



Environmental Risk Oriented Health Habits: Interstate and Intergender Study

KEYWORDS

risk oriented health habits, polythene, water bodies, garbage disposal

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ABSTRACT

The study was conducted in Haryana and Rajasthan states covering a sample of 200 respondents (100 male and female each) from two villages and two slum areas of each state. The use of polythene bags was done by all the respondents followed by using chulha by females/ smoking by male (78.5% each), open garbage disposal (77%) and washing clothes / taking bath near water bodies (49%). Majority of the female respondents from Rajasthan and Haryana were either using chulha or male members were indulged in smoking being a major cause of indoor air pollution. Washing clothes & taking bath near water bodies was done by 53 % and 45 % respondents of Haryana and Rajasthan, respectively while open garbage disposal was done by majority of respondents from Haryana (80%) and Rajasthan (74%). No significant interstate difference was observed regarding all the three environmental risk oriented health habits.

Introduction

Health risk communication has become the subject of scientific research within the last decade only. This is particularly true in the area of environmental issues, since the media and the general public have become increasingly hazard conscious. Pollution of freshwater (drinking water) is a problem for about half of the world's population. Each year there are about 250 million cases of water-related diseases, with roughly 5 to 10 million deaths (Ranjan, 2011). It was reported that around 50 percent of people, almost all in developing countries, rely on coal and biomass in the form of wood, dung and crop residues for domestic energy. These materials are typically burnt in simple stoves with very incomplete combustion. Consequently, women and young children are exposed to high levels of indoor air pollution every day. Exposure to indoor air pollution may be responsible for nearly 2million excess deaths in developing countries and for some 4%of the global burden of disease. Approximately half the world's population and up to 90 percent of rural households in developing countries still rely on unprocessed biomass fuels in the form of wood, dung and crop residues . These are typically burnt indoors in open fires or poorly functioning stoves. As a result there are high levels of air pollution, to which women, especially those responsible for cooking, and their children are affected (Bruce, N et al., 2000). Smoke is highly dangerous for mankind and environmental media. It was also reported that 4.2 million people are dying every year in the world because of smoke in environment. The major human health problems reported are throat diseases (75 %), depression (65 %), Influenza (56.7 %) and skin diseases (33.3 %) (Bonita, 1999). Hussain et al. (2003) in their study on impact of environmental pollution on human behaviour and uplift of awareness level through mass media depicted that over whelming majority (80.8 %) of the respondents were aware of dust as environmental pollution source followed by dirty water (60%), smoke (56.7 %), noise (51.7 %) and liquid (30.0 %). The present research endeavour entails to explore the issue pertaining to risk oriented environmental habits with the following specific objectives:

- To study the nature of environmental risk oriented habits among respondents.
- To assess the inter gender and interstate difference in environmental risk oriented habits

Methodology

The present study was carried out by covering two states that is Haryana and Rajasthan purposively. The two district headquarters namely Hisar and Jodhpur from Haryana and Rajasthan respectively were selected purposively for the reason that frequent and consistent visits were required to be made by the researcher for carrying out the research. One village in proximity of five to seven kilometers of each of the selected district headquarter was selected at random. Consequently two villages namely Patan from Hisar and Jhanwar from Jodhpur were selected for the purpose. Similarly one slum area from the selected district headquarters i.e. labour colony from Hisar and Nat basti from Jodhpur were selected at random. Total sample of 200 i.e. 100 each with rural and slum background covering 100 men and 100 women were included for the purpose of the study.

Nature of risk oriented health habit was operationalized as the form or method of practicing or exhibiting selected risk oriented health habits, while its extent was operationalized as the degree to which the respondents were exhibiting selected risk oriented habits. It was measured on three point continuum i.e. always (3), sometimes (2) and never (1). Total and weighted mean scores were calculated for each risk oriented habit to know the extent of the risk oriented health habits being practiced by the respondents. An interview schedule was developed to gather specific information about the nature and extent of environmental risk oriented habits. Weighted mean score and ranks were used for estimating the extent of risk oriented health habits nad Two sample't' test: was used to know the inter-state; inter gender and intra gender difference in nature of risk oriented health habits.

Results

Nature and extent of risk oriented health habits among respondents.

It is clear from the table 1 that using polythene bags was most prevalent as a poor environmental habit among the

respondents as all of the respondents were using polythene bags (100%) followed by using mud stoves without chimney by females/ smoking by male (78.5%), open garbage disposal (77.0%) and washing clothes or taking bath near water bodies (49.0%).

Table 1: Nature of environmental risk oriented habits among respondents

n=200

Habits	State								Total (200)	Rank
	Haryana (100)				Rajasthan (100)					
	Rural (50)		Urban (50)		Rural (50)		Urban (50)			
	Men (25)	Women (25)	Men (25)	Women (25)	Men (25)	Women (25)	Men (25)	Women (25)		
Using chulha without chimney/ smoking in males	18 (72.0)	18 (72.0)	22 (44.0)	17 (68.0)	17 (68.0)	19 (76.0)	21 (84.0)	25 (100.0)	157 (78.5)	II
Washing clothes & taking bath near water bodies	7 (28.0)	15 (60.0)	12 (48.0)	19 (76.0)	8 (32.0)	12 (48.0)	13 (52.0)	12 (48.0)	98 (49.0)	IV
Open garbage disposal	21 (84.0)	20 (80.0)	18 (72.0)	21 (84.0)	16 (64.0)	17 (68.0)	20 (80.0)	21 (84.0)	154 (77.0)	III
Use of polythene bags	25 (100.0)	25 (100.0)	25 (100.0)	25 (100.0)	25 (100.0)	25 (100.0)	25 (100.0)	25 (100.0)	200 (100)	I

Figures in parenthesis are percentages

Interstate difference in nature of environmental risk oriented habits

As shown in table 2, majority of the respondents from both the states i.e. Rajasthan (75%) and Haryana (82%) were either using *chulha* without chimney or male members were indulged in smoking which is a major cause of indoor air pollution and no state wise significant difference was observed on this issue. Washing clothes and taking bath near water bodies was done by 53.0 % respondents of Haryana and 45.0 % of Rajasthan respondents and no significant difference was found. Open garbage disposal was done by 80.0 % respondents of Haryana and 74.0 % respondents of Rajasthan and again no significant difference was found. Use of polythene bags was done by all respondents irrespective of state and accordingly there was no need to apply 't' test.

Table 2: Interstate difference in nature of environmental risk oriented habits n= 200

Habits	Haryana (100)	Rajasthan (100)	't' Value
Using chulha without chimney/ smoking in male	75	82	1.13
Washing clothes & taking bath near water bodies	53	45	1.12
Open garbage disposal	80	74	1.00
Using polythene bags	100	100	Not applicable

* Significant at 5 percent level of significance ; frequency and percentages are same.

Inter Gender difference in nature of environmental risk oriented habits:

Majority of the male respondents (78.0 %) were smoking and 79.0 % of females were using chulha without chimney leading to air pollution showing no significant difference.

in the number (Table 3). Washing clothes & taking bath near water bodies by respondents was done by 40.0 % of male respondents and 58 % of female respondents. The number of female respondents was significantly more than male respondents in polluting water bodies('t' value 2.57*). Open garbage disposal was done by 75.0 % of male respondents and 79.0 % p of female respondents. No significant difference was found regarding this habit. Use of polythene bags was done by all the respondents irrespective of gender.

Table 3: Inter Gender difference in nature environmental risk oriented habits n=200

Habits	Male (100)	Female (100)	't' Value
Using chulha without chimney/ Smoking in males	78	79	0.14
Washing clothes & taking bath near water bodies	40	58	2.57*
Open garbage disposal	75	79	0.66
Using polythene bags	100	100	Not applicable

* Significant at 5 percent level of significance; frequency and percentages are same.

Intra gender difference in nature of risk oriented health habits (male):

It is shown in table 4 that air pollution by smoking was done by majority of male respondents of Haryana and Rajasthan i.e. 80.0 % and 76.0 %, respectively. Washing clothes and taking bath near water bodies was 38.0 % and 42 % male respondents of Haryana and Rajasthan, respectively. Open garbage disposal was done by 78 % Haryana male respondents and 72 % Rajasthan male respondents. Use of polythene bags was done by all the male respondents irrespective of state. No significant difference

was observed in number of male respondents in terms of any of the environmental risk oriented habits.

Table 4: Intra gender difference in nature of environmental risk oriented habits (male) n=100

Habits	Haryana (50)	Rajasthan (50)	't' Value
Using chulha without chimney/ smoking in males	40 (80)	38 (76)	1.84
Washing clothes & taking bath near water bodies	19 (38)	21 (42)	0.41
Open garbage disposal	39 (78)	36 (72)	0.57
Using polythene bags	50 (100)	50 (100)	0

Figures in parentheses indicate percentages

Intra gender difference in nature of risk oriented health habits (female) :

Use of chulha without chimney which is a major cause of air pollution by was done by majority of female respondents of Haryana and Rajasthan (70.0 % and 88.0 %, respectively). Washing clothes & taking bath near water bodies was also done by majority of female respondents of Haryana (68.0 %) and nearly half of the female respondents of Rajasthan (48.0%). Open garbage disposal was done by 82.0 % of Haryana female respondents and 76.0 % Rajasthan female respondents. Use of polythene was done by all the females irrespective of state (Table 5).

Table 5: Intra gender difference in nature of risk oriented health habits (female) n=100

Habits	Haryana (50)	Rajasthan (50)	't' Value
Using chulha without chimney/ smoking in males	35 (70)	44 (88)	1.72
Washing clothes & taking bath near water bodies	34 (68)	24 (48)	1.53
Open garbage disposal	41 (82)	38 (76)	0.56
Using polythene bags	50 (100)	50 (100)	0

Figures in parentheses indicate percentages

Discussion and conclusion

All the respondents were using polythene bags as it was perceived very convenient and economical to use. Majority of respondents were polluting air either by using chulha without chimney by female or smoking by male followed by polluting soil by open garbage disposal (77%) and washing clothes and taking bath near water bodies resulting into water pollution (49%). Use of chulha was done by the respondents because they cannot afford gas chulha due to economic hardship. The results were in close agreement with the study by Bruce et al. (2000) who reported that people in developing countries, rely on coal and biomass in the form of wood, dung and crop residues for domestic energy leading to high levels of air pollution, to which women and their children are exposed .It also emerged during the discussion with respondents that even the families who were having gas stoves also used chulhas for heating water and chapatti making due to free availability of fuel and better taste of chulha cooked chapatties. More number of the respondents from Rajasthan were engaged in air polluting activities while Haryana respondents

outnumbered them in soil and water polluting activities, however, non significant difference was observed among their numbers More women were involved in water polluting activities like washing clothes as compared to men due to the fact that collection of water for family and household use is the sole responsibility of female members. In order to save their time and energy they might have used the place near water source for washing clothes.

It is therefore suggested to make rigorous efforts to create awareness about consequences/ health hazards due to risk oriented environmental habits. The results of the study indicated that though the maximum number of respondents exhibited poor environmental habits but their awareness level about its consequences was negligible.

Reference :

1. Bonita, R. 1999. Smoke and its harms for mankind. *Tobacco control*. 8:156-160.
2. Bruce, N., Padilla, R. and Albalak, R. 2000. Indoor air pollution in developing countries: a major environmental and public health challenge. *Bulletin of the World Health Organization*. 78 (9):1088-1089
3. Hussain et al. 2003. Impact of Environmental Pollution on Human Behaviour and Uplift of Awareness Level Through Mass Media Among the People of Faisalabad City. *International Journal of Agriculture & Biology*. 5(4): 660-661.
4. Ranjan, S. 2011. Facts about water pollution.URL: <http://www.buzzle.com/articles/facts-about-water-pollution.html>