EFFECT OF NOISE POLLUTION IN DAILY LIFE

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> ABSTRACT:

Sound is an integral part of life. It has a great impact on the environment. Unusual sound can disturb any human being, birds, animals and their activities. Sound is a necessity within its usage limits. It is possible for us to communicate each other only because of sound. It is a tool for all communications. Any undesirable sound is called as noise pollution. Environmental problems include many anthropological hazards, in which noise pollution is of primary significance. Though, noise is a controllable entity of the environment, on several occasions it is found to be uncontrollable. It creates severe impacts on life and induces unpleasant circumstances. Noise pollution is a public nuisance to the environment. The following modules are covered in this episode: 1. Types of Noise Pollution 2. Noise pollution and its causes 3. Environmental impact of noise pollution 4. Methods of controlling noise pollution.

> INTRODUCTION:

• What is noise?

Sound, a normal feature of our life, is the means of communication and entertainment in most animals, including human beings. It is also a very effective alarm system. A low sound is pleasant whereas a loud sound is unpleasant and is commonly referred to as 'noise'. Noise can be defined as an unpleasant and unwanted sound that is loud and disruptive to hearing. There are 4 different types of noise: continuous, intermittent, impulsive and low frequency. Continuous noise refers to noise that is produced continuously by machinery that does not stop working while intermittent noise refers to the quick rise or drop in the noise volume. Additionally, impulsive noise is characterized by its sudden and fast nature. Low frequency noise refers to the background noise that we hear in our surroundings. These 4 types of noise contribute to the noise pollution that we experience daily, especially in our highly urbanized world today.

What is noise pollution?

Noise pollution, also known as environmental noise or sound pollution, is the propagation of noise with ranging impacts on the activity of human or animal life, most of them harmful to a degree. Florence Nightingale recognized noise as a health hazard in 1859 when she wrote,

> **DISCUSSION:**

1. TYPES OF NOISE POLLUTION:

The types of noise pollution are categorized into three broadly.

1. <u>INDUSTRIAL NOISE</u>: is caused by some high intensity decibels that is the result of industry machines and other such appliances. The noise comes from the use of mills, heavy industrial machines and even the small exhaust fans that run for a long period. Noise from mechanical saws and pneumatic drills is unbearable and the ultimate form of pollution to the public and neighborhood. This is one cause of noise pollution.

- <u>2. TRANSPORT NOISE:</u> Transport noise is simply inevitable. The traffic jams cause considerable amount of vehicle noise and the honking of the many vehicles in the crowd are nothing but a pure nuisance. Whether road, rail or aircraft, their noise is a considerable contributor to noise pollution. Tractors and other heavy vehicle sounds are difficult to control for their sound.
- 3. <u>NEIGHBOURHOOD NOISE</u>: Gadgets, electrical appliances like the grinder and mixer are the prime contributors to noise pollution. Loud loudspeakers in the name of wedding, political parties and other such events call for a significant amount of noise pollution. In the long run, they become difficult to bear posing problems to the health of humans.

2. NOISE POLLUTION AND ITS CAUSES:

- 1. <u>Industrialization:</u> Most of the industries use big machines which are capable of producing noise. Apart from that, various equipment's like compressors, generators, exhaust fans, grinding mills also participate in producing noise.
- 2. Poor Urban Planning: In most of the developing countries, poor urban planning also play a vital role. Congested houses, large families sharing small space, parking lots, street noise, honking, commercial zone leads to noise pollution which disrupts the environment of society.
- <u>3. Social Events</u>: Noise is at its peak in most of the social events. Whether it is marriage, parties, pub, disc or place of worship, people normally defy rules set by the local administration and create nuisance in the area. People play songs on full volume and dance till midnight which makes the condition of people living nearby pretty worse.
- **4. Household Chores:** We people are surrounded by gadgets and use them extensively in our daily life. Gadgets like TV, mobile, mixer grinder, pressure cooker, vacuum cleaners, washing machine and dryer, cooler, air conditioners are also contributors to the amount of noise that is produced and but many times it affects the quality of life of our neighborhood.
- **5. Fireworks:** Firework is a common thing during various fairs, festivals and cultural ceremonies. Apart from air pollution, the intensity of their sound creates noise pollution.
- <u>**6.** Miscellaneous Sources:</u> The automobile repair shops, market places, schools, colleges, bus stands, and railway stations etc. are other sources of noise pollution, etc.

3. ENVIRONTMENTAL EFFECT OF NOISE POLLUTION:

1) Auditory effects: It includes deafness or auditory fatigue. Deafness or impaired hearing: Prolonged exposures to noise lead to gradual deterioration of internal ear and subsequently hearing loss or deafness. It may occur due to continuous exposure to noise level of more than 90 dB. It may be temporary or permanent. Explosions or other high intensity sounds can also cause immediate deafness by rupturing the ear drums or damaging the cochlea. Many time hearing loss is attributed to occupation. Auditory fatigue: It is defined as a temporary loss of

hearing after exposure to sound. Continuous humming sound such as whistling and buzzing in the ears.

- 2) Non auditory effects: These are:- Irritation and annoyance: Noise, sometimes, leads to emotional disturbances and makes people loose their temper. It can interfere with proper rest and sleep. Annoyance seems to increase with the loudness of the sound. Work efficiency: It has been observed that noise reduces the efficiency of work. Physiological effects: It includes dilation of the pupils, paling of skin, tensing of voluntary muscles, diminishing of gastric secretions, increase in diastolic blood pressure and the sudden injection of adrenalins into blood stream which increases neuromuscular tension, nervousness, irritability and anxieties. It can adversely affect the development of unborn babies.
- 3.Other health effects: Noise is also associated with headache, giddiness, sweating, nausea, fatigue, difficulty in breathing, disturbed sleep pattern, psychological stress. Trouble Communicating: High decibel noise can put trouble and may not allow people to communicate freely. Constant sharp noise can give you severe headache and disturb your emotional balance.

4. METHODS OF CONTROLLING NOISE POLLUTION:

We can reduce noise Pollution by following the below mentioned Tips

- 1. Turn of Appliances at Homes and Offices: We can turn off home and office appliances when not in use such as TV, games, computers etc. it can create unnecessary stress on ears. We can save electricity also when we turn them off.
- **2. Follow the limits of noise level:** Community law should check the use of loudspeakers, outdoor parties as well as political public announcements.
- **3. Go green by planting trees:** We can plant more trees as they are good noise absorbents. According to studies, it can reduce noise by 5 to 10 decibels Db around them.
- **4. Use Earplugs:** Use of earplugs or earmuffs can bring down loud noises to a manageable level. Earplugs are small inserts that fit into our ear canal. And earmuffs fit over the entire outer ear to form an air seal keeping ears safe from loud noises.
- 5. Lower the volume: We can listen to songs, radios, TVs in lower volume when listening from headphones or speakers. Stay away from Noisy area: Noise producing industries, airports, vehicles should be far from residential areas as it is very dangerous for infants and senior citizens.

> CONCLUSION:

• Improved traffic management practices such as one way traffic movement, proper management of buses in the traffic stream may reduce traffic noise level to some extent. Proper noise barriers should be constructed under flyovers to mitigate the traffic noise level.

- The Factories Act,1948 does not contain a specific provision of noise control while it has been found in a number of cases that high intensities, high frequencies, high intermittency of noise are the factor of annoyance for the workers.
- The Central and the State Boards now exercise the powers and functions under Section 16 and 17 of the Air Act, respectively with regard to the 33 prevention and control of noise pollution including the laying down of noise standards.
- Noise adversely affects general health and well being in the same way as does chronic stress. It adversely affects future generations by degrading residential, social, and learning environments with corresponding economic losses.