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RESEARCH ARTICLE

DESTRUCTION OF POLYTHENE; HAZARDOUS ISSUE OF ENVIRONMENTAL SYSTEM  
FAILURE & HUMAN HEALTH IN URBAN AREAS

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ABSTRACT

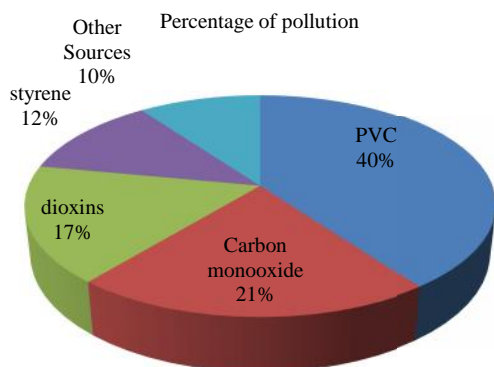
During this phase of science and technology, the facilities have changed our life style. Whereas, our lives has become faster and full of comfortable at same time we became inconsiderate towards our environment. Being enthusiastically ignitable, the ingesting of the plastics has gradually augmented since earlier days. It is because of due to its elasticity, availability, affordability and durability in comparison of the supplementary constituents which could be used for same purpose. In this study, we discussed about the disintegration of polythene in open which generates the black plumes of smoke and toxic volatilization products such as carbon mono-oxide, dioxins and furans and other diseases that is dangerous to our health. It causes cancer; respiratory disease also affects the lower testosterone levels including the incorporated into the ambient environment acquaintance.

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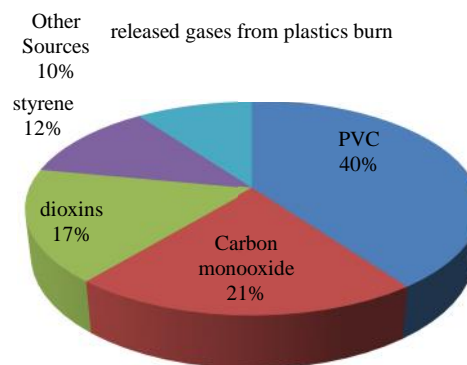
INTRODUCTION

With the rapidly growing population of India, an enormous expanse of discarded is released every day. Loads of techniques arose to reutilize these discards so that the environmental race could be saved effectively. In the modern time, a new drastic attitude towards the recycling of the discards maintains and for a healthy environment is needed. Plastic that is biodegradable and leaches the toxic additives from the food and beverages containers (Beth Terry).The utmost hazardous issue is the burning of the plastics such as polythene, bottles, blister packs and other things in open. The people do not realize the effect of this practice in our health and environment.

This open burning of the plastics containing organo-chlor based substances such as polyvinylchloride, carbon monoxide dioxins and styrene etc. [1]. When such plastics (polythene, bottles) are burned in open, the dioxins, poly styrene and polymers settle down on the several things such as cups, eggs, trays that is inserted in our bodies or passed to children through mothers as placenta. [2].



Graph1 represents the pollution percentage of a city

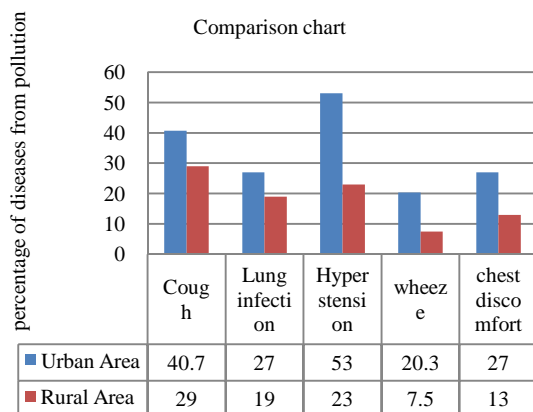


Graph 2 Represent the percentage of gases released from The plastics burn in the environment

These emitted toxics are either inhaled or readily absorbed through the skin and lungs which are carcinogenic and hormone disrupter and tenacious and accumulated in our body fat. The burning of polystyrene polymers releases styrene which escalation the menace of heart disease [3,4], respiratory ailments such as asthma & emphysema. It is understood the root of rashes, nausea, damage to the nervous system, kidney and liver. Earlier studies suggested the linakage between the

cancer and the dioxins and furans. Bioaccumulation in humans and wildlife and are associated with reproductive and immune system disorders.

According to earthworks “an association dedicated to shielding societies and environment from such leakage of harmful gases which cause greater to greenhouse effect. Phthalates is the chemical that is auxiliaries in plastics to build them indulgent & malleable which diminished the sperm counts and decreases its level in males as well as obesity, reduced female fertility, pre-term birth and low birth weight allergy and asthma symptoms [5]. According to facts it is also recyded in new cars and in new shower curtains and fragrance of phthalates off-gassing and inhaled with the breath by humans and animals.



Graph 3 Represents the comparison graph of diseases by the Pollution between the rural area and urban area.

**Effect of PVC on human health**

Air pollution status is accountable for several health issues in the urban areas that have undertaken many changes with the passage of time. This pollution rises to the adulteration of the earth environment with ingredients which inhibit to the human health and quality of ecosystem. As plastics bags which provide the facilities to our society there as their destruction is creating problems for our health [6]. The burning of plastics secretes harmful gases for human health in which poly vinyl chloride that is useful and aids many day by day activities in human life.

But when it is disposed it increases the concern towards the environment. This process produces various toxins which in turn become the reason for degradation of human health. The plastics which comprises additives that is off gas and infect our normal life [7].

They are a hormone disruptor also and persistent, and they accumulate in our body-fat and thus mothers give it directly to their babies via the placenta. These chemicals which are added in plastics to make them soft and flexible are also endocrine disrupts concomitant specially decreased sperm counts and poor quality in males as well as obesity, reduced female fertility a worsening of allergy and asthma symptoms.

Dioxins also settle on crops and in our waterways where they eventually wind up in our food, accumulate in our bodies and are passed on to our children. When it was comprised with the rural area, the urban area have 2.5-3.5 times higher prevalence of respiratory symptoms such as chest discomfort, cough, breathlessness etc. [8].Hypertension, which is positively

higher in the urban areas in a correlation with respirable suspended particulate matters in ambient air. It also gives the significant higher level of chronic headache, eye-irritation and skin irritation etc.

A comparative graph represents the comparison between the diseases of the population of a rural area and urban area caused by the pollution-

**Rheostat control strategy**

Pollution from the destruction of polythene in the urban areas is rapidly increasing the pouultion rate. For the protection of environment “Ministry of Environment and forests” are taking action in the urban areas and uses of polythene are banned. If the carrying function could help in decreasing the secretion of poisonous gases in the environment, it will be implementation of the health awareness.

The recycle of the plastics and destruction industries are to be set out of the residential areas. From time to time the government has taken strong action to decreases the rate of pollution in which Delhi is the first one which have implemented some rules for vehicle so that the environment could be saved [9]. In Delhi, the judiciary has taken strong note of the deteriorating environmental conditions in Delhi in response to public litigations.

One of the earliest such instances was the judgement passed by the Supreme Court of India to deal with the acute problem of vehicular pollution in Delhi in response to a writ petition filed in 1985. Subsequently, it ordered the shutdown of hazardous, noxious industries and hot-mix plants and brick kilns operating in Delhi [10].

**Assistance accrued as a result of control**

Meanwhile the starting of act on pollution was inaugurated and a lot of changes have been made in stint of human sources in form of development and other capabilities. In some studies, the evidences were collected to measures the health status by the effect of environment. The studies represent the demonstration which was conducted by the central pollution control board and found that expenditure 8-10 h in clean indoor environment can condense health effects of exposure to chronic air pollution [11]. Most of the studies which have been steered were ecological correlation studies and their limited proficiency to draw casual inferences. Noteworthy amount of pollutants of environmental and health apprehension including carcinogens such as PAHs, nitro-PAHs and dioxins have been notorious in the airborne particulate emanations [12]. The combustion products which are spawned from the burning of polythene isappraised by numerous scientists under different conditions.

In a recent study, it was conveyed that use of lower emission motor vehicle resulted in a significant gain in adjusted life of urban area. The degradation of polymers on human gives the overshadowed potential harm. It should be done as an awareness of the need for research and a meaningful estimate of toxicity.

**CONCLUSION**

In this discussion, the destruction of polythene and generated gases which were secreted are discussed. it is worth emphasizing that open uncontrolled burning is by no means

an environmentally sound option to dispose of waste plastics including waste agricultural plastics such as discarded grain storage bags. Other environmentally sound options must be explored for their safe disposal and/or recycling. Plastics products are widely used mainly due to their cheapness and the environment are seriously polluted for that various campaigns need to be organized in order to mobilize the public and other. Moreover, passing legislations alone is not sufficient condition to curb the problem of plastic bag wastes. Therefore, the central government in collaboration with other concerned authorities of the city should encourage people to use environment-friendly alternative materials, such as cloth bags, paper bags and natural fiber bags.

This study indicates the regardless of the demographic and in favor of banning the destruction of plastics products in an open area. The people should be aware from the adverse effects of plastic bags wastes on the environment, animal and for human health.

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