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### RESEARCH ARTICLE

#### ENVIRONMENTAL SANITATION PRACTICES AMONG RURAL COMMUNITY

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#### Abstract

**Introduction:** Proper sanitation promotes health, improves the quality of the environment and thus, the quality of life in a community. Sanitation refers to the safe collection, transportation, treatment and disposal of human wastes. It is a fundamental health service without which there cannot be any improvement in the state of community health. It is both public and private element, and the individual's hygiene can affect the whole community. Improving the sanitation within a community leads to an improvement in health. Thus, sanitation is an integral component of environmental protection, which ensures a productive life.

**Methodology:** In this pre-experimental study, 200 households of rural community in the age group of 20-60 years were selected as the samples for the study by using total enumeration sampling technique. The data was collected by using observational checklist on environmental sanitation. Data analysis was performed by descriptive statistics and inferential statistics. SPSS-17 software was used and P values less than 0.05 were considered significant.

**Result:** In the pre test [mean=12.2, SD=2.2], majority of the rural community had poor environmental sanitation practices and in the post test [mean =25.9, SD=3.0], majority of the rural community had good environmental sanitation practices.

**Discussion:** The result shows that there was improvement in practices regarding environmental sanitation practices after implementation of "HEALTH EDUCATION" on environmental sanitation practices which was calculated at 0.05 level of significance. So, it is concluded that the "HEALTH EDUCATION" on environmental sanitation practices has an effect on to improve poor and average environment sanitation practices.

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#### Introduction:-

Lack of environmental sanitation and unhygienic practices facilitates the transmission of pathogens resulting in many potential diseases. Bacteria, parasites and worm that live in the excreta cause diseases like typhoid, dysenteries, diarrhea, cholera, hookworm infections, viral hepatitis, poliomyelitis and other intestinal infections and parasitic infestation is hold responsible by the inadequate and unsanitary disposal of human excreta. Efforts to improve hygiene and sanitation must aim to reduce transmission of infectious agents. Environmental hygiene are activities aimed at improving or maintaining the standard of basic environmental conditions affecting the well being of people. These conditions include clean and safe water supply, clean and safe ambient air, efficient and safe animal, human, and industrial waste disposal, protection of food from biological and chemical contaminants, and

adequate housing in clean and safe surroundings. Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes. Hazards can be physical, microbiological, biological or chemical agents of disease. Sanitation. Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and excreta disposal. The waste is generated as consequences of household activities such as the cleaning, cooking, repairing empty containers, packaging, huge use of plastic carry bags. Many times these waste gets mixed with biomedical waste from hospitals and clinics. There is no system of segregation of organic, inorganic and recyclable wastes at the household level. Door-to-door collection is rarely practiced community collection bins are poorly managed and are usually no more than open dumps on the roadside. Impact on disease burden due to inadequate and unsafe water, lack of sanitation and poor hygiene behavior is a complex issue during 2006 and 2007, sulabh international academy of environmental sanitation carried out a study, supported by WHO to review and analyze regional, national, state and district level data of water supply and sanitation coverage and correlate the same with selected infectious disease. Almost fifty per cent of the developing world's population – 2.5 billion people lack improved sanitation facilities, and over 884 million people still use unsafe drinking water sources. Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day, and leads to impoverishment and diminished opportunities for thousands more. Poor sanitation, water and hygiene have many other serious effect.

### **Materials And Methods:-**

The methodology of research indicates the general pattern for organizing the procedure for gathering valid and reliable data for an investigation. In this present study a “Quantitative research approach” was used. The research design selected for this study was “pre-experimental one group pretest - posttest design”. HEALTH EDUCATION” on environmental sanitation practices was independent variable, environmental sanitation practices was dependent variable and age, educational status, monthly income, type of house , no. of rooms , reared cattle and source of information of households were demographic variables. The present study was conducted at Panthal village, Distt. Reasi, J&K and the accessible population was households had poor environment sanitation practices was present at the age of 20-60 years at the time of data collection and fulfills the inclusion and exclusion criteria. Total enumeration sampling technique was used to select the sample of 200 houses of rural community. The households who were Between 20-60 years willing to participate and observation checklist on environmental sanitation practices was used to check the practices of households regarding environmental sanitation practices. Content validity of the tool was made and necessary modifications were made according to the expert's opinion and tool was finalized. Ethical approval to conduct the study was obtained from sarpanch of Panthal village, Distt. Reasi. Written informed consent was obtained from the study subjects regarding their willingness to participate in the research project. Demographic variables were collected by using interview technique and privacy was provided. Ethical principles were adhered too throughout the study. After selecting the sample, researcher introduced himself and explained the purpose of the study to the households of rural community. For experimental group in the pre -test, demographic variable and observation checklist was collected. After that One or two members of these 200 households of rural community who were available at the time of data collection were called at designated places in the village and “HEALTH EDUCATION” on environmental sanitation practices according to planned schedule was acted by nursing students for them. After “HEALTH EDUCATION” weekly reinforcement for good environmental sanitation practices was given to the households. After one month of “HEALTH EDUCATION” on environmental sanitation practices post test observation of households' practices was done by using same observational checklist. Data collection procedure terminated by thanking the household for their Co-operation. According to the objectives the data was organized, tabulated. The data was analyzed by using both descriptive and inferential statistics i.e. Frequency, Percentage, Mean and Standard deviation, Paired “t” test.

### **Result:-**

#### **Demographic variables description**

Demographic variables were age, educational status, monthly family income, house type, no. of rooms, reared cattle and source of information of households. The above reveal that the obtained “t” value was found to be significant at the level of  $p < 0.05$ . It is inferred that the rural community with poor environmental sanitation exposed to “HEALTH EDUCATION” on the environmental sanitation had significant increase in post-test score. The above figure reveal that the Mean  $\pm$  SD pre-test score (12.2 $\pm$ 2.2) of environmental sanitation was lesser than the Mean  $\pm$ SD post-test score (25.9 $\pm$  3.0) of environmental sanitation. Therefore it can be interpreted that there was significant

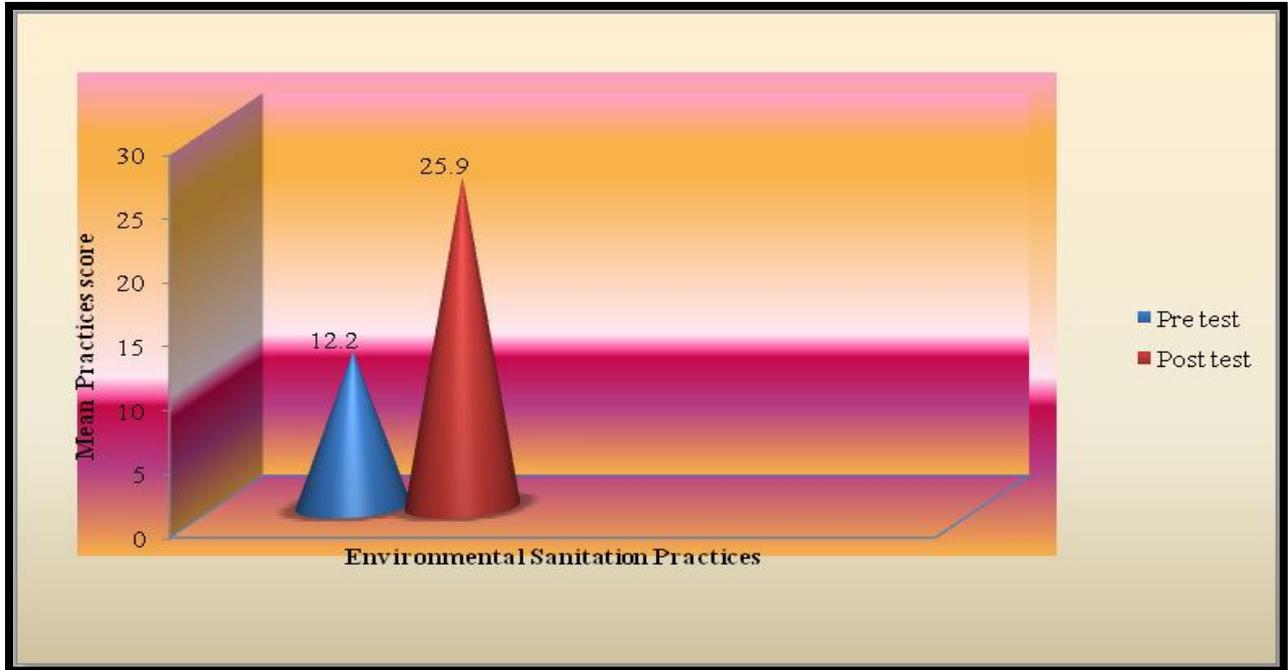
difference between pre test and post test score of environment sanitation practices. It was inferred that the "HEALTH EDUCATION" on environmental sanitation practices has an effect on to improve poor and average environment sanitation practices.

**Table 1:-** Distribution of households based on their demographic variables such as, age, educational status, monthly family income, house type .no. of rooms, reared cattle and source of information.

S. No	Demographic variables	Households with poor and average environmental sanitation practices	
		f	%
1.	Age ( years)		
a.	20 – 30	31	15.5
b.	31 – 40	70	35
c.	41 – 50	60	30
d.	51 – 60	39	19.5
2.	Educational Status		
a.	Illiterate	48	24
b.	Primary	95	47.5
c.	Secondary	35	17.5
d.	Graduates & above.	22	11
3.	Monthlyfamily income (in Rs.)		
a.	<5000	40	20
b.	5000-6000	50	25
c.	6001-7000	39	19.5
d.	>7000	71	35.5
4.	house type		
a.	Kacha	35	17.5
b.	Pucca	50	25
c.	Semi-pucca	115	57.5
5.	Number of rooms		
a.	2	80	40
b.	3	90	45
c.	4	26	13
d.	>4	4	02
6.	Reared cattle		
a.	Yes	150	75
b.	No	50	25
7.	Source of information		
a.	Television	95	47.5
b.	Radio	50	25
c.	Newspaper	20	10
d.	Resource person	35	17.5

**Table 2:-** Comparison of mean pre and post test environment sanitation Practices N=200.

Group	Mean	SD	't' test value
Pre-test	12.2	2.2	48.156
Post-test	25.9	3.0	



**Figure 1:-** Comparison of mean pre and post score of environmental sanitation practices among rural community.

### Discussion:-

The study was conducted using a pre-experimental design subject were selected by total enumeration sampling technique. The sample size was 200.

#### The first objective of the study Assessment of pre existing environmental sanitation practices:

It revealed that out of 200 houses, most of the rural area in Panthal village observed poor (14.84%) and (12.32%) had average Environmental sanitation practices. The pre-test score [mean =12.2, SD= 2.2], the investigator feels that by assessing the existing practices we can identify their previous exposure regarding environmental sanitation practices.

#### Sample characteristics:

Maximum no. of household with poor and average environmental sanitation practices fall in the age group of 31-40yrs (35%) were educated up to primary education (47.5%). Most of the household had semi pucca (57.5 %) houses with three living rooms (45%) . Most of them were earning more than Rs 7000/ and were rearing cattle (75%). Television (47.5%) was the most popular informational source regarding environmental sanitation practices.

#### The second objective of the study was to check the effectiveness of “HEALTH EDUCATION” On environmental sanitation practices:

The Mean  $\pm$  SD pre-test score (12.2 $\pm$ 2.2) of environmental sanitation was lesser than the Mean  $\pm$ SD post-test score (25.9 $\pm$  3.0) of environmental sanitation. It was found to be statistically significant where ‘P’ value (0.000) is less than the 0.05 level of significance. Hence, the null hypothesis ( $H_{01}$ ) rejected and inferred that findings are significant. Therefore it can be interpreted that there was significant difference between pre test and post test score of environment sanitation practices and it was inferred that the “HEALTH EDUCATION” with reinforcement on environmental sanitation practices has an effect on to improve poor and average environment sanitation practices.

### Conclusion:-

It was found that “HEALTH EDUCATION” on environmental sanitation had an effect in improving the environmental sanitation practices among rural community.

**References:-**

1. Choudury, N. and Mohammad, AH. 2006. Exploring the current Status of Sanitary latrine use in shibpur Upazila, Narsingdi district. BRAC report. Nov 2006.
2. Nath, KJ. 2010. Impact of inadequate sanitation and poor level of hygiene perception and practices on community health. Sulabh International Academy of Environmental
3. Sanitation. [Cited on 12<sup>th</sup> November]; Available from: <http://whoindia.org/linkfiles/sanitationimpact>.
4. Park, K. 2009. Textbook of preventive and social medicine. 20<sup>th</sup> ed. Jabalpur: Banarasidas
5. Bhanot publishers; p. 498-509.
6. Pathan, AKB. 2009. **Domestic Waste: Hazard to the Life and Its Effect on Human Being** Lawyer and LL.M. student From Nagpur [online]. 2006 [cited on Nov20]; Available from: URL: [http://azim\\_pthan@legalserviceindia.com](http://azim_pthan@legalserviceindia.com).
7. Pattanayak, SK., Yang, JC., Dickinson, KL., Poulos, C., Patil, SR., Mallick, KR., et al., 2009.
8. Shame or subsidy revisited: social mobilization for sanitation in Orissa. Bull of the World Health Organization (BLT). 87(8): 580-587.
9. Tilley, E., Ulrich, L., Luthi, C., Reymond, Ph. and Zurbrugg, C. 2014. Compendium of sanitation system and technologies. Swiss Federal Institute of Aquatic Science and Technologies. 2<sup>nd</sup> revised ed. Duebendorf ,Switzerland. Nov; Available from: URL: <http://en.wikipedia.org/wiki/sanitation/>.
10. Environmental sanitation business Dictionary.com. 2017 May retrieved. Available from: <http://www.businessdictionary.com/definition/environmental-sanitation.html>
11. Unite for children. UNICEF Geneva 10, Switzerland. Update: 6 July 2010. Available from: URL <http://www.unicef.org/wash/>.