



EFFECT OF WATER POLLUTION ON HUMAN HEALTH

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Abstract

This paper focuses on the effect of water pollution on human health. Human health is the most potent indicator to assess the development index of any society. Health is defined a State of having a sound or active body and mind. Polluted water consists of various kind of impurities and when this kind of water is being used by human being in any of the functions, or involved persons gets affected to some extent.

Introduction

Environmental pollutants from many different sources contaminate water, air and land putting humans and ecosystems at risk and often pitting people and against industry. By viewing competing interests and their implications with in a broad ecosystem analysis, eco health approaches strive to protect health While balancing the needs of various stakeholders and contributing to safeguarding the ecosystem. Humans are paying the price of these pollutants on many levels: from direct harm to health through cancer neurological impairment and other ailments, to contamination of food chain and the failing capacity of ecosystem to absorb waste and provide the essentials for life. In 21st century humanity is facing the major issues of water pollution. Human health related issues are one of the prime concerns for sustainable development. Polluted water is the main reason of a number of diseases. Water Pollution not only affects the life of present generation but it also affects the life of upcoming generations. The pure water is essential component for good health and it is playing a major role in the overall development of the people. In developed countries most of the disease like cholera, dysentery, diarrhoea, gastroenteritis prevails because of impure drinking water.

Water pollution

An important constituent of environment is water and when water gets polluted in any way it is known as water pollution. Polluted water is not unfitted for human beings, but also for the other living creatures. The qualities of polluted water get changed. The water is being used by human beings in different functions like cooking food, agriculture, for quenching the thirst and washing clothes. There are various reasons of water pollution. It is because of various activities perform by human beings that water gets polluted. There are two important factors urbanisation and industrialisation. The main activities which led to the pollution of water are as follows:

1-Industrial Wastage: Various kind of products are being prepared in the factories, in the production of which various waste products emerge. These wastes are highly chemical products consisting of complex synthetic organs. Water gets polluted when the waste products originating in the factories get mixed with it. In all the factories, provision is made that waste products are being thrown in the water river and when these products get assimilated in water, various kind of im purities in different forms enter the water and make it in perfect to use. In Big industries, this kind of problem is increasing day by day.

2-Physical Polluteness: Thermal pollution and radio-active substances are the main constituents of physical polluteness. Thermal pollution take place because of hot water. It Is due to this hot water that the temperature of aquatics environment gets increased because of this aquatics animals and plants get affected adversely. When radio-active ash falls into the water, it gets polluted, which result from processing of uranium or research laboratories where are being used. On coastal areas of lakes, seas and oceans, oil gets spill. Oceanic water also gets polluted.

3- Sewage-An important source of pollution in urban cities is sewage, which consist of decomposable organic matter and pathogenic agents developing countries, people are migrating in a large number to the big cities,



because of Which sewage is being produced in large quantity, but disposal of these products can't take place accordingly. When the impure liquid get merged in water, or they are being stored in any open space, after some time, mosquitoes breed over them and various kinds of bacterise and impurities enter into the water, which makes the water impure.

Agriculture Activities: Today our country is developing in all the fields and this kind of development can be seen in agriculture sector also. To protect fields from insects' various kind of chemicals are being used. If these chemicals are being used in greater quantity, they affect the quality of land adversely. When these fertilizers get dissolved into water, they remove the hydrogen present in the water, which affect the Life of various living creatures leading their life under water. When this kind of polluted water is being taken by human beings, their health gets deteriorated and they get affected by various diseases. Today water pollution has become one of a big hazard to the health of the people. Various kinds of diseases emerged out by using polluted water and all the living creatures become affected by polluted water directly as well as indirectly.

Various measures or steps have been taken by the government to clean the water of various rivers and in making this kind of polluted water clean, large amount of money is being spent every year. Thus, water pollution leads to economic loss to the human beings indirectly. Water pollution is the consequences of use of various modern industrial technologies and increased population. Now the problem which is being faced is to determine the optimum level which can permit economic and social development of the people without affecting health in any way. For controlling or putting the stoppage on water pollution, various measures are being used by the government some of which are as follows:

a) Population Control

One important reason of water pollution is increase in the population. Various programs and policies have been designed by government of India to control growth rate. Because of tremendous population, people don't get the opportunity to get educated and in case of illiteracy, it becomes very difficult to convince them that they are responsible for water pollution. For this purpose, government should educate the people as well as try to control the population of our country.

b) Making Waste water Clean

Industries and tremendous increase in the urban population are considered to be the two main cases of water pollution. industrial waste is known as effluent, while the urban liquid waste is being called sewage. Sewage is being produced by domestic as well as from the industrial area. This kind of product is being produced from the various human activities.

Method of purifying surface water

As we know water is one of an important constituent human body and water of canals, rivers and lakes is used for drinking but water in these sources don't remain clean or purified. Before using this kind of water, it is necessary to make them fit to drink with the help of some special kind of processes, water can be purified, some methods being used for this purpose are as follows:

1. **Decantation:** In the process, impure water is being pumped and collected in a decanting basin when soil and other waste products get settle down after some period of time.
2. **Filtration:** From setting basin water is being transferred from filter which consists of sand in some quantity. With this process, almost maximum purity is lying in the water gets destroyed. It is necessary to clean the filter regularly.
3. **Chlorination:** After drink the water out of filter the next step is to mix chlorine in it. With this method bacteria present in the water can be removed.



Making waste Clean

Sewage is being produced by domestic as well as from the industrial area. This kind of product is being produced from various human activities. Sewage consists of pathogenic germs and is very harmful and hazardous for health. Sewage should not be thrown into water body without being treated properly. The chances of spreading the communicable diseases from them gets reduced. Collection, treatment and re-use are the main steps which are being included in the treatment process of sewage. All the pathogenic agents preset in the sewage are being destroyed through the various treatment processes. From treatment processes, sewage becomes suitable for re-use.

Another measure which is being used by government of India is use of various methods in relation to industrial waste water treatment. For this, three steps are being identified, under which, various kinds of pollutants are being recognized. Pollutants are considered to be of three different kinds namely, floating pollutants, suspended pollutants and dissolved pollutants. Oil, grease and fat are the main kinds of floating pollutants. These pollutants generally affect the growth of the plants. Suspended pollutants can be either organic or inorganic in nature. Acids, alkalis, heavy metals and insecticides are dissolved pollutants, which affects the aquatic life adversely.

Conclusion

Water is an essential commodity for human being to survive. We need clean water for drinking, washing, cleaning and for many purposes. Due to water pollution certain infections like cholera, typhoid, etc may affect human health. We have to use such methods for development and industrialisation which can't pollute water. On the other hand, we can use different methods as discussed in paper to make polluted water fit for re-use. Pollution free water is the key of healthy and disease-free life.

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