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Awareness about environmental pollution in rural children

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Abstract

The study was conducted in rural area of Hisar district of Haryana. A sample of 120 children of primary and middle grade from four schools of two villages was taken for the present study. To find out the existing level of awareness of selected young children regarding environmental pollution questionnaire cum interview schedule was prepared. Majority of the parents of the respondents were illiterate and were engaged in labouring activities and having monthly income below Rs. 5000. Most of the families were having inadequate house and public facilities and had less religious beliefs and the influence of media was also less. The obtained data showed that the awareness of the respondents regarding air, water, soil, noise, flora and fauna was higher after existing level of awareness of the respondent regarding environment pollution was less. They were less aware about air, soil, flora and fauna and noise pollution but their awareness was better in case of water pollution.

Keywords: Environmental pollution, rural children, awareness.

Introduction

Man has lived for centuries in the harmony with nature and such symbiotic relationship with nature has shaped human development until the beginning of industrial era. It is the human invention in the natural process, particularly during the last few decades, which has created ecological destabilization and environmental problems of serious magnitude and these environmental problems are air, water, soil, flora and fauna and noise pollution. According to Central Pollution Control Board (1998) air pollution refers to the presence of any substance in the atmosphere in such a concentration that may tends to be injurious to human beings and other creatures, or to the plant.

Water is another component which is essential for survival of life on earth but in present state it is very hard to find even a drop of water, pollution free. Careless practices and usage of water are leading to its pollution. Water pollution may lead to harmful water borne diseases as malaria, diarrhoea, yellow fever, hepatitis, cholera, typhoid and sleeping sickness etc. Another component which harms to environment is noise. Today noise pollution has become almost an unavoidable factor. It has been reported that constant noise affects the hearing capacity of an individual (Jain, 1993).

Soil is living community of micro-organisms such as algae and fungi.. Soil erosion is the major cause of land degradation and it is also polluted by the use of pesticides because excess quantities of pesticides ultimately find its way into the soil. Besides all these garbage and plastics products left open is visible in almost every third lane of a city, leading to infectious diseases.

Flora and Fauna including both plant and animal species are threatened due to various development programmes like creation of reservoirs, mining, forest cleaning baying of transport and communication network etc.

Rural communities are illiterate and are characterized by ignorance regarding healthy way of living and continue to practice age old and unhygienic way of life. So to educate people especially rural children about their unhealthy practices, environment education are a recent educational intervention to cope with the problem of environmental deterioration (Sharma, 1994). Rao (1993) reported that if we educate children about environment at school, this will foster an eco-friendly attitude into children, which often carry these experiences, attitude and thoughts into adulthood. Dighe (1993) revealed that adults concerned for the future of the environment should help young children in their care to become responsible care taker of the earth.

Keeping all these facts in mind present study was undertaken as an endeavor in entailing to find out the existing level of awareness and practices in young children regarding environment.

Methodogy

The existing level of awareness and practices in rural young children regarding environment was assessed. Rural area of Hisar district of Haryana State was selected purposely. For the selection of area a list of blocks was prepared and from this list one block was taken randomly. From the selected block, two villages, Bhojraj and Dahima were taken purposely. One school from each selected village was taken randomly to meet the requirements of the present study. Keeping in view the requirements of the study V, VI, VII classes were taken purposively. The age criteria were 10-12 years. A sample of 60 children of primary and middle grade from each school was taken. Thus a total sample of 120 children was the final sample for the present study.

Tools for data collection: In accordance with the specific objectives of the study an observation check list, self developed questionnaire cum interview schedule were prepared in the light of available literature. The first part of the questionnaire cum interview schedule contained the general information about the respondents and their families, house and public facilities, religious believes and 2nd part contained specific information about the environment pollution or environment awareness. The prepared schedule was sent to 20 experts for the evaluation. After getting professional opinion, necessary modifications were made in questioner cum interview schedule and then it was finalized.

Results and Discusion

The results and discussions of the study were accordingly organized and presented under the following heads:

- Profile of the respondents
- Level of awareness of respondents regarding environmental related practices

Profile of Respondents

Table 1 makes it clear that more than sixty per cent (60.8%) of the respondents were female followed by 39.2 per cent male respondents. Majority (85%) of the respondents had first or second order birth while, 15 per cent has their birth order third or more. Majority of the respondents (75.8%) hailed from nuclear families, whereas 22.2 per cent of them belonged to joint families. The trends of mother's education showed that 59.2 per cent were illiterate, 23.3 per cent were educated upto middle followed by 17.5 per cent educated above middle. Fifty five per cent of the fathers of the respondents were illiterate, 24.2 per cent were educated above middle while 20.8 per cent were educated up to middle. Results showed that 48.3 per cent of the parents were engaged in laboring, while 35.0 per cent were farmers, followed by 16.7 per cent who engaged in service and other activities. The data regarding family income indicated that majority (64.2%) of the families earned up to Rs. 5000 while 35.8 per cent families earned above Rs. 5000/month.

Table1. Personal and socio-economic profile of respondents

N=120

Variables	Frequency	Percentage
Gender		
Male	47	39.2
Female	73	60.8
Family type		
Nuclear	91	75.8
Joint	29	22.2
Mother education		
Illiterate	71	59.2
Up to middle	28	23.3
Middle and above	21	17.5
Father education		
Illiterate	66	55.0
Up to middle	25	20.8
Middle and above	29	24.2
Parental occupation		
Labour	58	48.3
Farming	42	35.0
Service and Business	20	16.7
Monthly income		
Up to Rs. 5000	77	64.2
Above Rs. 5000	43	35.8
House and public facilities		
Inadequate (7-14)	58	48.4
Somewhat adequate (15-22)	37	30.8
Adequate (23-30)	25	20.8
Extent of religious belief		
Below average (2-12)	48	40.0
Average (12-22)	42	35.0
Above average (22-33)	30	25.0
Parental knowledge regarding Environmental pollution		
Low (0-20)	87	72.5
High (21-41)	33	27.5
Media impact		
Low (0-14)	78	65.0
High (15-29)	42	35.0

It is clear from the results that 48.4 per cent of the families were having inadequate facilities followed by 30.8 per cent having somewhat adequate facilities and 20.8 per cent

were those who were having adequate facilities. Results showed that 40 per cent of the parents of the respondents were belonging to the below average religious belief category followed by 35.0 per cent parents who had average religious belief and 25.0 per cent parents were having high religious belief about environmental pollution. It was revealed that majority of the respondents (72.3%) had low level of knowledge about environmental pollution followed by 27.5 per cent, who were having high level of knowledge. Data revealed that 65.0 per cent parents had low influence of mass media followed by 35.0 per cent of the parents who were highly influenced by mass media. Sodhi *et al.* (1992) established the fact that the television occupied a special status among other mass media because it shows various programms related to the environment i.e. recycling methods of disposal of waste, there by leading to awareness and favorable attitude towards environment. Rockland (1995) studied the children's awareness about the environment and he concluded that there was a significant increase in knowledge i.e. seventy four percent of the student learns about the environment from television and 31 percent from newspapers.

Existing Status of Respondents Regarding Environmental Pollution

General awareness of the respondents regarding environmental pollution: The table 2 showed that 50 per cent of the respondents had low level of knowledge about environment pollution followed by 36.6 per cent respondents having middle level of knowledge and only 13.4 per cent having high level of knowledge. Pruthi *et al* (2004) found that, the selected respondents were concerned about the present status of the environment. At the local level, they have not only shown high concern about deteriorating landscape and air and water pollution as serious health hazards but also felt the need to utilization of local resources in decentralized production and promotion of devices using alternative sources of energy. Bhole (2002) presented an overview of environmental awareness and education at various levels. He stressed courses at various levels cover the many aspects of pollution i.e. cause, prevention and control. These are concerned with everyone's life and hence knowledge about environmental aspects at various levels of education is essential.

Table 2. Existing level of awareness of the respondents regarding environment pollution

N=120

Sr. No.	Variables	Frequency	Percentage
1.	Environment pollution		
	Low (0-14.3)	60	50.0
	Medium (14.4-28.7)	44	36.6
	High (28.8-43.0)	16	13.4
2.	Air pollution		
	Low (2-13.6)	67	55.8
	Medium (13.7-25.3)	30	25.0
	High (25.4-37.0)	23	19.2
3.	Water pollution		
	Low (25-39.6)	47	39.2
	Medium (39.7-54.3)	60	50.0
	High (54.4-69.0)	13	10.8
4.	Soil pollution		
	Low (12-27.3)	58	48.4
	Medium (27.4-42.7)	29	24.2
	High (42.8-58.0)	28	23.4
5.	Flora and fauna		
	Low (22-42.6)	66	55.0
	Medium (42.7-63.3)	45	37.5
	High (63.4-84.0)	9	07.5
6.	Noise pollution		
	Low (16-38.6)	76	63.3
	Medium (38.7-61.3)	24	20.0
	High (61.4-84.0)	20	16.7

Awareness of the respondents regarding air pollution: It was revealed from the data that 55.8 per cent of the respondents scored low score followed by 25 per cent scored average and 19.2 per cent scored high score regarding air pollution. Dharey and Co-Worker (1999) gave the suggestion, to increase the awareness among the rural children; environmental education should be introduced in the course curriculum at all level of education including primary school.

Awareness of the respondents regarding water pollution: Table showing that half (50%) of the respondents were in the medium category and 39.2 per cent were in the low category while 10 per cent had the correct information about water pollution.

Awareness of the respondents regarding soil pollution: Results showing that nearly half of (48.4%) the respondents were not aware about soil pollution, while nearly 24.2 per cent were having somewhat awareness about soil pollution and 23.4 per cent respondents were highly aware about soil pollution.

Awareness of the respondents regarding flora and fauna: It was revealed that 55 per cent were the low scorers followed by 37.5 per cent average scorers and 7.5 per cent were the high scorers.

Awareness of the respondents regarding noise pollution: More than half (63.3%) of the respondents were less aware about noise pollution, followed by 20 percent of the respondents having the appreciating knowledge and 16.7 per cent were those who having the high level of knowledge about noise pollution.

Table 3. Composite score of existing level of awareness of respondents regarding environmental pollution

N=120

Category	Frequency	Percentage
Low (0-28)	56	46.7
Medium (29-56)	42	35.0
High (57-84)	22	18.3

Composite score of existing level of awareness of respondents regarding environmental pollution

It was revealed from the data that majority of the respondents (46.7%) were not aware about environmental pollution followed by 35 per cent who having medium knowledge and only 18.3 per cent having high knowledge (Fig. 1).

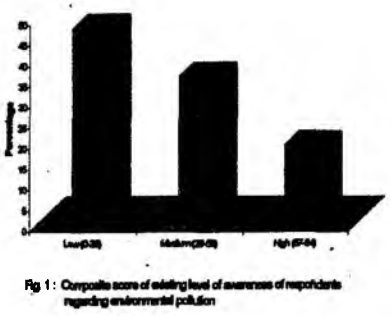


Fig 1 : Composite score of existing level of awareness of respondents regarding environmental pollution

Conclusion

The obtained data showed that the existing level of awareness of the respondents regarding environmental pollution was less they were less aware about air, soil, flora and fauna and noise pollution but their awareness was better in case of water pollution.

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