

Environmental Pollution:

Health Hazards and Preventive Measures

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Abstract:- Environmental Pollution can be defined as any undesirable change taking place in the environment which is harmful for both living and non-living things. Pollution is caused by the introduction of contaminants into the natural environment. The increasing level of pollution in the past thirty years is a serious cause of concern which needs a tactical approach otherwise our health status will be in jeopardy.

I. INTRODUCTION

The Environment can be said to be comprised of:

- The air which we breathe,
- The water which we drink,
- The food which we eat, and
- The habitat where we live, work and play.
- On the other hand Pollution can be defined as under:

The introduction of harmful materials into the environment is called pollution. The addition of any substance (solid, liquid or gas) or any form of energy such as heat, sound thermal or radio- active, to the environment at a rate faster than the rate at which it can be dispersed, diluted, decomposed, recycled or stored in a harmless manner is called environmental pollution. Alternatively environmental pollution is defined as “ the contamination of the physical and biological components of the atmosphere to such an extent that normal environmental processes are adversely affected.

II. ENVIRONMENTAL POLLUTION AND HEALTH HAZARDS:

The major types of pollution are as under-

- AIR
- WATER
- SOIL
- NOISE
- LIGHT
- PLASTIC
- THERMAL
- RADIOACTIVE CONTAMINATION

The above kinds of environmental pollution prove to be hazardous to human health and are therefore a cause of concern for humanity. The environment and the health of individuals are very closely related. Environmental health is the discipline that focuses on the inter- relationships between

people and their environment. An environmental health hazard is a substance that has the ability to cause an adverse health event which include physical, chemical, and biological factors that are external to a person. Hazards can be natural or human-made.

The major kinds of pollution, usually classified by environment, are air, water, land, noise, light, thermal and plastic pollution. All these kinds of Pollution have a negative effect on the environment and adverse impact on human health.

A few health hazards faced by the human race due to the various kinds of environmental pollution are as follows:

➤ AIR POLLUTION

Air pollution is the introduction of chemicals , particulate matter or biological materials that cause harm or discomfort to humans or other living organisms or cause damage to the nature. The exposure of high level of air pollution can cause a variety of adverse health outcomes, it increases the risk of respiratory infections, heart diseases, lung cancer, long term nervous disorder, damage to brain, kidney, liver and other organs.

➤ WATER

When some harmful chemicals or other pathogenic agents get mixed with the natural water, it gets polluted . Contaminated water can cause cholera, diarrhoea, dysentery, hepatitis -A, polio and other bacterial and protozoal diseases.

➤ LIGHT

Light pollution is one of the most widespread but the least noticeable environmental hazard caused due to insensitive human activity. Light pollution refers to the glare, the trespass and the sky glow resulting from the scattering of light in the atmosphere. The excessive or poor use of artificial outdoor light i.e. outdoor light pollution can cause respiratory diseases by increasing atmospheric carbon dioxide, ophthalmic problems, insomnia etc.

➤ THERMAL POLLUTION

The discharge of heated effluents from industrial processes such as electric power generation results in decrease in oxygen level in water and atmosphere which has hazardous effects on both flora and fauna. The effects of thermal pollution are diverse but in short, thermal pollution contaminates water ecosystems and reduces the animal

population which in turn disturbs the nature. Thermal pollution causes various skin diseases and ophthalmic problems in human beings. It can also cause disturbance in the reproductive cycles of both human beings as well as animal kingdom.

➤ *SOIL*

It refers to the contamination of soil with anomalous concentrations of toxic substances. The main source of soil pollution is the excessive or improper use of pesticides in agroindustry and poor management and inefficient disposal of industrial and domestic waste. It harbours many health hazards such as :-

Nausea, headache, fatigue, allergies, nervous disorders, kidney and liver damage, leukemia etc.

➤ *NOISE*

Noise pollution is an invisible danger for mankind but it is present nevertheless, both on land and water bodies. The excessive or undesirable sound which can have deteriorious effect on human health, wildlife and environmental quality. The main cause of noise pollution is the noise from large motors and exhaust systems of heavy road vehicles, construction noise, aircrafts and industrial activity. It can cause hyper- tension, sleeping disorders, speech interferences, hearing loss etc.

The above impacts on human health can be controlled to some extent by taking certain preventive measures as below:

- SAVE ENERGY
- GO-GREEN (PLANT MORE AND MORE TREES)
- PROMOTE WALKING AND CYCLING
- REDUCE OR ELIMINATE THE USE OF FERTILIZERS AND PESTICIDES
- PROMOTE WATER HARVESTING
- SAY NO TO PLASTIC
- INCREASING EFFICIENCY IN ENERGY USE
- PROTECTION OF SENSITIVE AREAS
- MODIFIED PRODUCTION TECHNIQUES WHICH PRODUCE LESS WASTE
- USE OF ENVIRONMENTALLY BENIGN FUEL SOURCES

In short the environmental pollution can be reduced by using 3 R -model i.e.

REDUCE
RE-USE
RECYCLING

III. CONCLUSION

As the world is undergoing a rapid transformation stemming from technological advancement and storming industrialization, extensive efforts have been deployed in order to control environmental pollution .The environmental pollution control policies are broadly concerned with air,

water and land and such global problems as loss of biodiversity, global warming and depletion of the stratospheric ozone level which cause a variety of health issues. Pollution prevention is yet another approach that reduces, eliminates or prevents pollution at its source before it is created. Pollution prevention reduces both financial costs and environmental costs. Pollution prevention protects the environment by conserving the natural resources while strengthening economic and medical growth through more efficient production in industries and less exposure to hazardous pollutants.

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