



Assessing Knowledge and Practice of Domestic Waste Disposal among Women Residing in a Selected Rural Community, Thrissur

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ABSTRACT

Every human activity contributes in the formation of waste. The main rural waste includes agricultural and domestic waste. The present study focuses on assessing the knowledge and practice of domestic waste disposal among women in a rural area in Thrissur with a view to prepare an information booklet. The objectives of the study were to assess the level of knowledge and practice of domestic waste disposal among women, to find the relationship between knowledge and practice of domestic waste disposal among women, to associate the level of knowledge and practice of domestic waste disposal among women with their selected demographic variables, and to prepare and distribute an information booklet on domestic waste disposal. The conceptual model was Modified Rosen stock's Health Belief Model. The design of the study is a descriptive survey design, conducted on 100 women of rural area. The tools used were structured knowledge questionnaire and a self-reported check list. Following that the researcher distributed an information booklet regarding proper methods of disposal of domestic waste. The findings revealed that 59% of women possessed adequate knowledge related to domestic waste disposal, whereas 38% had moderate knowledge and 03% had poor knowledge regarding domestic waste disposal. Regarding practice, 47% were found to have low practice level regarding domestic waste disposal 53% had high practice level regarding domestic waste disposal. The analysis showed that there is a positive correlation between level of knowledge and practice of women regarding domestic waste disposal as the r value was 0.286 which was significant at 0.01 level and there is no significant association between level of knowledge and practice with selected demographic variables (occupation, family type, number of members in the family and land area).

KEYWORDS

Domestic Waste, Knowledge, Practice, Women, Information Booklet



INTRODUCTION

Human beings, the inhabitants of the planet earth, are born from earth, we return to the earth and we are sustained by the earth. The environment in which we live is very important and it directly affects our lives. With the development of civilization and globalization, drastic changes have come in our life style and in every activity of ours like education, recreation, travelling, feeding, clothing and housing. During all these processes, we generate a lot of waste. Every year we dump 2.12 billion tonnes of waste globally. The rapid urbanization and change in life style has increased the waste load and thereby pollution loads on the environment. This has grown to unmanageable and alarming proportions in the management of waste¹.

In India the amount of waste produced per day is 1, 00,000 tonnes. Large metropolis such as Mumbai and Delhi generate around 9,000 metric tonnes and 8,300 metric tonnes of waste per day, respectively².

NEED AND SIGNIFICANCE OF THE STUDY

Getting rid of household waste is everyone's problem. Every one throws away paper, old newspaper, bottles, cans, plastic bags, kitchen wastes like fruit and vegetable peelings, residues of fish and meat, and left over or excess food. The output of daily waste depends upon the dietary habits, life styles, living standards and the degree of urbanisation and industrialization. Waste, whether it is of urban or rural area is now a threat to the public health. Due to uncollected waste and improper disposal techniques, drains also get clogged which leads to the breeding of mosquitoes by which various diseases like malaria, chikungunya, viral fever, dengue etc. arise and affect the health of people adversely³.

The government has an important role in controlling the problem. Especially, in rural areas of India, the local government involves in the waste management. The management of domestic waste is a duty often relegated to women and children. Domestic waste disposal refers to all activities undertaken to get rid of domestic waste through sorting, collecting, transporting and disposal in a designated locations for treatment, recycling or re-use. Womens' role is crucial in this respect. In each household, women are the receivers of wastes which can be managed by them before its disposal. Even the proper method of disposal can also be decided by them if they understand the importance of domestic waste management and its health and environmental



impact.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and practice of domestic waste disposal among women residing in a selected rural community, Thrissur with a view to prepare an information booklet.

OBJECTIVES

1. To assess the level of knowledge and practice of domestic waste disposal among women.
2. To find the relationship between knowledge and practice of domestic waste disposal among women.
3. To associate the level of knowledge and practice of domestic waste disposal among women with their selected demographic variables.
4. To prepare and distribute an information booklet on domestic waste disposal.

HYPOTHESES

All hypotheses will be tested at 0.05 level of significance.

H₁: There is a significant correlation between knowledge and practice of domestic waste disposal among women.

H₂: There is a significant association between the knowledge and practice of domestic waste disposal among women with their selected demographic variables.

MATERIALS AND METHODS

The investigator adopted a quantitative approach for this study. The research design used for this study was descriptive survey design. Types of variables used in this study were research variables and demographic variables. The setting of the study was rural areas under wards 1, 2 and 3 of Nadathara Grama Panchayat, Thrissur District, Kerala. Sample size of the study was 100 women residing in ward 1, 2 and 3 of Nadathara Grama Panchayat. Here the researcher used systematic random sampling to select the samples. The tool in this study consists of **Section A:** Demographic profile of women, **Section B:** Structured interview schedule to assess the knowledge of domestic waste disposal among women and **Section C:** Self-reported checklist to assess practice.



During data collection for the Investigator visited each household, met the woman of the household and conducted the interview. During interview schedule, initially, the investigator introduced herself and developed rapport with the women of households. The investigator explained the purpose of the study and reassured that the collected data would be kept confidential. An informed consent was obtained from the respondents; individually. The investigator collected the data using a structured interview schedule, read the questions exactly as they appeared in the schedule and marked the answers which the respondents gave. Among the answers, there was one correct answer and three wrong options. There were 30 questions. After assessing the knowledge, practice was marked using a self reported checklist. The checklist had 18 items. It was recorded on the basis of practice that was carried out for past one month. Each correct practice was given one mark. The total score was 18. Daily the investigator collected data from minimum seven houses.

Table 1 Frequency and percentage distribution of level of knowledge (N = 100)

| Sl. No. | Level of knowledge | Frequency(n) | Percentag(%) |
|---------|--------------------|--------------|--------------|
| 1 | Poor | 3 | 3 % |
| 2 | Moderate | 38 | 38 % |
| 3 | Adequate | 59 | 59 % |

Table 2 Correlation between the knowledge with practice of domestic waste disposal among women (N=100)

| Variable | N | r value | p value |
|-----------|-----|----------|---------|
| Knowledge | 100 | 0.286 ** | 0.004 |
| Practice | | | |

** Significant at 0.01 level

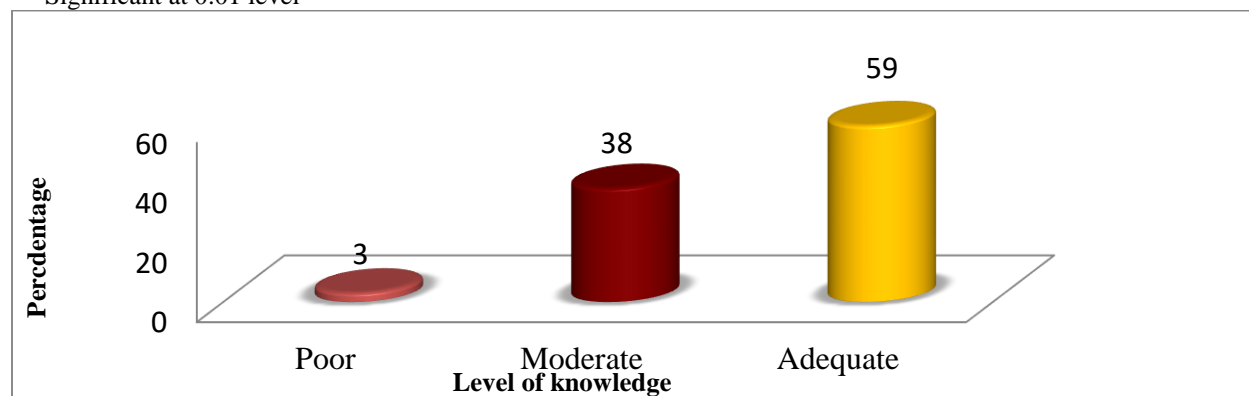


Fig 1 Percentage distribution of women according to level of knowledge(N=100)

RESULTS AND DISCUSSION

SECTION A: Description of demographic profile of samples.

This section deals with the frequency and percentage distribution of samples based on their



demographic variables.

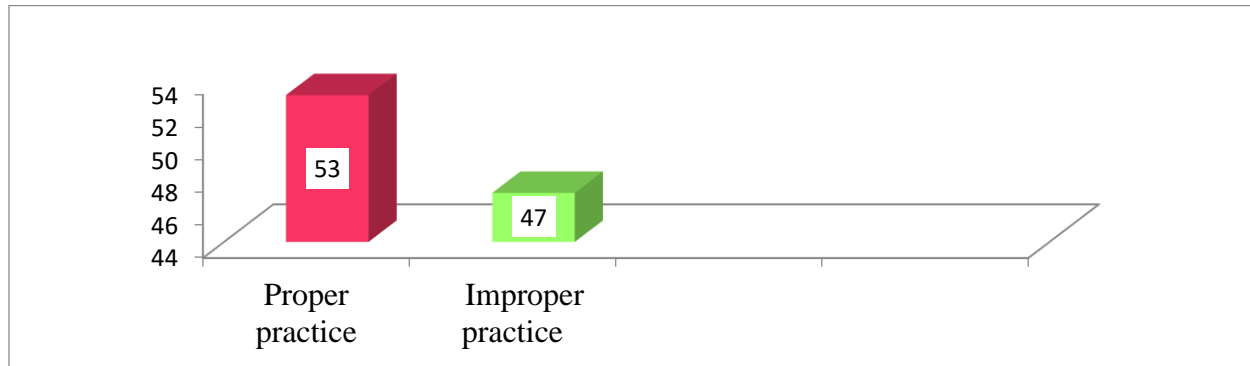


Fig 2 Percentage distribution of women according to level of practice

- ❖ On the basis of age, 40 (40%) of the samples were in the age group of above 50 years, 36 (36 %) were in the age group of 41- 50 years and 24 (24%) of the samples were in the age group of less than 40 years.
- ❖ With regard to education, majority were having primary education that is 35 (35%), 25 (25%) were having higher secondary education, 19 (19%) samples were graduates, 16 (16%) were having secondary education and 5 (5%) were illiterate.
- ❖ With reference to the occupation majority samples i.e.64 (64%) were homemakers, 23 (23%) of the samples were private employees, 8 (8%) of the samples were self-employed, 4 (4%) were government employees and 1 (1%) among them was retired.
- ❖ According to the family type, 75 (75%) samples belonged to nuclear families, 21(21 %) were members of joint families and only 4 (4%) of the samples belonged to extended family .
- ❖ Regarding the income, 54 (54%) belonged to a family with monthly income less than Rs. 5000/-, 32 (32%) were from monthly income between Rs 5001 -10,000 , 7 (7%) had family income between Rs 10001 – 15000 and 7 (7%) had a monthly income greater than Rs 15000.
- ❖ About the family members, 58 (58%) samples were from family with 4-6 members, 35 (35%) of the samples were from family with less than 4 members and 7 (7%) of the women were from family with more than 6 members .
- ❖ Regarding the information received, 95 (95%) of women received information about domestic waste disposal and 5 (5 %) of the samples did not receive any information.
- ❖ About the sources of information, 53 (53%) of the samples received information from



- mass media, 31 (31%) from health professionals, 6 (6%) received from friends and 5 (5%) from books and magazines.
- ❖ With reference to the frequency of cooking food 67 (67%) women cooked food twice daily, (16%) cooked thrice daily, 15 (15%) practiced cooking only once daily and only 2 (2%) cooked more than thrice daily .
 - ❖ In perspective of the major waste generated, majority waste ie 71 (71%) of it was kitchen waste, 23 (23%) was paper waste, 5 (5%) was waste clothes and only 1 (1%) was glass waste.
 - ❖ Regarding the land area, 50 (50%) women were from households which had less than 5 cents, 35 (35%) samples had 5-10 cents and only 15 (15%) had more than 10 cents.

SECTION B : Description on level of knowledge of domestic waste disposal among women.

With reference to the knowledge score of women about domestic waste disposal, 59(59%) of women possessed adequate knowledge related to domestic waste disposal, whereas 38 (38%) had moderate knowledge and 03 (03%) had poor knowledge regarding domestic waste disposal

Section C: Description on practice of women regarding domestic waste disposal

This section explains the practice of women regarding domestic waste disposal. It showed that 47 (47%) were found to have improper practice level regarding domestic waste disposal and 53 (53%) had proper practice level regarding domestic waste disposal.

Section D: Correlation between level of knowledge with practice of domestic waste disposal among women.

This section deals with the correlation between level of knowledge with practice of domestic waste disposal among women .It showed that there is positive correlation between level of knowledge and practice of women regarding domestic waste disposal as the r value is 0.286 which is significant at 0.01 level . This implies that with an increase in knowledge level there is an increase in practice of domestic waste disposal among women. Hence, the research hypothesis is accepted and null hypothesis is rejected.

Section E: Description on association between knowledge of domestic waste disposal among women with selected demographic variables.

This section dealt with the association between knowledge of domestic waste disposal among women with selected demographic variables such as occupation, family type, number of



members in the family and land area. It showed that there is no significant association between knowledge of domestic waste disposal and any of the demographic variables with regard to occupation (χ^2 value = 1.367, p-value > 0.05), family type (χ^2 value = 0.583, p-value > 0.05), number of family members (χ^2 value = 3.985, p-value > 0.05) and land area (χ^2 value = 2.041, p-value > 0.05).

Section F: Description of association between practice of domestic waste disposal with selected demographic variables.

This section describes the association between practice of domestic waste disposal by women with selected demographic variables such as occupation, family type, number of family members and land area. It showed that there is no significant association between practice of domestic waste disposal and any of the demographic variables with regard to occupation (χ^2 value = 0.74, p-value > 0.05), family type (χ^2 value = 1.850, p-value > 0.05), number of family members (χ^2 value = 3.758, p-value > 0.05) and land area (χ^2 value = 0.055, p-value > 0.05).

CONCLUSION

Most of the women had good knowledge about domestic waste disposal. The practice of the women towards domestic waste disposal may increase as their knowledge increases. Hence the study identified the need for education regarding domestic waste disposal for further increase in knowledge. Thus, the investigator identified that the information booklet would be really an effective tool and an asset in future for the reference by women. They can easily identify the different methods of waste disposal for different types of domestic waste.



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