

Research Article**Effects of Physical, Organic and Environmental Factors on
Human Health and Its Relation with Milieu****¹Qurat ul Ain Ali, ²Sumiya Siddique, ³Tooba Anjum,****⁴Maryam and ⁵Ussama Ishfaq**¹WMO, Town Hospital S-Block Shah Rukn e Alam, Multan (RHC level), Pakistan.²BHU 30 SB, Sargodha, Pakistan.³Mayo Hospital, Lahore, Pakistan⁴MBBS from King Edward Medical university Lahore Pakistan. Email: mrmakbar@gmail.com⁵Dr Ussama Ashfaq, Post Graduate Resident Ophthalmology Lahore general Hospital, Lahore. Pakistan.**ABSTRACT**

This study aims to enhance the comprehension of relation between health and environment. This is done by an action research, visiting different areas having different environmental factors. In order to define and to analyze environmental health, choose the five different factors, and study their impact on health of people living in different areas. Two different areas are selected to establish that whether environmental factors always have negative impact or can also impact health in positive way. Further, my aim is also to compare the rural area with urban area and to determine whether urban areas are more exposed to negative impacts of environmental factors. The study discusses different environmental factors including physical, biological and environmental factors. There are numerous factors in the environment having deep impact on human health but practically it is not possible to quantify the influence of every environmental factor on human health. Environment is such a vast term and so closely associated with lives of all living beings that all dimensions of it are difficult to cover through a single research paper within limited time. Finally, it can be concluded that to determine correlation between environment and health and describing the environmental health by stating each existing factor of environment is not possible however by using some specific and most common factors of environment can be used to determine the relation between health and environment, and this study also based on some specific but common factors of environment and conclusion is drawn after performing active research and collecting data through practical involvement, collection of both qualitative and quantitative data and conclusion is drawn after considering all possible impacts of gathered data. However, exceptions of all set rules are always existing and the drawn conclusion is applicable on general, normal, ordinary circumstances not to the exceptional or extraordinary circumstances.

Keywords: factors, environment, human health, physical, biological, environmental.**INTRODUCTION**

In the past many decades, public health specialists, environmental experts and scientists, and have made development in the count of hazards caused by environment on the health of human. In the presence of available data estimations are made for the impact measurement of hazards of environment on the health of human. A healthy and clean environment is required as a mandatory

component for quality life at present and for the generations to come [1]. Demands of the humanity are pure drinking water, fresh breathing air, healthy and nutritional food, pollution free environment. Noise free living, beautiful landscapes, neat coastal lines are also desired for healthy living; in addition, climactic change is also a threat to all these desires. Balanced and healthy natural system is

mandatory for the survival of life on earth. Necessary sources and resources basic for human survival are provided through nature; these sources include construction material for homes, medicines, fibers, air, food and water. Nature also teaches us as we grow up. It is our prime responsibility that we should safeguard and preserve the mother nature for our generations to come [2].

Few resources are basic for population transportation and industries including few other miscellaneous sources need input from outside for their activity. Major pollutants of the present day are the waste produced from the industries [3]. They pollute air, water and they pollute the overall environment. The very environment in which we have our being. Power stations are the major sources of pollution as they release heavy amount of hazardous gases like Sulphur and carbon and smoke in the outer environment. Other metallurgical industries especially non-ferrous pollute the air with chlorine, carbon, nitrogen, phosphorus and ammonia [4]. They also release very dangerous gas compounds like arsenic and mercury. These gases are produced from the burning process of fuel in the industries and transportation. Burning process is in continuation everywhere such as in our homes, industry and transport producing huge amounts of pollution and waste and resultantly polluting the environment [5].

PURPOSE:

The objective of this study is environmental factors affect the human health or not and are environmental factors are worse in urban areas than rural areas?

MATERIAL AND METHOD

Space as a whole with its all contents is termed as environment. It also includes all the physical attributes like artificial landscape and natural landscape, social or human, norms and all the practices of any culture. The under-hand research targets the physical environment in the presence of this accepted fact that separation of these aspects of environment are difficult as one relies on the other for its existence [6]. Human health and well-being is disturbed and benefitted by the external environment in various ways.

Pathological, radiator, chemical or biological contaminations present in the air and atmosphere directly endanger health of human. Our physiological, physical, aesthetic and social life and health can be disturbed by the environment because our rural and urban setting, use of land and transport and housing is disturbed [7].

To understand the term "Environmental health" it is necessary to get description of the environmental health on general a term which is applicable on human beings of whole world. It is also necessary to define the environmental health by using such terminologies which are standard for the whole world not for specific regions. Health of the environment deals with every physical aspect including biological and chemical factors; additionally, these factors affects human behavior and attitude [8]. All the factors potential enough to harm the health of human species come under the umbrella of environmental pollution. Focus is on the disease prevention and health support in the environmental setting [9].

Human well-being, health, food, water, air, and land; everything is disturbed by the factor of pollution. Human as a whole, utilize all the environmental resources for their routine requirements. Landfills, schools, buildings, roads, and even our homes are also disturbed by the environmental pollution. They are disturbed in different intensity and frequency. Diseases and other epidemics also depend on the pollution level of the region. Combined effects are responsible and due to various hazardous material make the destruction even complex that in few of the cases it is irreversible. Other dominated factors are also affected by the factor of physical health factors; such as, safe water reserves, active life, green plains and sun exposed areas [10].

Air filled with the released dangerous substances causes the pollution of air. This air we breathe with every inhale and exhale. Adverse effects are caused due to a substantial and over presence of these contaminants in the atmosphere [11]. Air Quality Index accounts for the air in the atmosphere. Six hazardous pollutants of air are included in this mixture; namely, nitrogen oxides, hydrocarbons, ozone

and Sulphur dioxide. An increased amount of this ration causes irreversible and adverse effects. An advisory than becomes mandatory for the awareness of the pollution level in the air for the said released chemicals and gases. Main sources of these exhausts are trucks, cars and other flying objects in the air. Rural areas are less exposed to these pollution factors, resultantly the pollution is less in quantity when compares to urban life. Urban life is full of transport facilities and other related industry causing damage to environment [12].

Numerous stages of research are completed in this research study. For the best understanding the area of research was first circled for onward probe. Data collection and generalization was taken after the area selection. Descriptive studies are based on these steps. The techniques utilized in this research are also exploring and probing. This factor brings clear data advocated by the theories that support and speak for the data. Data is validated through supporting sources. This research will also try to describe and explain the causes or reasons for the identified events. These events are similar with the explanatory study [13].

CASE STUDY I: “NAROVAL VILLAGE”- RURAL AREA

It is small village in the district of Naroval, having population of 87,000 people approximate. This village has medium level of facilities to live the life as compared to any under developed city. The infrastructure is not fully developed, only one main road is

constructed which connects this village with main highway while all others inter village are road are unpaved. This village is surrounded from each side through lush green fields. There is no proper system of sewerage. Although there is no proper system to deliver pure and clean water at door step of people but still people manage to get clean water from the nearby wells and tube wells. No modern facilities of life are available at here. Transport facility is also not available, usually animal driven caught are sued at here [14].

CASE STUDY II: “LAHORE CITY”- URBAN AREA:

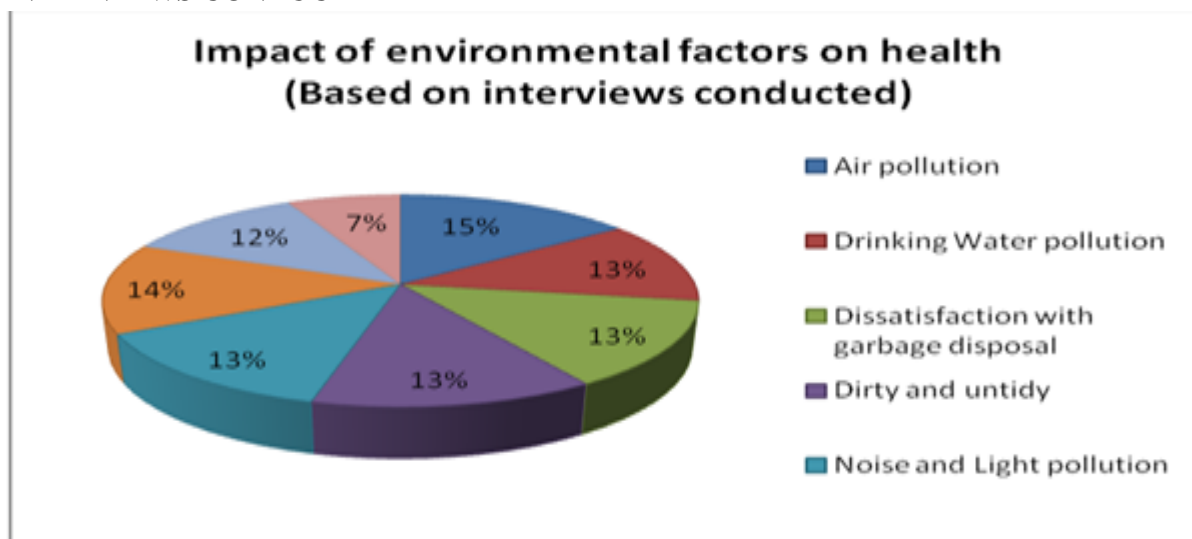
Lahore is the capital of Province Punjab, and ranked as 34th more populated urban area of the world, according to an estimate its population is almost 1.5 million. This city is considered as second biggest city of Pakistan and has almost all facilities of modern living standard. Public transport remains on road 24/7 and almost 75% of its population has its own cars. Different industrial zones are also established in it or near to it. One is at “Kot lakhpat” and other is near to it in Raiwind “Sunder Industrial estate” and some factories are also established in Thokar Niaz baig. Although water is available at door step to people but still supply of clean and pure water is challenge for local administration. Air pollution, water pollution, noise and sound, Food source, chemical hazardous and biological hazardous all types of pollution is main challenge for residents of this city [15].

NUMERICAL DATA COLLECTED DURING RESEARCH:

Data collected based on the 100 participants of interview about environmental pollution in Lahore:

FACTOR	RATING	COMMENTS
Air pollution	65	HIGH
Drinking Water pollution	54	MODERATE
Dissatisfaction with garbage disposal	58	MODERATE
Dirty and untidy	58	MODERATE
Noise and Light pollution	58	MODERATE
Water pollution	60	HIGH
Dissatisfaction to time spend in city	50	MODERATE
Dissatisfaction to time spend in parks in the city	31	LOW

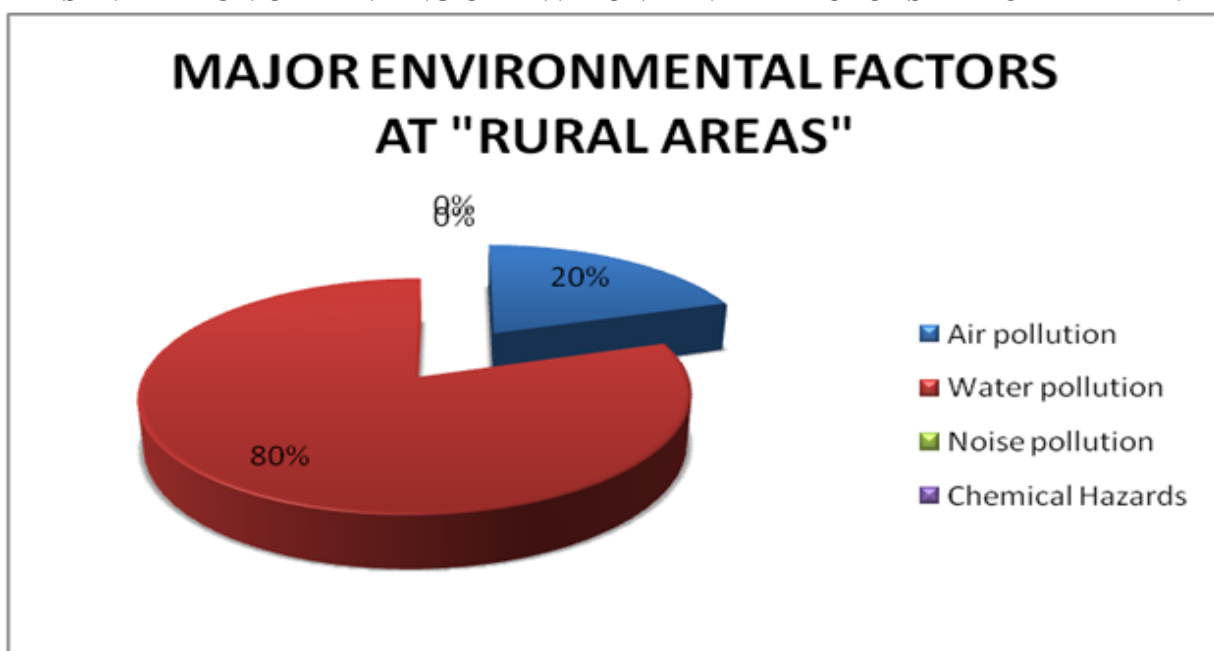
PRESENTATAION OF RANKING OF ENVIRONMENTAL FACTORS BASED ON INTERVIEWS CONDUCTED



Source of Diseases among 100 people selected in “Case study I”, at rural area “Naroval Village”

Source of Disease	No of people suffered	Percentage
Air pollution	5	5%
Water pollution	20	20%
Noise pollution	0	0%
Chemical Hazards	0	0%
TOTAL	25	25%

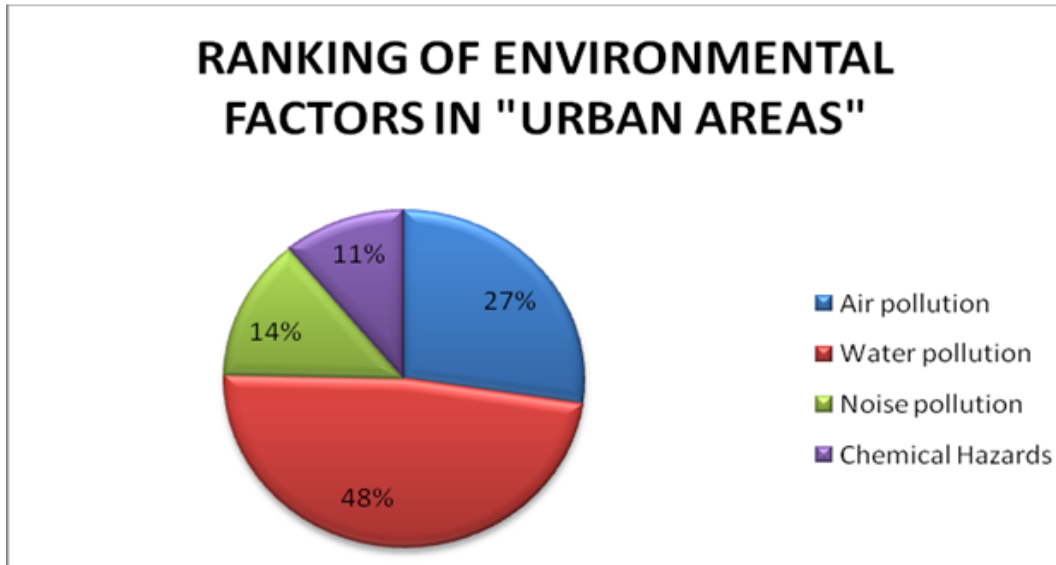
PRESENTATAION OF RANKING OF ENVIRONMENTAL FACTORS AT RURAL AREA:



Source of Diseases among 100 people selected in Case study II, at urban area “Lahore city”

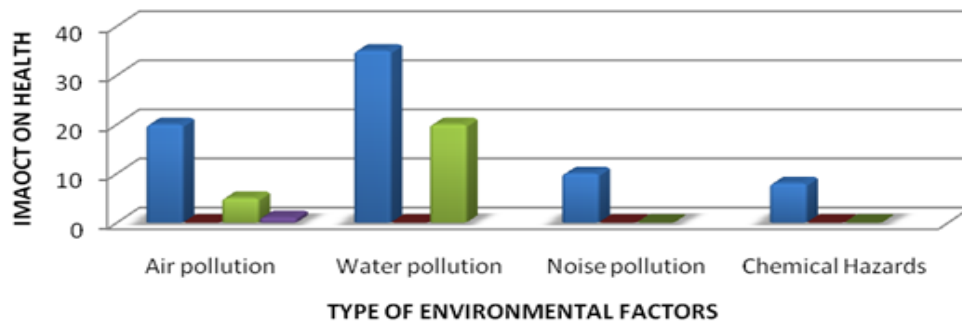
Source of Disease	No of people suffered	Percentage
Air pollution	20	20%
Water pollution	35	35%
Noise pollution	10	10%
Chemical Hazards	8	8%
TOTAL	73	73%

PRESENTATION OF RANKING OF ENVIRONMENTAL FACTORS AT URBAN AREA:

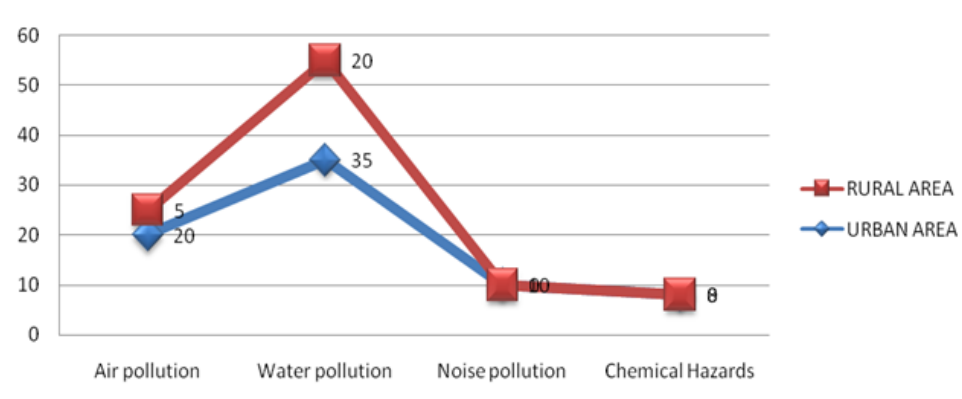


COMPARISON OF RANKING OF ENVIRONMENTAL FACTORS IN RURAL AND URBAN AREAS BASED ON THEIR ADVERSE IMPACT ON HUMAN HEALTH:

COMPARATIVE PRESENTATION OF ENVIRONMENTAL FACTORS AT RURAL AND URBAN AREAS



COMPARISON OF ENVIRONMENTAL FACTORS AT RURAL AND URBAN AREAS



CONCLUSION

Environment is the most common and general factor affecting the not only the human health but also the all living beings. From the research

study, it is also established that environmental factors in urban areas are worst than rural areas, therefore environmental health of people spending rural life are better than people of

lining an urban life. Based on the whole research performed and data collected through various sources, we can conclude that Environmental factors affect the human health, it depends on the environmental matrix and balance of environmental factors that whether it would have positive or negative impact on human health. The reason of existence of worse factors in urban area is the injection of all those matters and activities which imbalance the natural environment. Therefore, people of urban area are paying the cost of their environmental health for achievement of modernization. This conclusion is based on the study made at selected area. It is applicable on ordinary and normal course of circumstances. Exceptions of every rule exist in this world; therefore, exception of this conclusion may be existing, but it is watchful to consider the conclusion of research in context of its background and specific determinants.

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