



Awareness of rural women of Punjab regarding pollution causing and environmentally safe waste disposal practices

Balwinder Kaur and Kanwaljit Kaur ✉

Received: 10.04.2012

Revised: 15.06.2012

Accepted: 24.08.2012

Abstract

Household waste disposal practices are main source of pollution. Rural folk dispose their waste in open areas due to lack of awareness about their consequences. Some practices were identified to check their awareness about these practices. The present study was conducted to find out the awareness regarding pollution causing and environmentally safe waste disposal practices in three regions of Punjab i.e. Majha, Malwa and Doaba. For this purpose, 240 rural women of district Gurdaspur, Hoshiarpur and Ludhiana were selected. Data were collected through interview schedule. The study findings revealed that large majority of respondents (91.67 per cent) were aware regarding open drainage of water is source of pollution followed by 87.33 per cent regarding burning of waste and plastic in open air causes pollution. Data regarding environmentally safe waste disposal practices showed that large majority of respondents were aware that selling of electrical waste (90%), disposal in closed container (87.08 %) and faecal matter disposal in *pakka* pits (80%) are safe disposal practices for environment. About eighty per cent of respondent had high level of awareness. Age, education, mass media exposure, family education and family size were significantly correlated with level of awareness. Although the women had awareness about pollution causing practices but they don't know the alternatives and management strategies to control pollution.

Keywords: Awareness, waste disposal pollution causing practices, waste disposal environmentally safe practices, pollution

Introduction

Rural people generally dispose the waste with the garbage that produces carcinogenic gases which are harmful for human health. Rural women burn the household waste and plastic materials inside their houses. They dispose plastic materials in garbage which is biggest pollutant of environment. Due to lack of awareness in homemakers they generally follow these practices which are dangerous to human health, environment and surrounding. Hence the present study was an attempt to find out the awareness of rural women regarding pollution causing and environmentally safe waste disposal practices with following objectives:

1. To identify the pollution causing and environmentally safe waste disposal practices.

2. To study the awareness of rural women regarding pollution causing and environmentally safe waste disposal practices.
3. To study the relationship between socio-personal profile and level of awareness.

Materials and Methods

The study was conducted in three socio-cultural regions i.e. Majha, Malwa and Doaba of Punjab State. Three districts one from each region of Punjab were further selected. A sample of 240 women was drawn randomly from twelve villages by selecting twenty rural women from each village (four from each selected district). Keeping in mind the objectives of the study, an interview schedule was prepared for collection of information. To identify the major pollution causing practices and environmentally safe waste disposal practices, relevant literature and experts from Punjab Agricultural University, Ludhiana and Environment Pollution Control Board were consulted. The

Author's Address

Department of Home Science Extension & Communication Management, College of Home Science, Punjab Agricultural University, Ludhiana
Email: kanwaljithsee@pau.edu.com



collected data were analysed by using frequency, percentage and correlation coefficient.

Results and Discussion

Table 1 depicted that large majority of respondents (91.67 per cent) were aware regarding open drainage of water is source of pollution followed by 87.33 per cent regarding burning of waste and plastic in open air causes pollution. Data regarding environmentally safe waste disposal practices showed that large majority of respondents were aware that selling of electrical waste (90%), disposal in closed container (87.08 %) and faecal

matter disposal in *pakka* pits (80%) are safe disposal practices for environment. Thirty six percentage of respondents was not aware that dumping and landfill method is harmless. These practices also got lowest mean score i.e. 0.63. Only one third of respondents were aware that open throwing of expired medicine cause pollution. The findings are in line with the research conducted by Israel (2007) found that people were aware about open burning of household waste pollute air and also affect their health. The findings were also supported by Kalana (2010) who reported the preferred method of electronic waste disposal by residents was sale and storage.

Table 1: Distribution of respondents according to their awareness regarding environmentally safe and pollution causing waste disposal practices (n=240)

Pollution causing practices	Awareness		Mean score	Rank
	Aware f (%)	Not aware f (%)		
Burning of waste products in open air pollutes air	212(88.33)	28(11.67)	0.88	3.5
Burning of plastic in open air produce toxic gases	211(87.92)	29(12.08)	0.88	3.5
Improper disposal of computers and laptops waste lead to environmental pollution	195(81.25)	45(18.75)	0.81	6.5
Expired medicine pharmaceuticals not disposed off properly produce toxins in environment	90(37.50)	150(62.5)	0.37	12
Open drainage of water is not good for health	220(91.67)	20(8.33)	0.92	1
Disposal of faecal matter in open drain or in fields is harmful for environment	195(81.25)	45(18.75)	0.81	6.5
Faecal matter disposal in <i>kaccha</i> pits pollutes for water and soil	188(78.33)	52(21.67)	0.78	9
Environmentally safe practices				
Faecal matter disposal in <i>pakka</i> pits is safe for environment	192(80)	48(20)	0.80	8
Disposal of waste in closed container is safe for environment	209(87.08)	31(12.92)	0.87	5
Dumping or landfill method is harmless	152(63.33)	88(36.67)	0.63	10
Separate disposal of organic waste from synthetic waste is safe for environment	147(61.25)	93(38.75)	0.61	11
Selling of electrical and other household wastes instead of dumping or throwing in garbage is safe practice	216(90)	24(10)	0.90	2



Table 2: Distribution of respondents according to their level of awareness regarding waste disposal practices (n=240)

Level of awareness	Frequency	Percentage
Low(0-4)	14	5.83
Medium(4-8)	36	15
High(>8)	190	79.17

Table 3 Relationship of various socio-personal characteristics with level of awareness (n=240)

Socio-personal characteristics	r-value
Age	0.179*
Education	0.328*
Respondents income	0.040 NS
Extension contacts	-0.002 NS
Mass media	0.242*
Family size	-0.119*
Family education	0.17*
Family income	0.073 NS

*5% level of significance, NS= non significant

2 Level of awareness regarding waste disposal practices

The level of awareness was measured by assigning the one score to aware and zero to not aware response categories. Total scores of respondents were divided into three levels i.e. low, medium and high. Data in this respect was recorded in Table 2 revealed that 80 per cent respondents had high level of awareness regarding pollution causing waste disposal practices. Only 15 per cent respondent had medium level of awareness followed by 5.83 per cent low. It was observed by investigator that women were aware about wrong practices but they are practising all these practices because they don't know management strategies.

3 Relationship of various socio-personal characteristics with level of awareness

Data given in Table 3 revealed that age, education, mass media exposure and family education were positively and significantly correlated with awareness where as respondent's income, extension contacts and family income had no significant effect on awareness. Family size was negatively significant correlated with level of awareness.

Conclusion and Suggestions

Although women had awareness about pollution causing practices but they don't know the alternatives and management strategies to control pollution. Respondent age, education, mass media exposure and family education had positive and significant relationship with level of awareness. There is need to educate rural women regarding management of pollution causing waste disposal practices through different interventions. Mass media had positive and significant relationship with level of awareness. So, it is suggested that special attention should be paid by mass media planners to include more programmes and articles regarding environment pollution of these practices.

References

- Irsael P. 2007 People's awareness on effects of open burning of household waste in Kinondoni municipality, Dar-es-Slaam. *Der Es Slaam Medical Student's J* 15, 19-22
- Kalana J. A. 2010 Electrical and electronic waste management practice by household in Shah Alam Salangor, Malaysia. *International J Environmental Sciences* 1,132-44.

