
REVIEW ON NOISE POLLUTION AND ITS SOURCES

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Abstract

Noise is a type of pollution and impacts on our health and wellness. The prevalence of noise is increasing in magnitude and severity because of urban lifestyle and no or bad governance of noise in the region as the rules are flouted routinely. Noise pollution leads to many chronic and socially significant impacts. The present study investigates the level of awareness about noise pollution in all over the country, its causes, its health impacts and solutions among the youth in the country. The study concludes that the majority of educated youth is aware about noise pollution, its causes and probable health effects but the vast majority of educated youth did not perceive noise pollution as an environmental challenge and ranked it as least important threat to the health and environment.

Keywords: *Environment, Health, Industrial Sources, Noise Pollution, Physical Effects.*

I. INTRODUCTION

Noise pollutants is a growing international trouble however has critically grown in metro towns of developing international locations. Delhi, the country wide capital of India is the second one worst city with highest noise pollution inside the international. that is observed via Cairo, Mumbai, Istanbul and Beijing because the noise pollutants in these towns had touched triple digits. A look at Mimi hearing technology and Charite college sanatorium in Berlin closing year discovered that Delhi is second to China's Guangzhou in phrases of the degree of hearing loss suffered by citizens in percentage to their age [1]. In maximum monitoring stations across Delhi, decibel tiers exceed the permissible limits any time of the day. The arena fitness company says that prolonged publicity to sound above eighty decibels can interfere with immune systems, improve stress hormones, contribute to cardiovascular maladies and damage hearing. Human ears are a hyper touchy part of human anatomy which plays crucial capabilities within the defence mechanism of the frame [2].

It continuously explores the potential threats from the environment and conveys it to the brain, thereby preparing it for counteraction if required and initiates different physical features. The resilience of the human auditory machine and the proficiency of the brain to hinder the insignificant information from this constantly vigilant sensory system are amazing. but, this very well advanced auditory machine of the human frame is at risk. today's present day dwelling surroundings are loaded with masses of sounds usually cited as noise that has scant or no significance in any respect [3]. The noise of machines, vehicles, electronically inflated tune and loud speakers – or simply the sounds residing in in large part inhabited metro cities, all reason noise pollution. The steady blocking of these inappropriate sounds from accomplishing to the brain consumes an essential fraction of intellectual ability and causes stress. also, the frame is repeatedly provoked unnecessarily to put together for counteraction. Each the intellectual pressure and arbitrary responses of the body may want to in the long run lead to adverse consequences on human health and wellness. Environmental noise has been progressively developing in the course of the previous few a long time and is now becoming a critical difficulty for society. The health results of noise pollutants transpire a cost for society.

II. DISCUSSION

Sound, a normal feature of our life, is the means of communication and enter-tainment 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. Whether a given sound is as pleasant as music or as unpleasant as noise de-pends on its loudness, duration, rhythm and the mood of the person. But loud-ness is definitely the most significant criterion which converts sound into noise. Exposure to loud noise is indeed annoying and harmful too [4].

Noise is a physical form of pollution and is not directly harmful to the life sup-orting systems namely air, soil and water. Its effects are more directly on the receiver i.e. man. Noise pollution is the result of modern industrialized urban life and congestion due to overpopulation. Even though noise pollution is not fatal to human life, its importance cannot be overlooked because repeated exposure to noise reduces the sleeping hours and productivity or efficiency of a human being. It affects the peace of mind and invades the privacy of a human being. The importance of noise pollution as an environmental problem is being recognized as the ill effects of noise on human health and environment are becoming evident with each passing day [5].

Sources of Noise Pollution:

Major causes / sources of noise pollution are:

(i) Industrial Sources:

Progress in technology (industrialization) has resulted in creating noise pollu-tion. Textile mills, printing presses, engineering establishments and metal works etc. contribute heavily towards noise pollution. In industrial cities like Kolkata, Ludhiana, Kanpur etc., often the

industrial zones are not separated from the residential zones of the city especially in the case of small scale industries [6].

These operate from workshops located on the ground floors of the residential areas and cause annoyance, discomfort and irritation to the residents exposed to the noise that is inevitably produced. The situation is much better in modern planned cities like Chandigarh where the industrial area is kept away from the residential areas and both are separated from each other by a sufficiently wide green belt [7].

(ii) Transport Vehicles:

Automobile revolution in urban centers has proved to be a big source of noise pollution. Increasing traffic has given rise to traffic jams in congested areas where the repeated hooting of horns by impatient drivers pierce the ears of all road users [8].

Noise from airplanes constitutes an increasing serious problem in big cities like Delhi & Mumbai. Airport situated in the vicinity of population centres and the air planes pass over residential areas. Heavy trucks, buses, trains, jet-planes, motor-cycles, scooters, mopeds, jeeps—the list of vehicles is endless but the outcome is the same — noise pollution.

(iii) Household:

The household is an industry in itself and is a source of many indoor noises such as the banging of doors, noise of playing children, crying of infants, moving of furniture, loud conversation of the inhabitants etc. Besides these are the entertainment equipment in the house, namely the radio, record-players and television sets. Domestic gadgets like the mixer-grinders, pressure cookers, desert coolers, air- conditioners, exhaust fans, vacuum cleaners, sewing and washing machines are all indoor sources of noise pollution [9].

(iv) Public Address System:

In India people need only the slightest of an excuse for using loudspeakers. The reason may be a religious function, birth, death, marriage, elections, dem on station, or just commercial advertising. Public system, therefore, contributes in its own way towards noise pollution.

(v) Agricultural Machines:

Tractors, threshers, harvesters, tube wells, powered tillers etc. have all made agriculture highly mechanical but at the same time highly noisy. Noise level 90 dB to 98 dB due to running of farm machines have been recorded in the state of Punjab.

(vi) Defence Equipment:

A lot of noise pollution is added to the atmosphere by artillery, tanks, launching of rockets, explosions, exercising of military airplanes and shooting practices. Screams of jet engines and sonic booms have a deafening impact on the ears and in extreme cases have been known to shatter the window panes and old dilapidated buildings [10].

(vii) Miscellaneous Sources:

The automobile repair shops, construction-works, blasting, bulldozing, stone crushing etc. are other sources of noise pollution.

Effects of Noise:

Noise is generally harmful and a serious health hazard. It has far-reaching consequences and has many physical, physiological as well as psychological effects on human beings.

(i) Physical Effects:

The physical manifestation of noise pollution is the effect on hearing ability. Repeated exposure to noise may result in temporary or permanent shifting of the hearing threshold of a person depending upon the level and duration of exposure. The immediate and acute effect of noise pollution is impairment of hearing (i.e. total deafness.) Human ears have sensory cells for hearing. If these cells are subjected to repeated sounds of high intensity before they have an opportunity to recover fully, they can become permanently damaged leading to impairment of hearing. Besides the sensory cells, the delicate tympanic membrane or the eardrum can also be permanently damaged by a sudden loud noise such as an explosion [11].

(ii) Physiological Effects:

The physiological manifestations of noise pollution are several as mentioned below:

- (a) Headache by dilating blood vessels of the brain.
- (b) Increase in the rate of heart-beat.

III. CONCLUSION

This paper is focused on youth perception about noise pollution in Delhi, its causes, its health impacts and solutions. The study concludes that the majority of educated youth is aware about noise pollution and its causes. The study reveals that the female youth are more sensitive compared to male youth about noise pollution in Delhi. However, the vast majority of educated youth did not perceive noise pollution as an environmental challenge and ranked it as the least important threat. The study identified vehicular pollution as one of the most important causes of noise pollution and loud music as the second most important cause of noise pollution.

The study identified hearing impairment, hypertension, stress; heart problems are associated with noise pollution on the basis survey. It implies that the majority of educated youth understand the health related implications of noise pollution in Delhi. Noise is one of the typical hazardous emissions. Regular and long term exposure to elevated noise can bring about various adverse health consequences, such as hearing impairment, hypertension, heart disease, annoyance, and sleep disturbance which are also recognized by the respondent. However, this study also reflects on negligent attitude towards environment protection even in highly educated youth of the capital city of the country. Female youth seems to be more sensitive and participatory in Environment Improving Activities. Finally, the study provides

that Social and Behavioral Change of Citizens and Strict Enforcement of Environment and Noise related Laws is the prerequisite for an improvement in the environment.

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