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RESEARCH ARTICLE

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A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING DOMESTIC WASTE MANAGEMENT AND DISPOSAL AMONG HOUSEWIVES IN SELECTED RURAL AREAS OF PUDUCHERRY

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ABSTRACT

Background: Numerous human activities produce huge amounts of domestic waste throughout the world and their management and disposal has become a technical and environmental challenge. Knowledge of current practices and perception of household waste management and disposal is necessary for accurate decision making in the more towards a more sustainable approach. This study investigates the level of knowledge on domestic waste management and disposal among housewives in selected rural areas of Puducherry. **Method:** This study utilized a quantitative research approach. A self-structured questionnaire consisting of 30 questionnaires were used to collect data. The study population consisting of 50 housewives. The study was conducted in selected rural areas of Puducherry. Data collected were analyzed using frequency and percentage distribution. **Result:** The study results revealed that out of 50 housewives the majority 76% of housewives had adequate knowledge, 20% of them had moderate knowledge and 4% of them had inadequate knowledge regarding domestic waste management and disposal. The chi-square value revealed that the level of knowledge regarding domestic waste management and disposal were highly significant to higher secondary education and pucca house of p level 0.000 and 0.005 respectively. **Conclusion:** Researchers conclude that there is adequate level of knowledge regarding domestic waste management and disposal among selected housewives.

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INTRODUCTION

Disposal of wastes is now largely the domain of sanitarians and public health engineers. However, health professionals need to have a basic knowledge of the subject since improper management and disposal of wastes constitutes a health hazard. Further, the health professional may be called to give in some special situations, such as camp sanitations or coping with waste disposal problems when there is a disruption or breakdown of community health services in natural disasters. The generation of waste and the collection of waste include domestic and urban waste. Waste generation is an integral part of ecological cycle. Every element of ecosystem directly or indirectly produces waste. With the advancement in human activities inventions and discoveries, the quantum of waste generation has gone high. It has not increased in volume but also has become more and more complex in composition which cannot be decomposed completely, through natural process, hence waste management become an important responsibility of all the stake holders generating wastes and authorities managing human habitat and environment. Types of wastes are Domestic waste, Industrial waste, Biomedical waste, e-waste. In that domestic waste which is generated from residential households

through daily activities which includes ash, paper, clothing, bits of wood, metal, glass, dust, dirt, food/ kitchen wastes, vegetable peelings, yard/ garden wastes, bulky items, consumer electronics, batteries, oil, tires, leather, rubber, earth, ceramics, animal wastes, cow dung, tree strings, cattle food, mud, silica. Waste management in all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things, collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompasses the legal and regulation framework that relates to waste management encompassing guidance on recycling etc.. Responsibilities of households are each house hold shall segregate waste into wet waste, dry waste, and hazardous waste and put it proper colour dustbins. This is called Primary Segregation, which will be the responsibility of the residents. The foundation for success or otherwise of this effort is absolutely at this stage only. Wet waste (Blue colour dustbin) and wet waste are vegetable peels, fruits, flowers, and egg shells, tea leaves, including leftover food, old bread, fish bone, garden shrubs and other easily degradable items.

Dry wastes (Blue): Plastics, cardboards, shampoo bottles, empty cans, tins, tooth paste tube, worn out tooth brushes, milk covers, oil covers, glass bottles, pet bottles, broken toys, cap of mineral water bottles, iron pieces, etc..

Hazardous waste (Red): Under this category, items frequently discarded are (i) used batteries, (ii) children’s diapers, (iii) used napkins and such items. Other items under this category include chemicals / cleaners / fused bulbs, tubes, broken mirror and broken ceramics items, residual, farm pesticides, grease, spray, shoe polish, expired medications and other pharmaceutical items / syringes, needles, etc... For the purpose of segregation at the household level in the important phase of preventing major health hazards, accidents, environmental pollution. The government of India as well as many state governments are looking up gram panchayat to come up with a working system to manage domestic waste in rural areas. So due to all these reasons the researcher is considered domestic waste management in the primary level of segregation and can prevent many major problems and household knowledge is very important for the cleanliness of the villages as well as state & nation.

Statement of the Problem: A descriptive study to assess the level of knowledge on domestic waste management and disposal among housewives at selected areas rural areas of Puducherry.

Objectives of the Study

- To assess the level of knowledge regarding domestic waste management and disposal among housewives.
- To associate the level of knowledge with the socio demographic variables.

MATERIALS AND METHODS

The quantitative research approach was followed to conduct the study. A non experimental descriptive research design was used to assess the knowledge on domestic waste management and disposal. The study was conducted in selected rural areas in Puducherry. Totally 50 housewives were selected using purposive sampling technique. After self introduction, the purpose of the study was explained to the subjects and requested their willingness and co-operation to participate in this study. The demographic data was collected and the level of knowledge on domestic waste management and disposal was assessed from the subjects with the help of structured questionnaire

RESULTS AND DISCUSSION

Demographic Data of the Subjects: In age group of 21-30 years, 20 housewives had adequate knowledge, 4 had moderate knowledge and 2 had inadequate knowledge. In the age group of 31-40 years, 11 had adequate knowledge and 2 had moderate knowledge. In the age group of 41-540 years, 5 had adequate knowledge and 4 had moderate knowledge. In the age group >50 years, 2 had adequate knowledge (X^2 value = 61.27, $df = 6$, $\rho = 0.409$). Among the Hindu housewives, 34 had adequate knowledge, 9 had moderate knowledge and 2 had inadequate knowledge. Among Muslim housewives, 1 had adequate knowledge, 1 had moderate knowledge and 1 had inadequate knowledge. Among Christian housewives, 3 had adequate knowledge (X^2 value = 2.129, $df = 4$, $\rho = 0.712$). Among the housewives in nuclear family, 21 had adequate knowledge, 7 had moderate knowledge and 2 had inadequate knowledge. In joint family, 17 had adequate knowledge and 3 had moderate knowledge (X^2 value = 6.909, $df = 4$, $\rho = 0.41$). Among primary educated housewives, 7 had adequate knowledge and 4 had moderate knowledge. Among secondary educated housewives, 3 had adequate knowledge and 1 had moderate knowledge. Among higher secondary educated housewives, 14 had adequate knowledge and 4 had moderate knowledge. Among graduated housewives, 14 had adequate knowledge, 1 had moderate knowledge and 2 had inadequate knowledge (X^2 value = 17.463, $df = 6$, $\rho = 0.000$). Among the housewives living in kutch house, 9 had adequate knowledge, 3 had moderate knowledge and 2 had inadequate knowledge. Among housewives living in pucca house, 29 had adequate knowledge and 7 had moderate knowledge (X^2 value = 5.514, $df = 2$, $\rho = 0.005$).

Among the housewives with family income below Rs.5000, 18 had adequate knowledge, 4 had moderate knowledge and 1 had inadequate knowledge. Among the housewives with family income Rs.5000-10,000, 6 had adequate knowledge and 3 had moderate knowledge. Among housewives with family income Rs.10,000-15,000, 7 had adequate knowledge, 1 had moderate knowledge and 1 had inadequate knowledge (X^2 value = 3.247, $df = 3$, $\rho = 0.077$). Among the housewives who dispose the waste in open space, 7 had adequate knowledge, and 5 had moderate knowledge. Among the housewives who dispose the waste by burial method, 3 had adequate knowledge and 2 had moderate knowledge. Among the housewives who dispose the waste in municipality bin, 24 had adequate knowledge, 3 had moderate knowledge and 1 had inadequate knowledge. Among the housewives who dispose the waste by incineration, 4 had adequate knowledge and 1 had inadequate knowledge (X^2 value = 10.96, $df = 6$, $\rho = 0.099$). Among the housewives with presence of kitchen garden in their home, 17 had adequate knowledge, 5 had moderate knowledge and 1 had inadequate knowledge, Among the housewives with absence of kitchen garden in their home, 21 had adequate knowledge, 5 had moderate knowledge and 1 had inadequate knowledge (X^2 value = 0.102, $df = 2$, $\rho = 0.950$). Among the housewives with own house, 33 had adequate knowledge, 9 had moderate knowledge and 2 had inadequate knowledge. Among the housewives with rent house, 5 had adequate knowledge and 1 had moderate knowledge (X^2 value = 0.359, $df = 2$, $\rho = 0.836$). Among the housewives who had stayed below 5 years, 5 had adequate knowledge and 3 had moderate knowledge. Among the housewives who had stayed 5-15 years, 11 had adequate knowledge, 10 had moderate knowledge and 1 had inadequate knowledge. Among the housewives who had stayed 15-30 years, 2 had adequate knowledge, 2 had moderate knowledge and 1 had inadequate knowledge. Among the housewives who had stayed above 30 years, 16 had adequate knowledge and 1 had moderate knowledge (X^2 value = 11.674, $df = 6$, $\rho = 0.166$).

Table 1. Distribution of subjects according to level of knowledge (N=50)

LEVEL OF KNOWLEDGE	FREQUENCY (N)	PERCENTAGE (%)
Inadequate knowledge	2	4.0
Moderately knowledge	10	20.0
Adequate knowledge	38	76.0

Inference: The findings reveal that out of 50 samples the highest percentage of 76% of them had adequate knowledge, 20% of them had moderate knowledge and 4% of them had inadequate knowledge.

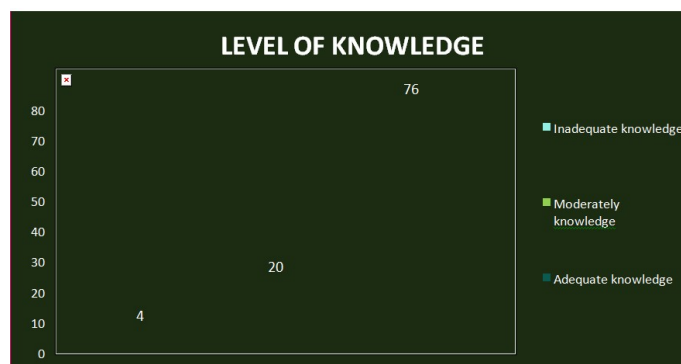


Figure 1. Distribution of subjects according to level of knowledge

CONCLUSION

- The study reveals that, out of 50 samples,
- 38 housewives (76%) had adequate knowledge.
 - 10 housewives (20%) had moderate knowledge.

- 2 housewives (4%) had inadequate knowledge.

RECOMMENDATIONS

- Similar study can be conducted using experimental research design with pre and post tests.
- Similar study can be done in different settings.
- Similar study can be conducted with larger samples.
- A comparative study can be conducted to all the women in urban and rural area.
- A comparative study can be conducted to all the housewives in urban and rural area.
- Similar study can be conducted to all the women in the rural area.
- Similar study can be conducted to all the women in the urban area.
- Similar study can be conducted to all housewives in the urban area.
- A comparative study can be conducted to all the male and female in urban area.
- A comparative study can be conducted to all the male and female in rural area.

REFERENCES

BOOKS:

- K.Park (2017), Textbook of Prevention of Social Medicine, 24th edition, Page No:475-476.
- AH Suryakanta (2014), Community Medicine with Recent Advances, Jaypee Brothers medical publishers (LP) Ltd, New Delhi, 3rd edition, Page No:866-867.
- Bijayalakshmi Dash (2017), A Comprehensive Textbook of Community Health Nursing, Jaypee Brothers Medical Publisher (P) Ltd, New Delhi, Page No:242265.
- Bhaskara Rao Thirunavalli, Usha Rani Chadalawada (2015), Textbook of Community Medicine, 3rd edition Paras Medical Publisher, Page No:798-824.
- Mahajan & Gupta (2013), Textbook of Preventive and Social Medicine, 4th edition, Jaypee Brothers Medical Publisher (P) Ltd, New Delhi, Page No:71-82.
- Suresh K. Sharma, Textbook of Nursing Research & Statistics, 3rd edition, Elsevier Publications.
- Papri Das (2017), Textbook of Community Health Nursing, 1st edition, Paras Medical Publishers, Page No: 263-270.
- Dr. J. P. Baride & Dr. A.P. Kulkarni (2016), Textbook of Community, 3rd edition, Vora Medical Publishers, Page No:217-250.
- K.K Gulani (2015), Community Health Nursing (Principles & Practice), 2nd edition, Kumar Publishing House, New Delhi, Page No:222-223.
- Sunder Lal & Adarsh Pankaj (2017), Textbook of Community Medicine, 5th edition, CBS publishers & Distributors pvt & ltd, New Delhi, Page No: 248-276.

JOURNALS

- Baby, A., & Mathew, S. (n.d.). *A Correlative Study to Assess the Knowledge and Practice of Housewives Regarding Householdwaste Management in Selected Rural Community at Mangalore with a View to Provide an Information Pamphlet* (Vol. 20, Issue 4).
- Chanu, S. G., Bhuyan, H., & Dutta, A. (n.d.). A study to assess the Knowledge and Practices on Household Waste Management among the Slum Dwellers of Kamrup Metro, Assam. *Issue 4 Ser. IV, 10*, 1–09. <https://doi.org/10.9790/1959-1004040109>
- Deb, P. (2021). A Study to Assess the Knowledge and Attitude Regarding Household Waste Management among Housewives in Selected Urban Slum Area, Agartala, Tripura West in a View to Develop Pamphlet. In *Advances in Applied Science Research* (Vol. 12, Issue 9).
- Fadhullah, W., Imran, N. I. N., Ismail, S. N. S., Jaafar, M. H., & Abdullah, H. (2022). Household solid waste management practices and perceptions among residents in the East Coast of Malaysia. *BMC Public Health*, 22(1). <https://doi.org/10.1186/s12889-021-12274-7>
- Sultana, S., Islam, Md. S., Jahan, F., & Khatun, F. (2021). Awareness and Practice on Household Solid Waste Management among the Community People. *Open Journal of Nursing*, 11(05), 349–366. <https://doi.org/10.4236/ojn.2021.115031>.
