

Knowledge Regarding Domestic Waste Management among Women

Ch. Karunasri *, B. Kokilamma**, P. Sudharani ***, M. Sreelatha****

*M.Sc. Nursing, **Lecturer, ***Principal, ****Asstt. Professor, Dept. of Community Health Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India.

Abstract

A cross sectional descriptive design was adapted for the study, 160 women were selected by using non probability convenient sampling technique at Poola street urban area of Tirupati. The data was collected by using self-administered structured knowledge questionnaire. The results revealed that out of 160 women 80 (50%) had a moderate knowledge level, 43 (26.9%) had inadequate knowledge level, 37 (23%) had adequate knowledge level. Finally, the study was shown that there was a significant association between the domestic waste management knowledge selected demographic variables, like education and occupation at ($p < 0.01$), monthly income and type of drainage system at ($P < 0.05$). The other variables were not found to have significant association with knowledge. Health-workers and local authorities must pay special emphasis to improve awareness on domestic waste management. Further in-depth studies should also be encouraged to look for improved interventions.

Keywords: Domestic waste management; Women.

Background

The growth of the world's population, increasing urbanization, rising standards of living, and rapid developments in technology have all contributed to an increase in both the amount and the variety of solid wastes generated by industrial, domestic and other activities. The problems of dealing with greater volumes of often more dangerous waste materials are particularly acute in developing countries where these changes have not been met by improvements in waste management technologies. Even domestic solid waste has become a health hazard in many developing countries as a result of careless handling and a failure to organize appropriate solid waste collection schemes.[3]

Urban India generates 188500 tonnes per day (68.8 million tonnes per year) of municipal solid waste at a per capita waste generation rate of 500 grams/person/day. The total waste generation figure is

achieved by extrapolating the total tonnage of waste documented for 366 cities (70% of India's urban population). (Central pollution control board survey report 2012).[1]

Uncollected Domestic Waste is causing health hazard as well as polluting to the environment endangering the life of the people at large. It is one of the biggest source of environment pollution. Land is polluted with the waste dumped upon it, makes the soil infertile. contaminates the water bodies, affect the aquatic life which through food chain reaches the human being as well as in organic compounds. Due to the discarded plastics carry bags and uncollected waste there is drain clogging which leads to stagnant water and becomes breeding ground for mosquitoes and insects. All this happens because there is no proper management and collection of solid waste which ultimately causes grave threat to the human beings and animals life.[2]

The objectives of the study were:

1. To assess the knowledge regarding domestic waste management among women.
2. To find out the association between domestic waste management knowledge with selected

Reprint Request: Ms. Ch. Karunasri, M.Sc. Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India.

E-mail: karunasri77@gmail.com

demographic variables.

Methodology

Research design: a cross sectional research design was adapted for the study.

The Setting of the Study

The study was conducted in urban area, i.e. Poola Street of Tirupati, Chittoor (District), Andhra Pradesh.

Sample Techniques

160 women were selected based on non-probability convenient sampling.

Criteria for Selection of Sampling

Women between the ages of 20 to 40 years,
Women who are willing in a selected urban area,
Women who can read and write Telugu.

Description of Tool

The tool consisted of two parts,

Section I: Consists of questions to collect demographic data.

Section II: consists of 32 questions to assess the knowledge regarding domestic waste management among women.

Pilot Study

Pilot study was conducted on 10 subjects and reliability was computed by applying the split half method, using Karl Pearson Coefficient of correlation, it came out to be 0.85 and tool was highly reliable.

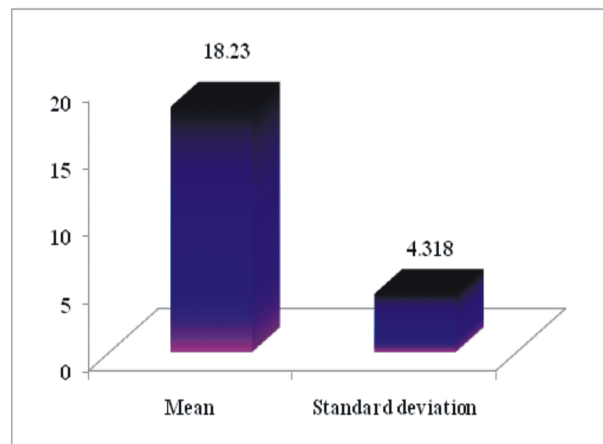
Informed Consent

After explaining the purpose of the study, written consent was taken and collected the data from women through self-administered knowledge questionnaire and all respondents were thanked for their co-operation and given the informational booklet as a module for creating awareness among mothers.

Table 1: Frequency and Percentage Distribution among Women Regarding Domestic Waste Management according to the Level of Knowledge (n=160)

Level of Knowledge	Knowledge score		
	Score	f	%
Inadequate (<47%)	<15	43	26.9
Moderate (47-66%)	16-21	80	50.0
Adequate (>66%)	>21	37	23.1

Fig 1: Mean and Standard Deviation for Level of Knowledge among Women



Results

The study revealed that Level of knowledge regarding domestic waste management out of 160 women 80 (50%) had a moderate knowledge level, 43 (26.9%) had inadequate knowledge level and 37 (23%) had adequate knowledge level.

Discussion

The study revealed that there was a significant association between some of the demographic variables like education, occupation with the knowledge at ($p < 0.01$), monthly income, type of drainage system with a level of knowledge at ($p < 0.05$).

Hence the hypothesis framed for this study was accepted that there is significant association between levels of knowledge with selected demographic variables of women.

The present study was supported by a cross

sectional study which was conducted by Naigh Ye Hein at Muang (Dist.), Thailand, with an objective to assess the level of knowledge, attitude and practice towards domestic waste management among women over a period of March 2010. The Study revealed that 400 Myanmar women's of age ranged between 15-65 years asked by using a structured questionnaire, nearly (39.8%) have a high level of knowledge, (61.2%) of the respondents have a moderate attitude level and only 16.5% had good practiced (83.5%) had less practice towards domestic waste disposal.[4]

The present study was supported by a cross sectional survey, which was conducted in Vietnam among 100 households regarding the household knowledge, attitudes toward good waste management and the household behaviors on recycling activities were evaluated. This study also analyzed the relations between household knowledge and relevant factors such as education level, urbanization level, income, age, gender, and working status. The result found that significant correlations were mainly found in educational level and urbanization level in all relevant factors at ($p < 0.01$). The effects of household, knowledge, attitudes and the household behaviors to household solid waste generation in detailed composition were also considered.[5]

Conclusion

Provision of adequate sanitation facilities is not only a socioeconomic and developmental issue but also an issue of self-respect, human dignity, and public health. The basic functional units of solid waste management start with onsite storage and handling of wastes. Unfortunately, our collecting and dumping processes mix and crush everything together; and make separation an expensive and sometimes impossible task to properly manage waste. In day-to-day life many people are unaware of the proper domestic waste disposal and its harmful effects on the health and environment. Community-based education, especially in women, on domestic waste management and hygiene is essential in order to improve the health of the community.[2]

Limitations of the Study

1. The study was restricted only to 160 women of poola street, Tirupati urban, chittoor district.
2. The study did not assess the attitude of women regarding proper domestic waste management.
3. The findings could be generalized only to the population which fulfilled the criteria in the study.

Implications

The findings of the study have implications in the field of nursing practice, nursing education, nursing administration and nursing research.

1. Nursing Practice

- Nursing professionals working in the community should educate regarding proper domestic waste management for the success of the National rural health programme.
- Nursing professionals play a key role in enhancement of knowledge and practice of women's regarding proper domestic waste management, which could change the knowledge and practice of women regarding the domestic waste management.

2. Nursing Education

- As a nurse educator, there are abundant opportunities for nursing professionals to educate the women as well as to the family members regarding proper domestic waste management.
- The study emphasizes significance of short term in service education programmes for PHC staffs and peripheral health workers regarding proper domestic waste management.

3. Nursing Administration

- The nursing administrator can take part in developing protocols, regarding the health education programmes and strategies for women regarding proper domestic waste management.
- The nursing administrator can mobilize the available resource personnel towards the health

education of women regarding proper disposal of domestic waste.

- The nurse administrator should plan and organize continuing education programme for ANM's to motivate them in conducting teaching programmes on proper domestic waste management as environmental sanitation programme in community. She should be able to plan and organize programmes taking into consideration the cost effectiveness to carry out successful educational programmes.
- The nurse administrators should explore their potentials and encourage innovative ideas in the preparation of appropriate teaching material. She should organize sufficient manpower; money and material for disseminating health information.

4. Nursing Research

- This study helps nurse researchers to educate the women to participate in community welfare programme according to their demographic, socio-economic, cultural and political characteristics.
- Nurses should come forward to carryout studies on proper domestic waste management and publish them for the benefit of public and nursing fraternity. The public and private agencies should also encourage research in this field through materials and funds.

Recommendations

On the basis of the findings of the study following recommendations have been made:

- A similar study can be replicated on a large sample to generalize the findings.

- A quasi-experimental study can be undertaken with a control group for effective comparison of the result.
- A study can be conducted by including additional demographic variables.
- A comparative study can be conducted between rural and urban settings.
- Manuals, self-instruction module may be developed in areas where there is no proper domestic waste management is practiced among women.
- A study can be carried out to evaluate the efficiency of various teaching strategies like SIM, pamphlets, leaflets and computer-assisted instruction on proper domestic waste management.

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