

## YOUTH'S ECOLOGICAL CONCERN ABOUT PLASTICS

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### ABSTRACT

Earth is the only planet, among the nine around the sun which supports life. We live on earth in different types of surroundings. But when the negative aspects of the industrialization and the growing danger of resulting environmental pollution came to the forefront man realized that ignoring environment while fulfilling the needs of the human beings cannot go a long way. Problems related to the environment are not limited to one place or area, one industry or two industries, one community or three, one nation or a few nations, these problems encircle almost all the living beings on this earth. Therefore, every individual should feel responsible for the well being of the environment. Awareness about environment is necessary to facilitate conservation and regeneration of the environmental resources. Generally when we talk about environmental awareness we think about water, trees, soil, rivers, air or greenery etc. But there is one thing also present in our daily life which is very harmful and devastating destructor of our life and ecological balance, that is "PLASTIC". Right from the colourful carry bags available in the market to the utensils used in kitchens, agricultural tools, locomotives, in house constructions, defence equipments and electronics together with many other fields, plastic is the most popular one. The hazards plastics pose are numerous. After use, like any other substance it is thrown out in the waste by which the land gets littered by plastic bag garbage, presenting an ugly and unhygienic scene. The "Throw away culture" results in these bags finding their way into the city drainage system, the resulting blockage causes inconvenience, difficulty in maintaining the drainage with increased cost, creates unhygienic environment resulting in health hazards and spreading of water borne diseases. Unlike any other material it is non-degradable which does not get decomposed in the environmental conditions. This gives rise to many ecological problems. Taking this into consideration a study was conducted to find out the youths ecological concern about plastics since they are considered as the future of the country. The major objective of the study was to find out the existing level of awareness of the youth about the hazardous effects of plastics and their attitude towards plastics. The findings of the present study will be useful to the NGOs, government organizations and educational institutions to bring about desired change in the awareness, attitude and practices of today's youth.

**Key Words :** Ecological concern, Plastics, Environment, Non-degradable, Water borne disease

### INTRODUCTION

Earth is the only planet, among the nine around the sun which supports life. We live on

earth in different types of surroundings. But when the negative aspects of the industrialization and the growing danger of resulting

environmental pollution came to the forefront man realized that ignoring environment while fulfilling the needs of the human beings cannot go a long way. Problems related to the environment are not limited to one place or area, one industry or two industries, one community or three, one nation or a few nations, these problems encircle almost all the living beings on this earth. Therefore, every individual should feel responsible for the well being of the environment.<sup>1</sup> Awareness about environment is necessary to facilitate conservation and regeneration of the environmental resources. Generally when we talk about environmental awareness we think about water, trees, soil, rivers, air or greenery etc. But there is one thing also present in our daily life which is very harmful and devastating destructor of our life and ecological balance, that is "PLASTIC". Right from the colourful carry bags available in the market to the utensils used in kitchens, agricultural tools, locomotives, in house constructions, defence equipments and electronics together with many other fields, plastic is the most popular one. The hazards plastics pose are numerous. After use, like any other substance it is thrown out in the waste by which the land gets littered by plastic bag garbage, presenting an ugly and unhygienic scene. The "Throw away culture" results in these bags finding their way into the city drainage system, the resulting blockage causes inconvenience, difficulty in maintaining the drainage with increased cost, creates unhygienic environment resulting in health hazards and spreading of water borne diseases. Unlike any other material it is non-degradable which does not get decomposed in the environmental conditions. This gives rise to many ecological problems. Plastics also have some very disastrous effects on the health of human beings other than its property of non-biodegradability. For eg. PVC, which is used to make pipes, in windows and doors can cause cancer. Polycarbonate which is used in machine packing, is obtained from phosphene and phenol molecules. Phosphene is a very

poisonous and suffocating gas and causes depletion of ozone layer, ultimately increases ultra violet rays on earth. Among the 47 chemical plants ranked highest in carcinogenic emissions by the Environmental Protection Agency (EPA), 35 are involved in plastic production. Certain plastics such as polyvinyl chloride (PVC), used for indoor and outdoor plumbing, electrical cables and countless other products, are potential sources of highly toxic dioxins when burned in municipal incinerators or in accidental fires. Polystyrene foam products are often made with chloro-fluorocarbons (CFCs) and hydro chloro-fluorocarbons (HCFCs), both of which are ozone-destroying chemicals.<sup>2</sup>

A review of relevant literature revealed that though a number of studies have been done related to environmental ecological issues but none has been done related to plastics and this area is relatively less explored but it is fast gaining attention and importance in India. The present study would make valuable contributions in gathering information about the awareness and attitude of youths about plastics. The findings of the present study will be useful to the non government and government organizations. They also will be beneficial to educational institutions, like the Faculty of Home Science, because in order to make the educational programmes practical, the need of the people has to be found out as the first step. Home Science as one of the applied sciences can help to bring about desirable changes in the awareness, attitude and practices of the youths.<sup>3</sup>

### OBJECTIVES

1. To find out the existing level of awareness of the youths about the hazardous effects of plastics.
2. To find out the attitude of the youths about plastics.

### MATERIAL AND METHODS

#### Research Design

The main purpose of the present investigation was to study youths ecological

concern about the hazardous affects of plastics. As it was an attempt to discover relationship between existing variable, descriptive research design was considered to be the most suitable one.

#### **Variables under study**

There are three sets of variables selected for the present study.

#### **A. Independent Variables**

##### **Personal variables**

1. Age of Respondent
2. Education of Respondent

#### **B. Situational Variables**

1. Family Income per month
2. Extent of use of sources of information

#### **C. Intervening variables**

1. Awareness about the hazardous effects of plastics
2. Attitude towards plastics

#### **Description of the Tool**

Questionnaire was used as an instrument for collecting data .The questionnaire was constructed keeping in view the objectives of the study. It comprised of 3 sections:

Section I contained questions to elicit background information of the respondents. It also contained a rating scale to find out the extent of use of sources of information.

Section II comprised of a rating scale to examine the ‘awareness about hazardous affects of plastics’ of the respondents. The scale contained statements aiming to measure awareness of the respondents regarding various harmful aspects of plastics to human beings and ecological balance. Response were recorded on two point scales ‘correct’ or ‘incorrect’.

Section III was a Likert type attitude scale constructed to asses the attitude of youths towards plastic. It contained statements pertaining to harm / pollution caused by plastics and their ecological responsibility as a consumer / user. Responses were recorded on three points ‘Agree’, ‘Undecided’ or ‘Disagree’.

### **Major Findings**

#### **Background Information of the Respondents**

The background information included age, education level, income of the family and source of information to which the respondents were exposed about the hazardous effects of plastics. The sample surveyed showed that just about half of the respondents i.e. 46.67 percent of the respondents were 16 to 18 years of age. Almost one third of the respondents i.e. 33.33 percent were above the age of 18 and above years. It was found that almost half (48.33%) of the respondents had monthly family income ranging from Rs. 15,001 to 25,000. The mean monthly income of all the respondents was found to be Rs. 16,258.33. The sample surveyed showed that majority of the youths fall in the low score category which showed that they had a low extent of exposure to the sources of information about the problems of plastics to environment.

Study revealed that 20% of the respondents always discussed about the problems caused by plastics with their friends, neighbours or relatives. None of the respondents had heard about this in radio. Majority of respondents had never seen anything regarding this problem on television, magazines, internet. About one third of the respondents sometimes read about hazardous affects of plastics in the newspaper and almost half of the respondent sometimes discussed this problem with their friends / relatives / neighbours. It was found that very few of the respondents were exposed to the sources of information.

Study revealed that only 3.33 percent of respondents had high level of awareness and more than half i.e. 63.33 percent of respondents had low level of awareness.

From the above findings it can be said that most of the respondents had low level of awareness and it is necessary to impart more, correct and recent information about the

harmful affect of plastics. The study revealed that more than half of the respondent were aware that chemicals in the production of plastics cause rashes on skin. Again more than half i.e. 63.33% agreed that plastics thrown away block drainage system and make it unhygienic, half (53.33%) of the respondents were aware that everyday tonnes of plastic is getting accumulated in our hill stations, only one fourth of the respondents were aware about

the non-degradable nature of plastics. There were only 3.33 percent respondents who know that plastics toys are harmful for babies; PVC can cause cancer and asthma and the cancer causing particles can seep into food covered with plastic wrap during microwave cooking.

Thus it was an evident that the respondents were not aware about the latest and recent researches which have found the ill effects of plastics.

**Table 1 : Frequency and percentage distribution of respondents according to their attitude towards plastics**

Attitude	Respondents	
	f	%
Favorable	26	43.33
Neutral	28	46.67
Unfavorable	6	10.00
Total	60	100

The study revealed that almost equal percentage of respondents had favourable and neutral attitude toward plastic. Only 10 percent of the respondents had an unfavourable attitude towards plastics.

#### **Testing of Hypothesis**

The testing of hypothesis revealed that there was no relationship between age, education, employment status and income of the respondents with their awareness about hazardous effects of plastics and their attitude towards plastics. However there was a positive correlation between exposure to sources of information with the awareness of the respondents about hazardous effects of plastics and negative correlation between exposure to sources of information with the attitude of the respondents towards plastics. The awareness of the respondents about hazardous effects of plastics and their attitude towards plastic were negatively correlated i.e. as the awareness increased the attitude became negative.

#### **CONCLUSION**

It was found out that the youths had low level of awareness about hazardous effects of plastics. They were not aware of the latest information related to adverse effects of plastics on health and ecology. Since last 1997 protests, mostly by several small NGO's, can be seen across the country. This has helped in creating some mass awareness. There have been a paradigm shift to cloth bags and paper in many shops and supermarkets. All this has also led to government legislation in India to curtail the use of plastic carry-bags. Yet despite such widespread awareness and protest there is virtually no change in the scenario in the country at large. The solution to this problem lies in educating and spreading awareness among the youths, who are the future of the nation. Environmental education should be introduced in schools as well as colleges highlighting the ill effects of plastic. Also alternatives suitable for making bags and packing material at competitive rate and

convenience without having any negative aspect has to be thought of. Educate the users the right disposal methods. Also the youths and other citizens of the country should be encouraged to use reusable bags from traditional materials by suitable advertisements to make it fashionable.

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