a human the symptoms include fatigue, fever, and muscle aches. These symptoms are universal. There may also be headaches, dizziness, chills, and abdominal problems such as vomiting, diarrhoea and mosquito bites of the human-infected mosquito zika virus, chikungunya virus, dengue, and malaria.

Proper waste management converts waste to useful others or prevents the formation of domestic waste it looks home cleaning net is tidy and presents the same. I selected this topic because nurses are the grassroots-level professionals who must supervise and ensure proper handling segregation and disposal of different categories of waste generated in community areas. Improper waste disposal by one individual affects the entire citizenry, so as a policy, countries have tasked every individual, establishment, or institution to contribute significantly to the process of keeping their communities and environment clean and maintaining society and community clean and healthy⁵.

Problem statement: -“A study to evaluate the effectiveness of a demonstration on practices regarding domestic waste management among the housewives staying in Single, Miraj and Kupwad corporation areas.”

Objectives of the study are 1. To assess existing practices, and score regarding domestic waste management among the housewives. 2. To assess the post-test practices score regarding domestic waste management among the housewives. 3. To compare pre-test and post-test practice scores regarding domestic waste management among housewives

Hypothesis: H₁- There is a significant change in practice score in the pre-test and post-test regarding domestic waste management among the housewives staying in Sangli, Miraj, Kupwad corporation area

A review of the literature is mentioned under two headings 1. Review of literature related to general information on domestic waste management. 2. Review of literature related to a demonstration of practices regarding domestic waste management. National 6 and International 5 articles are included.

2. Research Methodology

The present study involves a quantitative research approach, which is aimed at assessing the effectiveness of demonstration practices regarding domestic waste management among housewives. In this study, the research design adopted was a pre-experimental one-group pre-test post-test research design. The dependent variable was housewives' practises on domestic waste management and the independent variable was the demonstration on domestic waste management.

This study has been conducted on domestic waste management selected the housewives. demonstration on practises and planned teaching program was conducted at Sangli (n = 25), Miraj (n = 25), and Kupwad (n = 25). Housewives who are willing to participate and ready to give consent for research. And ages between 20 to 45 years were included in the study.

Housewives who have more than one in the same family were excluded. In this study use - A simple random sampling technique was used.

The research tool has Section One- Socio-demographic Variables and Section Two- Checklist on practices regarding domestic waste management among housewives. Ethical approval was taken from the ethical committee of BVDU, College of Nursing, Sangli. 16 experts did the content validity of the tool the experts were selected from various fields. Considering those opinions corrections were made in the tool and after that final tool was prepared. The reliability of the tool was 'r' value of the tool is 0.81 which is more than 0.7 so the tool was found to be reliable. The pilot study was conducted at B.V.D.U. C.O.N. housewives Sangli between 06 -03-2023 to 14-03-2023. The pilot study showed the final study is feasible. Data collection included a pre-test demonstration on domestic waste management, from 3/4/2023 to 7/4/2023 and a Post-test duration -11/4/2023 to 16/4/2023. Data analysis was done with SPSS (statistical package for the social science) **version 22**. -Descriptive statistics - frequency, percentage, and standard deviation. Inferential statistics - student t-test to compare pre-test and post-test practice scores.

Analysis and interpretation of data

The collected data of the present study was classified, organized, and analysed under the following sections. **SECTION-I-** Frequency and percentage-wise distribution of the Socio-demographic variables. **SECTION II-** Frequency and percentage of practices score of pre-tests regarding demonstration of domestic waste management. **SECTION III-** Frequency and percentage of Post-test practices score of demonstration of domestic waste management. **SECTION IV-** comparison of pre-test and post-test practices regarding domestic waste management.

Table No. – 1: Frequency and percentage-wise distribution of the Socio-demographic variables n =75

Sr no	Family dada	Sub-groups	Frequency	Percentage
1	Age in the year.	20 to 30.	19	25
		30 to 40.	39	52
		40 to 50. & above.	17	22
2	Housewives' education.	Formal	16	21
		Primary	13	17
		Secondary	14	18
		Graduate & above.	32	42
3	Have you attended any teaching activities on domestic waste management?	Seminar	05	7
		Workshop.	0	0
		Any program	12	8
4	Where do you dispose of domestic waste	Composting	15	20
		Ganta Gadi	60	80
5	How do you dispose	Segregation	12	8
		Without segregation	63	92

The above table data showed that housewives belonging to the age group were 20 to 30 of the 19(25%), 30 to 40 39(52%) and 40 to 50 & above 17(22%). Formal education 16(21%), primary 13(17%), secondary 14(18%), and graduate and above 32(42%). 70(93%). No one has attended

teaching activities on domestic waste management only 5 (7%). Housewives' attendants teaching activity of domestic waste management. 60(80%) disposing domestic waste by Ghanta Gadi, Composting of 15(20%). Only 12(8%) housewives had collected domestic waste by segregation. And without segregation12(8%).

Table no. 2; Frequency and percentage of practices score of pre-test and post-test score regarding demonstration of domestic waste management.
n =75

Sr.No.	Practices	Pre-Test Correct practice		Post test. Correct practice	
		F	%	F	%
1	Make foot mat from old cloth	44	58	12	16
2	Making a rough notebook from one site paper.	38	50	12	16
3	Reused yesterday's food.	63	84	03	04
4	Compost the fruits, vegetables, and food waste matter	15	20	18	24
5	Use wastewater for the kitchen garden.	45	60	15	20
6	Used plastic bags to purchase vegetables, fruits and gains	25	33	15	20
7	Used different dustbins for domestic waste management	16	21	06	08
8	Give or buy back waste things like paper and cloth.	31	41	02	03
9	Throw e-waste articles (part of mobile, Radio, and audio devices).	64	85	01	02
10	Purchase cheap and short-duration items	70	93	01	02

Table no . 2 . Pre-test analysis showed that only 15 (20%) housewives responded correctly to the question, about composting fruits, vegetables and food waste, whereas 25 (33%) housewives responded correctly to the question, about using plastic bags to purchase vegetables, fruits and grains. And whereas a70(93%) throw E-Waste articles (Parts of Mobile, Radio, Audio devise)

Post-test analysis showed that only 57 (76%) housewives responded correctly to the question, compost the fruits, vegetables and food waste, whereas 60 (80%) housewives responded correctly to the question, use a plastic bag to purchase vegetables, fruits and grains And whereas a74(98%) throw E-Waste articles (Parts of Mobile, Radio, Audio devise)

Table no . 3: Comparison of pre-test and post-test practices regarding domestic waste management.
n=75

Aspects	Mean	S.D.	d. f.	Unpaired t-test	p-value
Pre-test	43.54	20.50	20	3.67	0.006
Post-test	67.18	05.96			

The above table shows that the practice level, the mean score practice in pre-test was 43.50, SD 20.50 and the post-test mean was 67.18. P value is 0.006 i.e. less than 0.05 to t –test is effective. Accepted H1, there is a significant diff in pre and post-score of practices regarding domestic waste management.

Discussion: Sultana S. et.al. did a study on the Awareness and Practice of Household Solid Waste Management among Community People. The results are like our study. The finding of the study shows that the mean awareness regarding household solid waste management was 7.96 (SD = 1.64) and the mean practice was 2.94 (SD = 1.35) respectively. It indicates that the awareness and practice of community people were at a moderate level. In bivariate analysis, it has been shown that training on household solid waste management (“P < 0.001”), and recyclable waste (p = 0.019) were statistically significantly correlated with household solid waste management practice.⁵

Nursing implication: The results of the present study have brought out certain facts that have far-reaching implications for nursing in demonstration practices, education, administration and research. Nursing practice: CHN, as a part of health education at home, shows the demonstration of domestic waste management and takes the follow-up of it. Nursing education: Add the domestic waste management content to the CHN syllabus of the GNM, BScN or PBBSCN program. Nursing Administration- The nurse administrator arranges practices regarding domestic waste management for students and staff. Nursing research -The nurse researcher shares the results with staff/students and it is important in a written or oral presentation way. Guide to conducting different studies on domestic waste management.

Recommendations for further 1. Conduct a KAP study on domestic waste management .2. compared practices score of urban and rural housewives regarding domestic west management method 3. comparing the health status of family members regarding practising and non-practising domestic waste management

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