# Conserve What Our Children Deserve: Environmental Hazards and Their Impacts on the Inhabitants of Rawalpindi, Pakistan

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Abstract: Climate change is one of the gravest issues encountered by humanity today, resulting from serious environmental hazards that are acutely poisoning the natural ecosystem. This study endeavored to pinpoint the causes of environmental hazards and explain their detrimental effects on the climate. Using a qualitative approach, we investigated the attitudes of the local community and analyzed their practices through the thematic analysis method, hoping to provide a refined idea about the risks and community tactics involved in discerning the menace of environmental degradation. In-depth interviews were conducted in the local languages, with 60 respondents of Rawalpindi who hailed from different walks of life alongside local inhabitants, which were later transcribed into English. The findings revealed that the major environmental hazards, air pollution, waste disposal, and scarcity of clean water caused by factories and vehicles; poor waste disposal management; rapid urban population growth; the contamination of water; and poor sewerage systems, have negative effects on the physical and psychological health of people. This study shows that there is a dire need for the continuous process of planning and management to be enacted by educationists and government officials to create awareness and mitigate the existing environmental hazards.

#### 1. Introduction

Mother Earth provides bliss to its inhabitants through its natural resources. These resources are the real treasures of the world in which we sustain our lives. The innate selfishness of humans has even impacted these treasures. Human activities have resulted in the degradation of natural bliss. These resources, which are a gift for humankind, are depleting one by one and are becoming a curse for humankind. It is because of the continuous degradation of the natural resources of this planet that our environment is gradually eroding with the rust of human actions. With the continuous degradation of environmental resources, adverse substances impacting the natural balance of the Earth are turning out to be the environmental hazards (Liverman 2001) with which the Earth is currently battling. These environmental hazards are impacting the natural balance of the environment, thus having detrimental effects on individuals.

South Asia is one of the most affected regions in terms of environmental problems. The rise in temperature, glacier melting, food issues, and water security are some of the issues that have multiplied the environmental hazards that have

caused a national political issue. Pakistan is one of the countries around the world that is affected by environmental changes and has the most polluted cities. Lahore, the second-largest city in Pakistan, is currently ranked as the world's most polluted metropolis, forcing authorities to scramble to combat this environmental disaster (Al Jazeera 2021). Multiple reasons are responsible for environmental degradation. Environmental hazards have emerged in the form of pollution. Pollution of varying kinds is acting as a monster and engulfing the lives of many every single day. Air pollution, land pollution, and water pollution are the three different forms of pollution that are taking hold of the health of hundreds and making individuals pay a price as high as their lives in the battle with this chaos. The indoor or outdoor contamination of the environment in which an individual sustains life is considered air pollution (World Health Organization 2022), which is slowly creating this unseen haze of danger around humans. Mother Earth is not even safe from the atrocities of humans and is now facing the worst kind of land pollution ever recorded in history. With industrialization, land pollution has become a major concern for many governments. Even water is not safe from this hazard, and improper sewage treatment is reflected in the form of impure drinking water, which is impacting two-thirds of the global population, as 2 billion people in the world today do not have the access to clean drinking water because of the constantly increasing levels of pollution (CDC n.d.). Drinking water is especially becoming a poison in the lives of children. Rai et al. (2020) indicate that water pollution is linked to a range of adverse conditions, including infections and diarrhea, and it can lead to stunted growth in children in South Asia. Akhtar et al. (2018) revealed that in urban areas of Lahore, drinking water contains heavy concentrations of lead and chromium, which are becoming a major reason for hindered development and congenital disabilities among children.

Pollution in its varying forms is destroying the natural rhythm in underdeveloped countries where the issues are enormous, and managing these issues takes a lot of wealth and many strategies. In underdeveloped countries, where economic and political issues are enormous, climatic concerns are at the bottom of the priority list, and this is exactly why the environmental hazards in Pakistan are enormous and increasing gradually due to a lack of effective strategies.

Environmental hazards have emerged as a perplexing concern today. It is important to explore whether we can provide our children with a healthy life or not as they are directly impacted by environmental hazards, especially air pollution. Children living in areas where the air quality is unsafe and the air has a higher concentration of pollutants frequently develop respiratory and cardiovascular disorders (Colbeck et al. 2010). Exposure to air that is blackened with pollution leads to reduced lung function among children, who thus develop a risk of permanent lung damage (Zaidi et al. 2019). Sabzwari and Qureshi (2019) assert that when children have to sustain lives in areas where pollution concentrations are at a peak, it impacts their cognitive and neurological development as well.

In Pakistan, especially in the metropolitan city of Rawalpindi, the amount of pollution has doubled over time, which has had varying causes and impacts on the lives of people hailing from every walk of life. This study aims to understand the basic causes behind the growing environmental hazards in the metropolitan city of Rawalpindi. In addition, it explores the impacts of growing environmental hazards upon the lives of people residing in the suburbs.

Environmental hazards are enormous, and so is their impact on the global world. The current study was based in Pakistan, and the sample was limited to Rawalpindi city in light of selective sampling. The different causes of pollutants and their impacts on the lives of people were analyzed. In addition, measures were then recommended based on the experiences of the local population of Rawalpindi, which was divided into various categories based on the participants' professional and personal lives. Against the backdrop of this discussion, this study addresses the following research questions:

## 1.1. Research Questions

- How do environmental hazards impact the physical and psychological health of the local community in Rawalpindi?
- What are the attitudes of varying groups of people in Rawalpindi considering the impending menace of environmental hazards?

# 1.2. Significance of the Study

This study reveals the extent of environmental hazards prevalent in varying localities of Rawalpindi. It will further help to pinpoint the types of hazards, their chief sources, and the risks associated with them. This study is also significant as it explores the attitudes and perspectives considering the chief hazards prevalent in the environment. This study will help to un-layer the public opinions of individuals and their approaches concerning the impending hazards.

This study provides a better understanding of the environmental issues in overpopulated areas, their causes, and their impacts on urban communities. In addition, it is also a crucial study in terms of devising policies against pollution control, as it involves the opinions of the general public. Hence, in light of the current study, the phenomenon of policy-making and implementation can be facilitated on the governmental level.

## 2. Methodology

The ethnographic research method was employed to conduct this study. Researchers can observe study participants in their natural environments and interact with them using the qualitative research method known as ethnography. (Sharma and Sarkar 2018). While employing the ethnographic research method, in-depth interviews are conducted to collect the perspectives of the respondents on the chosen phenomenon. In-depth interviews are utilized as a research strategy in which the

researcher gently guides the participants' dialogue across a long discussion to learn about their unique perspectives on one or more narrowly defined subjects (Rubin and Rubin 2011, p. 4). In order to conduct interviews, in this study, an interview guide was constructed after an extensive literature review to cover all the aspects of the main research questions which are focused on exploring the perspectives and practices of people regarding the causes and effects of environmental hazards. An interview can be frequently guided by a list of semi-structured questions that the researcher develops and asks each interviewee. Each in-depth interview takes a different turn and travels down its own meandering road depending on the interviewee's responses. It is crucial for the researcher to have the freedom to explore any relevant subjects that the interviewees themselves bring up (Brounéus 2011).

The interview guide was tested in a pilot study before starting the fieldwork and was revised by incorporating essential changes and omitting unnecessary questions. The pilot study was conducted outside the actual locale of the study, and data were collected from 5 participants including 3 males (1 janitor, 1 transporter, and 1 restaurateur) and 2 females (1 healthcare professional and 1 housewife from the local population). After modifying the interview guide, actual fieldwork started in July 2021 and ended on 15 September 2021.

The locale of the fieldwork was Rawalpindi City and its suburbs (Figures 1–3). The metropolitan city of Rawalpindi has undergone substantial urbanization over the past three decades, as residents of rural areas moved there in search of jobs, education, and other necessities. The exponential growth of urbanization has disrupted the local climate (Mannan et al. 2021).



Figure 1. Study Area of Raja Bazar. Source: Adapted from ARCGIS (2022).



Figure 2. Study Area of Murree Road. Source: Adapted from ARCGIS (2022).

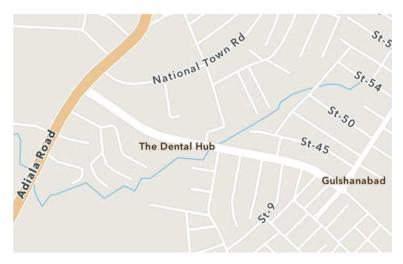


Figure 3. Study Area of Adiala Road. Source: Adapted from ARCGIS (2022).

Using the purposive sampling technique, in-depth interviews were conducted with 60 respondents of Rawalpindi: healthcare professionals (10), janitors (10), transporters (10), restaurateurs (10), and the local population (20), which were later transcribed into English. The heterogeneous sample was selected in terms of their demographics, belonging to different age ranges, educational levels, and socio-economic backgrounds, to collect a variety of perspectives of the people from the chosen locale.

Before starting the interview, rapport was developed with each participant of the study. The goal of building a relationship with participants was to collect rich data while preserving mutual respect (Guillemin and Heggen 2009). Due to the mutual trust and understanding that are fostered by a positive relationship between a researcher and a participant, having a good rapport with participants may result in researchers having better access to information and data (Leach 2005). During the interviews, field notes and jottings were taken. The interviews were conducted in the local languages, i.e., Punjabi, Pothwari, or Urdu, which were later transcribed into the English language, taking the issues of translation into consideration.

The transcribed data were further sorted and coded to develop initial themes. After developing initial themes, similar coded themes were formed into more focused themes. The analytical byproducts of data analysis include categories, themes, subcategories, and subthemes (Vaismoradi and Snelgrove 2019). The subsequent analysis section of this study is based on these themes generated after a rigorous process of sorting and coding.

#### 3. Results and Discussion

#### 3.1. Major Environmental Hazards

Environmental dangers, the most pressing concern of our time, are brought on by several factors that this study has explored. It also discussed the impacts of major environmental toxins on people's lives.

No doubt our environment today is going through its worst phase as industrialization prevails around the world. This industrialization might be a blessing for people seeking ease in every single affair of life but is developing itself into a curse for the environment. With growing industrialization and unplanned development, pollution has emerged as the chief issue around the world. Pollution in its various forms keeps on leaving its imprints on the mental and physical state of its direct victims, i.e., humans. The contamination of the atmosphere of land which leaves an adverse impact on humans is categorized as a constituent of environmental pollution. Landrigan et al. (2018) state that exposure to the contaminants of the environment, particularly lead, air pollution, and pesticides, leads to 9 million deaths worldwide each year. This contamination might exist in the air, land, or water. Due to pollution, natural elements are not only contaminated but become insufficient to meet the growing needs of the population, especially in underdeveloped states where the graph of growth is considerably lower compared to the developed countries of the world. Grandjean and Landrigan (2014) found that the toxins present in the environment are threatening to cognitive and behavioral development among children, especially during the early years of their growth. One of the most powerful environmental hazards exists in the form of air pollution. Over the years, the quality of air has significantly worsened because of growing human activities. In fact, the WHO reports that 99% of the air pollution in the world today contains exceeding levels of air pollutants. A total of 92% of people worldwide reside in areas where the levels of particulate matter are exceedingly higher than the standards imposed by the WHO (Cohen et al. 2017).

Though it is a universal dilemma, Pakistan has seen dangerous levels of increment in the amount of pollution in its atmosphere over the span of the last five years. According to the Air Quality Life Index, Pakistan holds the status of the fourth most polluted country on a global scale, with an alarming rate of 44% pollutants in its air according to the latest statistics. The intensity of the particulate matter in the air becomes so high in the winter months in some of the major cities of Pakistan that it starts acting as a life-threatening phenomenon. In fact, metropolitan cities such as Lahore and Rawalpindi face the curse of smog every year, and the death rate has become as high as 128,000 people on an annual basis all over the country. These victims are all engulfed by the monsters of air pollution (Junaidi 2019). The major culprits behind this high rate of smog in Pakistan are industrial emission of chemicals, smoke coming from brick kilns, and unchecked engines of automobiles which are pacing at a faster rate on the roads every day (Al Jazeera 2021).

There has been a rapid increase in the number of vehicles in Pakistan, which is responsible for carbon emissions. Smog is produced by vehicles. Interviews with several transporters from Rawalpindi were conducted to ascertain the true reason behind the increasing levels of smog and pollution, especially in the winter months in Rawalpindi. One-third of the transporters believed that the "growing influx of population in this city" has become a chief reason for air pollution and smog in the past few years. According to them, it is because of the increased number of vehicles in Rawalpindi which has made the situation hard to battle, since the authorities cannot control the fast-paced growth of automobiles. Ramanathan and Feng (2009) state that the black carbon emission from automobiles is the second most lethal contributor after carbon dioxide, leading to global warming. Most of the transporters thought that in crowded areas such as Murree Road and Katcheri Chowk, where the peak hours result in hours of traffic jams, the engines of the automobiles are usually creating a mess in the atmosphere for many hours. Another interesting fact was revealed as some of the drivers believed that the initiation of the metro bus project has increased the amount of pollution twofold as the smog levels have become increasingly high in areas where the bus system as well as local transportation work in collaboration. Almost all the transporters agreed that they have seen the amount of smog increasing in the past few years, and most of this is because of the unchecked car engines which have become old over time. When they were further questioned, the transporters revealed that the growing economic burden is in some ways responsible for the amount of pollution in the air which they breathe because they are unable to take their vehicles for regular maintenance as the petrol price keeps on hiking and the potential profit is lower as compared to the past.

One of them reported that smog irritates our airways when we breathe it in. He shared a case where one of his family members died because of lung disease. Some of the locals also complained about the burning of their eyes and throat. They stated that their eyes and throat may burn on a day with a high ozone alert, and they may cough and wheeze as well.

Air pollution is not only a concern for transporters as it hinders the possible range in winter, but it is also becoming a burning issue for commuters. These commuters have been organized into various categories. Students, professionals, and daily wagers were questioned about their perspectives. Many of the youth who hailed from the student category believed that air pollution in the city is increasing to dangerous levels. Certain students believed that the amount of carbon monoxide in the atmosphere is becoming a major reason behind long-term respiratory problems. Three students complained that their asthma worsens due to smog, and this impacts their academic life as well. Among the professionals, we interviewed three doctors who were of the view that air pollution has become a major reason behind the increased number of respiratory ailments. Meanwhile, some commuters believed that transporters are not careful in terms of protecting the atmosphere despite repeated warnings. Daily wagers considered that the burden on transporters has intensified due to the bulk of the population traveling on an everyday basis and the number of automobiles that have increased at a higher rate to meet these needs.

Industrialization also plays a vital role in spreading pollutants in the air. The use of furnace oil in factories causes great destruction. The unplanned growth of factories is not only responsible for creating havoc in the form of air pollution but is one of the leading factors behind the production of industrial waste. Ukaogo et al. (2020) suggest that industrialization not only leads to air pollution but enhances the concentration of solid particulate matter on land, impacting public health. Not only industrial waste but also household waste is another dangerous threat to humankind since the silent dumping of waste is a time bomb that will take the lives of many with it when it explodes. The European Environment Agency considers that the linkage between human activities and waste material is close enough since the waste is directly dependent on human consumption, which, of course, is growing due to the growing needs of the global population. The rapid expansion of heavy industry to meet the needs of a growing population leaves the concentration of toxins on the land unchecked as contamination begins to impact healthy lives (Binkley and Miao 2015). In countries where population growth is left unchecked and there are no strict policies implemented for the effective management of human growth, the problem of waste contamination follows. Pakistan faces a severe problem of land pollution due to unchecked population growth and a careless attitude towards Mother Nature.

WWF (2021) has come up with a very intriguing kind of pollution that has existed for the last ten years in Pakistan. Its plastic pollution has increased over time due to the high level of consumption of the population in major cities as well as villages all across Pakistan. Even the capital of Pakistan, Islamabad, faces a grave situation regarding plastic bag pollution, where burning plastic not only pollutes the land but it once again devastates the atmosphere. According to the statistics recorded, 65% of the waste in Pakistan is composed entirely of plastic in its various forms. Sometimes, the waste is shopping bags, while other times, bottles and boxes of plastic contribute their due share in adding more pollution to the already bleak

picture. With every approaching year, the share of plastic increases by 15%, which is enough to destroy the planet, making individuals concerned about their health on a large scale (Mukheed and Khan 2020, pp. 1–7). When combined with the rainy seasons, this unchecked increase in waste means that epidemics have become a common tale in every household.

## 3.2. Impact of Environmental Toxins: Natives' Perspective

Several janitors in Rawalpindi were questioned about this chaotic scenario. A 27-year-old janitor held people accountable for creating this chaos and blamed their carelessness. According to him, it is the sheer carelessness of people that they display by openly disposing of waste in the streets every single day and not contributing a lot to clean up the mess, which makes the situation worse in the end. Two other janitors who have been in the cleaning profession for the last ten years believed that the number of cleaning people is fewer and the waste level is significantly higher, which is why it has become very problematic for a few people to collect garbage that has been left for a long time. Almost all the janitors believed that one reason behind improper waste disposal is the lower wages that are paid to them. A 45-year-old janitor expressed that sustenance on meager figures and cleaning every single day seems difficult for most, and that is why many young janitors these days are finding alternative jobs instead of cleaning, which enables them to clean only at weekends or on special days. Another 30-year-old janitor stated:

A number of times while we are cleaning the roads and drains, the passersby, especially young boys start ridiculing us and calling us names. This sometimes leads to occasional rows as well. The young janitors who are taking up the job are hot-headed. Frequently, we have faced a situation where one of our men stops coming to work and this leaves the heaps lying on the roads for days. People also need to understand that when we are not doing this of free will, it's our job and they need to respect this opinion if they want their roads clean.

This suggests that the inability of janitors to continue working due to the attitudes of people makes the waste twofold, and it becomes impossible in the end to clean huge dumpsters.

Interviews were conducted in various suburbs of Rawalpindi, including Murree Road, Adiala Road, and Raja Bazaar. The locals reported that the implemented system of the government to collect the waste is a total failure. There is no individual appointed by the union council who comes to check on the garbage dumpsters on a daily basis. A 40-year-old female homemaker said that she has appointed some Afghani kids to collect the daily garbage who later throw the garbage in Nala Lai. An old man living in the vicinity of Raja Bazaar told us that there are open dumpsters in the nooks and crannies of every Mohallah/street, which are then dumped in Nala Lai (a rainwater-fed natural stream that runs through the city of Rawalpindi) by

the mutual efforts of the people of the locality as they collect money for arranging for individuals to clean up the dumpsters. This reveals that the system of cleaning garbage in common areas is not properly managed. Five men from the area said that the dumpsters have become the reason for increased epidemics in the area, especially in the monsoon seasons when there is increased vector growth. Diseases such as dengue, Malaria, and diarrhea have become common phenomena. Some locals blame restaurant establishments that are totally unhygienic and are established just by the side of the road, which creates a very unhealthy atmosphere. A man from Murree Road revealed that it is a rare occurrence for restaurant owners to properly dispose of the waste; usually, they dispose of it quickly on the roads. The same behavior from the owner of a meat shop was noticed, who was described as not caring about the hygiene of their shop, and an unpleasant impact was noticed. A 29-year-old man from Murree Road revealed:

The restaurant owners are quite careless in dumping their waste. You will find the neighborhood all tacky and pungent because of the actions of a few. There is no one who checks on them or holds them accountable.

In order to find the opinions of restaurant owners, five different restaurant owners were interviewed, who revealed that a lack of a proper government setup prevents them from disposing of waste in safe spaces. One of the owners said that the economy has much to do with this. As the inflation graph is on a rise, it is hard for them to create safe spaces which ensure hygiene because they have been there in the locality for a while, and increasing prices beyond a certain range could lead to public outrage. A 50-year-old restaurant owner told us that:

We do not have enough money to manage waste disposal on a daily basis. In all honesty, it's not even our responsibility but the government needs to send the garbage trucks daily. When they don't pay heed to the situation and keep on raising prices, how can you expect us to manage another extra expenditure on our own?

Therefore, it becomes extremely hard for them to manage hygiene and their businesses side by side. Several owners were of the view that it is because of the lack of government care towards local businesses which prevents them from maintaining proper standards, unlike posh restaurants.

Within the locality, doctors from three different hospitals were interviewed. They had quite similar values about the health impacts of dumpsters in the area. One female doctor asserted that over the years, with the growing numbers of dumpsters, gastric problems have elevated at a much higher rate. She stated that much of it has to do with the vectors which feed on those dumpsters and then impact masses. Another doctor stated that he finds 90% of patients with diarrhea and gastroenteritis on a daily basis are infected because of unhealthy standards. Another 47-year-old physician stated:

Quite often, the attitudes of locals are also to be blamed when we talk about the negative impacts of pollution. Whenever there is an epidemic on the run, most people are reluctant to accept that it's because of their activities. Even when I suggest they use boiled water or practice basic hygiene, they are usually overlooked after the initial two days of following. People here only want to get relief from an ailment but they don't want to look at the reasons which have made them ill.

A local doctor stated that during monsoons, most of the people he treats suffer from dengue, which is an outcome of the open dumpsters. One of the doctors from the Holy Family hospital also showed great concern about waste management. He asserted that the infectious waste from the hospital needs to be properly disposed of since it is creating great havoc in spreading infectious and some fatal diseases. All four doctors believed that the government needs to be highly active about the issue of pollution and waste management and needs to take prompt measures in the area.

When every natural bliss is corrupted at a gradual pace, the most significant elixir of life is not even safe from the harsh consequences of human activities. Water, which gives life and acts as a harbinger of health and natural bliss, is now becoming a major cause of death throughout the globe as its soul is corrupted by the hands of the monster of pollution. This not only leaves a big question mark on the quality of the drinking water which is available but also closes all paths for the availability of fresh and pure water at a time when the environment is battling the issue of pollution. Eventually, there will be a lack of freshwater resources for the population all around the globe, since most of the water reservoirs have already been destroyed and are no longer suitable for drinking. Azizullah et al. (2011, pp. 479–97) note that just like other forms of environmental hazards, Pakistan faces a major issue in the supply of clean drinking water, and this makes it the 80th country among the 122 countries listed as providing fresh and clean drinking water to its people. Almost two-thirds of the drinking water, whether it is underground or appears in the form of streams or lakes, is highly polluted by the activities of humans and industries on a collaborative level. The level of toxins present in water is so high that the mortality rate is elevated particularly in this part of the South Asian region.

The locals from Adiala Road, Murree Road, and Raja Bazaar were interviewed about this issue. Nearly all the locals believed that the drinking water which is available to them is not clean at all but contaminated. Two-thirds of the locals asserted that they boil the water which they use because it helps them to elevate its quality. A 30-year-old woman, who is also a mother, believed that she can never rely on supplying unboiled water to her children as she knows that it is highly poisonous and has seen people suffering from dysentery within the locality. Locals of Adiala Road were of another opinion. They stated that their area suffers from the scarcity of drinking water most days, which is why they are forced to arrange private tankers to meet their needs. One man said that almost half of his hard-earned money is spent

arranging for tankers, which seems very problematic for those belonging to the lower middle class. A 51-year-old shopkeeper shared his views:

Most of us are not affluent enough to afford mineral water or water filtration units. I have been running this grocery shop for the last twenty-five years, and throughout these years, I have seen the customers buying mineral water bottles only when they lack water bottles with them while traveling and suddenly a pang of thirst strikes.

Certain locals from the Raja Bazaar stated that the scarcity of water in their areas is a reason that they never bother about the quality of the water which is available to them. A mother from Murree Road stated that she becomes highly anxious every time her children are down with fever and diarrhea because she knows that it is because of the water, and that is why even after repeated boiling, the water quality is becoming troublesome and the chief cause of major infections.

A 43-year-old doctor who works in a government hospital said that every single day, new cases come to the hospital who are suffering from chronic diarrhea to an extent that sometimes it becomes life-threatening. In his view, the ineffectiveness of active government policies is contributing to a higher rate of infection in the suburbs. Another colleague of his believed that it is the booming level of population in these suburbs that has made it quite difficult for the hospitals as well as government organizations to provide active facilities all the time. While interviewing a general physician, it was revealed that the lack of proper planning in terms of urban development as well as active waste and sewage management in the suburbs was the prime cause of the elevation of severe health infections in these areas.

## 4. Conclusions

In overpopulated cities such as Rawalpindi, pollution has become a major cause of concern among other issues. This study takes the opinions of the general public into account and serves to locate the prime factors due to which these environmental hazards are deteriorating the natural balance of the environment. By shedding light on the attitudes of the public, the study defines pollutants destroying the environment from the lens of the general public, as Nixon (2011) suggests:

The environment is not a passive backdrop for human action, but rather a central player in shaping human destinies. The world we inhabit, and the ways in which we interact with it, profoundly influence the outcomes of our lives and the quality of our experiences.

Keeping in view the above discussion, based on the findings, we conclude that overpopulation is the main cause of environmental hazards. Fast population development can cause environmental deterioration and habitat loss, as well as a rise in the demand for resources such as water and electricity. Promoting family planning, funding healthcare and education, and enacting laws that support

sustainable development are all examples of appropriate overpopulation planning. According to different respondents, the responsible attitude of the public regarding waste management in the form of recycling products and the minimal use of plastic can help us to improve our environment. Health workers were also very much concerned about the infectious wastes/chemicals that need to be properly disposed of. Pollution, greenhouse gas emissions, and the spread of disease can result from improper waste management. Promoting recycling and composting, putting trash reduction plans into action, and investing in new waste-reduction technology are all examples of appropriate waste management planning. Water security was also mentioned by a few respondents since Pakistan is a facing critical water shortage. Pipe leaks, ineffective irrigation techniques, and excessive water use can all result in water wastage. Planning effectively for water waste might include actions such as encouraging water conservation, making investments in cutting-edge technologies, and putting laws in place that support sustainable water management. Water sources can become contaminated and waterborne diseases might spread as a result of improper wastewater management. Planning effectively for sewerage systems might entail actions such as making sure wastewater is treated to strict standards, making investments in cutting-edge treatment technologies, and encouraging water conservation. High temperature, air pollution, and bad sanitation systems are all responsible for respiratory, skin, and gastro diseases. Hence, this study discovered that the main environmental threats—air pollution, inadequate waste management, the shortage of fresh water caused by businesses and automobiles, growing urbanization, water waste, and inadequate sewage systems—have a significant negative influence on people's physical and mental health. Therefore, proper planning and management need to be enacted by government officials and educators to continuously plan and manage efforts to conserve a healthy environment for our future generations.

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#### References

Akhtar, Munir, Nabila Akhtar, and Sajid Ahmad. 2018. Drinking water quality and child health in urban areas of Pakistan: A case study of Lahore city. *Human and Ecological Risk Assessment: An International Journal* 24: 825–36. [CrossRef]

Al Jazeera. 2021. Pakistan's Lahore again Tops World's Most Polluted Cities list. *Al Jazeera News*, December 3. Available online: https://www.aljazeera.com/amp/news/2021/12/3/pakistan-lahore-tops-most-polluted-cities-list (accessed on 21 September 2022).

- ARCGIS. 2022. Study Map of Selected Areas. Available online: https://www.arcgis.com/apps/mapviewer/index.html (accessed on 19 February 2023).
- Azizullah, Azizullah, Muhammad Nasir Khan Khattak, Peter Richter, and Donat-Peter Häder. 2011. Water Pollution in Pakistan and its Impact on Public Health—A Review. *Environmental International* 37: 479–97. [CrossRef] [PubMed]
- Binkley, Michael, and Hui Miao. 2015. Industrialization and water pollution: The case of China. *Water Resources and Economics* 11: 1–14. [CrossRef]
- Brounéus, Karen. 2011. In-depth interviewing: The process, skill and ethics of interviews in peace research. In *Understanding Peace Research: Methods and Challenges*. Edited by Kristine Hoglund and Magnus Oberg. London: Routledge.
- Centers for Disease Control and Prevention—CDC. n.d. Global WASH Fast Facts. Available online: https://www.cdc.gov/healthywater/global/wash\_statistics.html#:~:text=2% 20billion%20people%20lack%20access,have%20basic%20drinking%20water%20service (accessed on 13 September 2022).
- Cohen, Aaron J., Michael Brauer, Richard Burnett, H. Ross Anderson, Joseph Frostad, Kara Estep, Kalpana Balakrishnan, Bert Brunekreef, Lalit Dandona, Rakhi Dandona, and et al. 2017. Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: An analysis of data from the Global Burden of Diseases Study 2015. *The Lancet* 389: 1907–18. [CrossRef] [PubMed]
- Colbeck, Ian, Zaheer Nasir, and Zulfiqar Ali. 2010. Indoor air quality and its effect on the health of children in Pakistan. *Environmental Monitoring and Assessment* 191: 425. [CrossRef]
- Grandjean, Philippe, and Philip J. Landrigan. 2014. Neurobehavioural effects of developmental toxicity. *The Lancet Neurology* 13: 330–38. [CrossRef] [PubMed]
- Guillemin, Marilys, and Kristin Heggen. 2009. Rapport and respect: Negotiating ethical relations between researcher and participant. *Medicine, Health Care and Philosophy* 12: 291–99. [CrossRef] [PubMed]
- Junaidi, Ikram. 2019. 128,000 Deaths Occur in Pakistan Due to Climate Change Every Year, Senate Body Told. Dawn. Available online: https://reliefweb.int/report/pakistan/ 128000-deaths-occur-pakistan-due-climate-change-every-year-senate-body-told (accessed on 31 December 2019).
- Landrigan, Philip J., Richard Fuller, Nereus J. R. Acosta, Olusoji Adeyi, Robert Arnold, Niladri Nil Basu, Abdoulaye Bibi Baldé, Roberto Bertollini, Stephan Bose-O'Reilly, Jo Ivey Boufford, and et al. 2018. The Lancet Commission on pollution and health. *The Lancet* 391: 462–512. [CrossRef] [PubMed]
- Leach, Matthew J. 2005. Rapport: A key to treatment success. *Complementary Therapies in Clinical Practice* 11: 262–65. [CrossRef] [PubMed]
- Liverman, Diana. 2001. Environmental Risk and Hazards. In *International Encyclopedia of the Social & Behavioral Sciences*. Edited by Neil J. Smelser and Paul B. Baltes. Amsterdam: Elsevier, pp. 4655–59. [CrossRef]
- Mannan, Abdul, Fan Yongxiang, Tauheed Ullah Khan, Syed Moazzam Nizami, Beckline Mukete, Adnan Ahmad, Ummay Amara, Jincheng Liu, and Mamoona Wali Muhammad. 2021. Urban Growth Patterns and Forest Carbon Dynamics in the Metropolitan Twin Cities of Islamabad and Rawalpindi, Pakistan. *Sustainability* 13: 12842. [CrossRef]

- Mukheed, Muhammad, and Alisha Khan. 2020. Plastic Pollution in Pakistan: Environmental and Health Implications. *Journal of Pollution Effects and Control* 4: 251–58. Available online: https://www.longdom.org/abstract/plastic-pollution-in-pakistan-environmental-and-health-implications-58056.html (accessed on 21 September 2022).
- Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge: Harvard University Press, p. 2.
- Rai, Divya, Prashant Kumar, and Preeti Purohit. 2020. Water Pollution and Child Health in South-Asia: A Systematic Review. *Journal of Water and Health* 18: 1–15. [CrossRef]
- Ramanathan, Veerabhadran, and Yangyang Feng. 2009. On avoiding dangerous anthropogenic interference with the climate system: Formidable challenges ahead. *Proceedings of the National Academy of Sciences* 106: 364–71. [CrossRef] [PubMed]
- Rubin, Herbert J., and Irene S. Rubin. 2011. *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage.
- Sabzwari, Tazeen, and Saima Qureshi. 2019. Effects of air pollution on children's health in Pakistan: A literature review. *Environmental Science and Pollution Research* 26: 35561–72. [CrossRef]
- Sharma, Hemant Lata, and Chiranjit Sarkar. 2018. Ethnography Research: An Overview. *International Journal of Advance and Innovative Research* 6: 78–79. Available online: https://www.researchgate.net/profile/Hemant-Sharma-31/publication/333701617\_ETHNOGRAPHY\_RESEARCH\_AN\_OVERVIEW/links/5d22fe09a6fdcc2462ca9c79/ETHNOGRAPHY-RESEARCH-AN-OVERVIEW.pdf (accessed on 15 March 2023).
- Ukaogo, Prince O., Ugochukwu Ewuzie, and Chibuzo V. Onwuka. 2020. Environmental pollution: Causes, Effects, and the Remedies. In *Microorganisms for Sustainable Environment and Health*. Edited by Pankaj Chowdhary, Abhay Raj, Digvijay Verma and Yusuf Akhter. Amsterdam: Elsevier, pp. 419–29. [CrossRef]
- Vaismoradi, Mojtaba, and Sherrill Snelgrove. 2019. Theme in qualitative content analysis and thematic analysis. In *Qualitative Content Analysis I*. Edited by Markus Janssen, Christoph Stamann, Margrit Schreier, Amanda Whittal and Thomas Dahl. Berlin: Institut für Qualitative Forschung.
- World Health Organization. 2022. *Air Pollution*. Geneva: World Health Organization (WHO). Available online: https://www.who.int/health-topics/airpollution#: ~:text=From%20smog%20hanging%20over%20cities,acute%20and%20chronic% 20respiratory%20diseases- (accessed on 21 September 2022).
- WWF. Tackling Plastic Pollution in Pakistan: Plastic Waste. 2021. Available online: https://www.wwfpak.org/issues/plastic\_pollution/ (accessed on 21 September 2022).
- Zaidi, Syed Ziauddin, Muhammad Shafiq, and Zafar Quadri. 2019. The relationship between ambient air pollution and respiratory health of school children: A cross-sectional study in Lahore, Pakistan. *BMC Public Health* 19: 1021. [CrossRef]
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