Section A-Research paper
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A Study To Compare The Level Of Knowledge Regarding Household Solid Waste Management Between Adult Women Of Selected Rural And Urban Area In Jaipur District

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ABSTRACT

The environment we live in provides support for our survival as well as other living things. Globally, efforts are being made to make people aware about the need to protect the environment. One of the main causes of environmental degradation is improper waste management in the disposal of solid waste. It is a major cause of pollution and outbreak of diseases in many parts of the world. What aggravates the situation is the fact that crisis related to the environment is of global concern and there is usually no permanent solution to environmental problems. **Aims of study** -The main aim of the research is to compare the level of knowledge regarding household solid waste management between adult women of selected rural and urban area in Jaipur district. **Materials and Methods**:- Comparative survey design and Descriptive approach is used for the research study .Setting of the study was Vatika and Pratap Nagar, Jaipur Rajasthan.population was the adult women between the age group of 25-55 yrs in selected rural and urban area in Jaipur Rajasthan.200 Adult women from rural area & 200 from urban area.Participants were selected by Simple random sampling technique (Lottery method). **Results-** Acute diseases suffered value at rural 45% and at urban 75% Having dustbins at different places value at rural 45% and at urban 70% Way of garbage disposal when sweeper does not come Collection at designated place outside the house value at rural 46% and at urban 56% Quantity of daily waste value 250-500 gms value at rural 50% and at urban 79% Ever thought of minimizing the garbage value at rural 47% and at urban 64% **Conclusion-** proper

segregation would lead to better options and opportunities for scientific disposal of waste. Recyclables could be straightway transported to recycling units, which, in turn, would pay the corporations for it, thereby adding to their income. This would help in formalising the informal set-up of recycling units, saving valuable raw materials resources of country. There should be provision for incentives to promote recycling.

Key words- Compare, Level Of Knowledge, Household Solid Waste Management, Adult Women, Rural Area, Urban Area

INTRODUCTION

One of the cardinal factors responsible for large solid waste generation is urbanization, which introduces society to a new, modern way of life, an improved level of awareness, new skills and learning process. However, when the rate of urbanization gets out of control, it poses a big challenge to governance, and institutional capabilities become inadequate and ineffective to manage waste. The generation of solid waste is an important by product of socio-economic activities. The definition of solid waste varies among countries. Generally, waste generated from industrial sector, commercial, domestic, institutional and municipal services. Presently, waste is generated faster than other environmental pollutants, including greenhouse gases. The ever rising population has resulted in immense pressure on demand for food, shelter and on other natural resources leading to various environmental problems including waste generation and waste management. Waste management is the process of collecting, transporting, processing or disposing, managing and monitoring of waste materials. The term usually relates to materials produced by human activity and the process is generally undertaken to reduce their effect on health, the environment or aesthetics. Waste includes all items that people no longer have any use for, which they either intend to get rid of or have already discarded and these include: packing items, garden waste, old paints containers, vegetables, metals etc. Poor waste management has been a major problem to human health and existence, affecting both rural and urban areas. A clean environment influences good health and good health further affects the productivity of man. Strict adherence to appropriate waste management practices in any

community will insulate the inhabitants from detrimental and hazardous environmental conditions and improve the living standard of the people.

NEED OF STUDY

Unhealthy disposal of solid waste is considered as one of the most important problems in many societies. The problem of waste management has arisen recently in developing countries where there is little history of the implementation of formal and informal community environmental education awareness program. Environmental attitude of young people appears to be crucial as they ultimately play a direct role in providing knowledge based solutions to in coming environmental problems. Abhishek Nandan and Bikarama Prasad Yadav (2017) et.al a study was conducted by that describes about current status of municipal solid waste management in different regions of India. It further summarizes a collective, systematic effort which improves implementation of legal frameworks, institutional arrangements, financial provisions, technology, operations management, human resource development, and public participation and awareness of Integrated SWM systems.

AIMS OF STUDY

The main aim of the research is to compare the level of knowledge regarding household solid waste management between adult women of selected rural and urban area in Jaipur district.

RESEARCH METHODOLOGY

Comparative survey design and Descriptive approach is used for the research study Setting of the study was Vatika and Pratap Nagar, Jaipur Rajasthan.population was the adult women between the age group of 25-55 yrs in selected rural and urban area in Jaipur Rajasthan.200 Adult women from rural area & 200 from urban area.Participants were selected by Simple random sampling technique (Lottery method). Study variables are Independent variable and Dependent variable. Independent variable are previous knowledge. Dependent variable are knowledge regarding household solid waste management as measured by structured questionnaire and socio-demographic data. Extraneous variables are Age, Religion, Area of residence, Duration of residency, Type of family, Educational status, Occupation, Monthly

income, Sanitary condition of the surroundings, Source of information. Inclusion criteria are Adult women who are in the age group of 25-55 yrs ,Adult women who are willing to participate ,Adult women who are available at the time of data collection Adult women who know to read and write Hindi. Exclusion criteria are Adult women who are not willing to give their consent. Data collection instruments & techniques are A closed ended questionnaire was used in this study which only had the answers selected by the researcher. The structured questionnaire consists of two sections.Section A: Socio demographic data of adult women including Age, Religion, Area of residence, Duration of residency, Type of family, Educational status, Occupation, Monthly income, Sanitary condition of the surroundings, Source of information.Section B: Structured questionnaire to assess the knowledge regarding household solid waste management, which had three sections with its questionsAll the tool will be self-developed .the tool will be given for content validity to five subject experts from Nursing and Community Medicine and psychologist. They will be requested to give their comments on the adequacy and relative apropriateness of the content. The suggestions of expert will be incorporated into the tool and the tool will be modified as required by eliminating certain questions and adding new questions according to the suggestion quoted. The corrected tool was translated into Hindi to administer to the sample. Pilot study also assured the validity tool.Data analysis was the systemic organization and synthesis of research data, the testing of the research hypothesis by using the obtained data. The obtained data was analysed by using both descriptive and inferential statistics on the basis of the objectives of the study. The master sheet was prepared for tabulation by the investigator.

RESULTS

Table No. 1: Comparison of level of knowledge of rural and urban women regarding household solid waste management

S. No	Activity	Maximum Score of Study	Rural Women	Urban Women
1	Acute diseases suffered	No	45%	75%
2	Having dustbins at different places	Yes	45%	70%
3	Way of garbage disposal when	Collection at designated	46%	56%

	sweeper does not come	place outside the house		
4	Quantity of daily waste	250-500 gms	50%	79%
5	Ever thought of minimizing the garbage	Yes	47%	64%
6	Awareness of problem created by solid waste disposal	Yes	49%	92%
7	Safer & efficient way of municipal solid waste disposal	Designated landfill sites	46%	85%
8	If waste generation a good sign	No	41%	81%
9	Awareness of environmental hazards created by its disposal	Yes	80%	100%
10	Awareness of place of land filling in the Jaipur	No	35%	55%
11	Area having maximum garbage	Thickly populated area Slum area	38% 40%	48% 50%
12	Awareness of solid waste and their sources	Yes	42%	68%

Acute diseases suffered value at rural 45% and at urban 75% Having dustbins at different places value at rural 45% and at urban 70% Way of garbage disposal when sweeper does not come Collection at designated place outside the house value at rural 46% and at urban 56% Quantity of daily waste value 250-500 gms value at rural 50% and at urban 79% Ever thought of minimizing the garbage value at rural 47% and at urban 64% Awareness of problem created by solid waste disposal value at rural 49% and at urban 92% Safer & efficient way of municipal solid waste disposal Designated landfill sites value at rural 46% and at urban 85% If waste generation a good sign value at rural 41% and at urban 81% Awareness of environmental hazards created by its disposal value at rural 80% and at urban100%Awareness of place of land filling in the Jaipur value at rural 35% and at urban 55%Area having maximum garbage Thickly

populated area value at rural 38% and at urban 48% Slum area value at rural 40% and at urban 50% Awareness of solid waste and their sources value at rural 42% and at urban 68%.

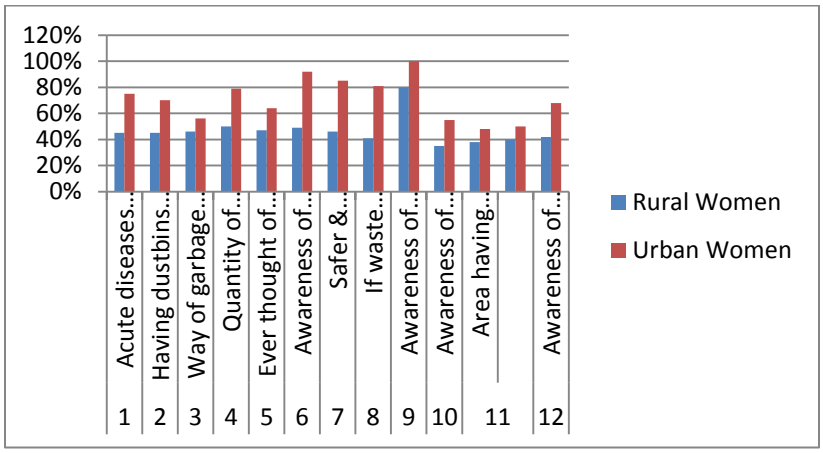


Fig No. 1: Comparison of level of knowledge of rural and urban women regarding household solid waste management

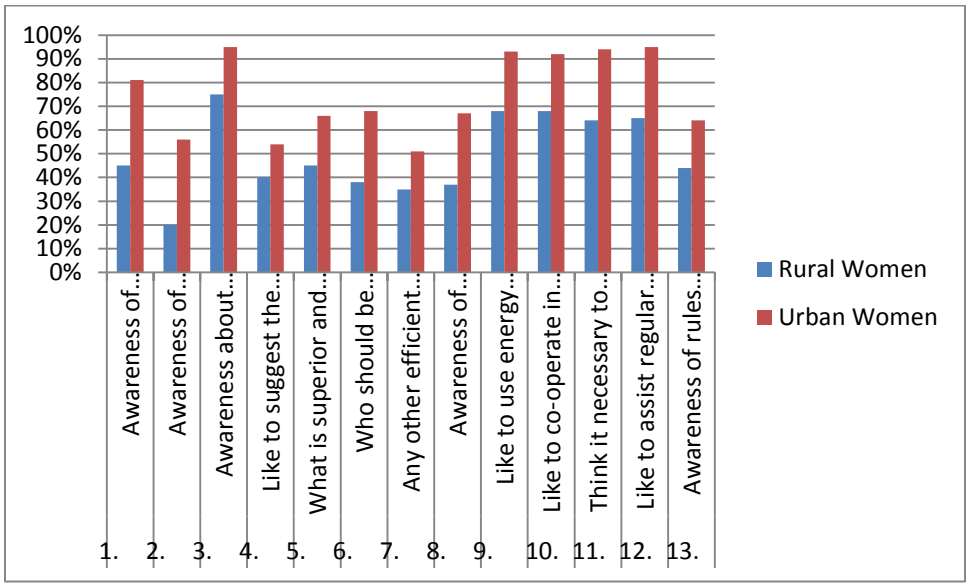
Table No. 2: Comparison of level of knowledge of rural and urban women regarding household solid waste management

S. No	Statements	Response	Rural Women	Urban Women
1.	Awareness of collection variables for garbage disposal	Yes	45%	81%
2.	Awareness of recovering energy from solid waste	Yes	20%	56%
3.	Awareness about garbage storage may create a crisis situation	Yes	75%	95%
4.	Like to suggest the best way for waste disposal in the city	No	40%	54%
5.	What is superior and economical for garbage collection	Plastic container	45%	66%
6.	Who should be responsible for garbage disposal	Municipal Council	38%	68%

7.	Any other efficient and safer approach of municipal solid waste disposal	No	35%	51%
8.	Awareness of travelling and collection cost of garbage	No	37%	67%
9.	Like to use energy from waste	Yes	68%	93%
10.	Like to co-operate in save energy and waste campaign	Yes	68%	92%
11.	Think it necessary to manage the solid waste disposal system	Yes	64%	94%
12.	Like to assist regular collection system at a minimal cost	Yes	65%	95%
13.	Awareness of rules and regulations for the disposal of garbage by the collection vehicle	No	44%	64%

Awareness of collection variables for garbage disposal value at rural 45% and at urban 81% Awareness of recovering energy from solid waste value at rural 20% and at urban56% Awareness about garbage storage may create a crisis situation value at rural 75% and at urban95% Like to suggest the best way for waste disposal in the city value at rural 40% and at urban 54% What is superior and economical for garbage collection Plastic container value at rural 45% and at urban 66% Who should be responsible for garbage disposal Municipal Council value at rural 38% and at urban 68% Any other efficient and safer approach of municipal solid waste disposal value at rural 35% and at urban 51% Awareness of travelling and collection cost of garbage value at rural 37% and at urban 67% Like to use energy from waste value at rural 68% and at urban93% Like to co-operate in save energy and waste campaign value at rural 68% and at urban92% Think it necessary to manage the solid waste disposal system value at rural 64% and at urban 94% Like to assist regular collection system at a minimal cost value at rural 65% and at urban 95% Awareness of rules and regulations for the disposal of garbage by the collection vehicle value at rural 44% and at urban 64%.

Fig No. 2: Comparison of level of knowledge of rural and urban women regarding household solid waste management



DISCUSSION

Waste minimization, Waste reduction or reduction at source is usually adopted to produce less waste. Source reduction affects the volume, and to some extent, the nature of waste, but some quantity of waste always remains for disposal. What is needed, beyond source reduction, is an effective system to manage this waste. Solid waste management is one such activity, where public participation especially women are key to success. The local body can never be successful in solid waste management without active community participation. The objective of the study was to make women residing in urban and rural areas aware about the health hazards caused by improper disposal of solid waste. As per the survey it was observed that education among women makes a significant impact on their habits of maintaining hygiene in and around their house. Apart from that the technological advancement also affects the lifestyle and thinking process of women. As the women residing in urban areas are receiving more facilities and basic amenities compared to one residing in rural areas, they are more aware about the management of solid waste and its requirement.

CONCLUSION

To reduce waste problems in future, reduction in waste generation would be the most important factor. Examples of possible reduction at the consumption level include reuse of containers, better buying habits and cutting down on the use of disposable products and packaging. The community needs to be sensitized to such initiatives. And proper segregation would lead to better options and opportunities for scientific disposal of waste. Recyclables could be straightway transported to recycling units, which, in turn, would pay the corporations for it, thereby adding to their income. This would help in formalising the informal set-up of recycling units, saving valuable raw materials resources of country. There should be provision for incentives to promote recycling.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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