IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

An Analysis of Public Perception and Measures for Air Pollution Control in India

J D Vikram[1] and Kalaiyarasi. M[2]
BBA.LLB. (Hons)[1,2]
Saveetha School of Law, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai
jd25vikram@gmail.com and kalaiadv29@gmail.com

Abstract: *Atmospheric pollution comprises airborne chemicals and particulates detrimental to human, animal, and plant health, as well as to structures. These pollutants exist as gases, solid particles, or liquid droplets. Air pollution constitutes a significant risk factor for numerous diseases, including respiratory infections, cardiovascular disease, COPD, stroke, and cancer. Although the problem has significantly worsened in recent decades due to rapid urbanization and industrialization, concerted efforts to mitigate it have persisted for nearly a century. This empirical research employed a questionnaire to collect data from a sample size of 211 participants using a convenience sampling method, drawing from the researcher's personal network& General Public. Independent variables included gender, age group, income level, education level, occupation, and respondent status. Dependent variables encompassed pollution causes, proposed solutions, and pollution mitigation efforts. Graphical analysis was utilized for data interpretation. Our survey revealed that 81.99% of respondents have undertaken actions to mitigate pollution, while 18.01% have not. The most popular proposed solution was increased utilization of public transportation, with 53.55% strongly agreeing and 31.75% agreeing that pollution is a significant contemporary issue..*

Keywords: Air, Air Conditioners, Awareness, Damage,Eco-friendly, Electric Vehicles, Environment, Firecrackers, Garbage burning, Government, Harmful, Health, Industrialization, Management, Particulate Matter, Policies, Pollution, Public Transportation, Reduction, Smoking, Society, Sustainable, Toxic gas, Urbanization, Waste

I. INTRODUCTION

Atmospheric pollution, characterized by the presence of harmful chemicals, negatively impacts human and ecological health, and can damage both the environment and man-made structures. Pollutants include gaseous compounds (ammonia, carbon monoxide, sulfur dioxide, nitrous oxides, methane, and chlorofluorocarbons), particulate matter (organic and inorganic), and biological agents. Exposure can result in human illness, allergies, and mortality; adverse effects also extend to other organisms and ecosystems. Pollution sources encompass both anthropogenic activities and natural phenomena.

Air pollution poses a substantial risk factor for numerous pollution-related diseases, including respiratory infections, cardiovascular disease, COPD, stroke, and cancer. The impact of poor air quality on human health is extensive, primarily affecting the respiratory and cardiovascular systems. Air pollution is a recognized environmental health hazard; visible manifestations include brown haze over cities, exhaust fumes on highways, and plumes from smokestacks. While some pollution is invisible, its odor often serves as a warning. It represents a major threat to global health and economic prosperity. Globally, air pollution in all forms contributes to over 6.5 million deaths annually, a figure that has risen over the past two decades.

Individual responses to air pollutants vary depending on the pollutant, exposure level, and individual health and genetic factors. The 2008 Blacksmith Institute report identified indoor pollution and poor urban air quality as two of the world's most significant toxic pollution problems. Outdoor pollution alone causes an estimated 2.1 to 4.21 million deaths annually, contributing to the approximately 7 million pollution-related deaths globally each year, making it the

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

world's leading environmental health risk. The economic impact is substantial, with productivity losses and reduced quality of life estimated at $5 trillion annually. Numerous pollution control technologies and strategies exist to mitigate these effects. Globally, governments have undertaken numerous initiatives to address the critical issue of pollution and promote environmental sustainability. India has grappled with air pollution since the early 1900s, with the first anti-pollution legislation enacted in 1905. Although the problem has significantly worsened in recent decades due to rapid urbanization and industrialization, concerted efforts to mitigate it have persisted for nearly a century. A key recent initiative is the 2019 National Clean Air Programme(NCAP), aiming to improve air quality by reducing Particulate Matter (PM) concentrations by 20-30% by 2024. This target was later extended to 2026, with a revised goal of a 40% reduction in PM10 levels compared to 2017. The NCAP mandates that State Governments implement City Action Plans (CAPs) and upgrade existing plans, guided by a three-member committee. The program focuses on sector-specific strategies for mobility and air quality, energy and buildings, waste management, urban flooding and water resource management, and urban greening and biodiversity, providing a comprehensive framework for pollution reduction. This research paper will analyze the impact of air pollution on modern society.

OBJECTIVE

- To assess the level of public awareness and understanding regarding the causes and consequences of air pollution.
- To identify the extent to which the public is informed about existing measures and strategies for reducing air pollution.
- To explore public perceptions and attitudes toward various air pollution control methods, including technological, behavioral, and policy-driven approaches.
- To evaluate the most effective and publicly supported solutions for mitigating air pollution.

II. REVIEW OF LITERATURE

(Adhikari)2012 These study examinations were gathered from 120 family units (641 people) and three distinct areas. The discoveries recommend that the yearly government assistance gained to a delegate individual inside the city from a rebate in contamination from the current normal level to a safe least level is NRS 266 for each annum (USD 3.70).
(Alberini et al.)1997. This study's unexpected valuation overview was directed in Taiwan to evoke eagerness to pay(WTP). They assessed a model during which WTP relies upon the credits of the sickness _duration and number of manifestations, and nature of the disease. WTP of Taiwanese families is differentiated and benefits move extrapolations that change WTP for the United States by Taiwan nuclear family pay, relative with U.S. nuclear family pay. **(Wolterbeek)2002**. This studies about Biomonitoring of trace element air pollution: principles, possibilities and perspectives.This paper discusses the biomonitoring of trace element air pollution. Much attention is given to both lichens and mosses as the dominant plant species used in biomonitoring surveys. **(Sweileh et al.)(2019).**Outdoor air pollution and respiratory health: a bibliometric analysis of publications in peer-reviewed journals (1900 – 2017).Research on the impact of outdoor air pollution on respiratory health had accelerated lately and is receiving a lot of interest. There was a dramatic increase in the number of publications in the last decade of the study period. **(Luechinger)2010.** This study about Life satisfaction and transboundary air pollution.It finds a statistically significant and robust negative effect of air pollution on life satisfaction, translating into considerable willingness-to-pay, which is larger for IV estimates with pollution from foreign sources as an instrument and for green voters and the elderly. **(Alberini et al.; Bernstein et al.)(2004).** This study's Epidemiologic investigations can show factual relationship between levels of individual or joined air contaminations and results, like paces of asthma, crisis visits for asthma, or medical clinic confirmations, yet can't demonstrate a causative job. Human openness examines, creature models, and tissue or cell considers give additional data on instruments of reaction yet in addition have natural restrictions. **(Brunekreef and Holgate) (2002).** This study of the health effects of air pollution have been subject to intense study in recent years. Openness to toxins, for example, airborne particulate matter and ozone has been related with expansions in mortality and clinic confirmations because of respiratory and cardiovascular sickness. **("Clearing the Air in**

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 6, April 2025 Impact Factor: 7.67

India")**Bussolo, M., and O'Connor, D. (2001)**. This study the elimination of any confusion in the air in India: the financial matters of environment strategy with auxiliary advantages. With the guide of a processable general harmony model, this paper gauges for India the extent of overflows from restricting development of ozone depleting substance outflows to nearby air quality and the strength of the metropolitan populace. **(Yazdi and Khanalizadeh) 2017**.Air pollution, economic growth and health care expenditure .In this article, we examine the role of environmental quality and economic growth in the determination of health expenditure in the Middle East and North Africa region.The results show that health expenditure, income, CO2 and PM10 emissions are a cointegrated panel. The results show that the income elasticity is inelastic, that health expenditure is not more sensitive to income and the adjustment to changes in income in MENA countries. **(Fang et al.)2015.** This study about Traffic-related air pollution and sleep in the Boston Area Community Health Survey. Little is known about environmental determinants of sleep. We investigated the association between black carbon (BC), a marker of traffic-related air pollution, and sleep measures among participants of the Boston Area Community Health Survey. We also sought to assess the impact of sociodemographic factors.**(Chestnut)(2009).**This study Monetary valuation of mortality hazard decrease: Review and suggestions for strategy and administrative analysis.This working paper refreshes the past writing survey by Chestnutetal. (1999) and makes new proposals about suitable assessments to utilize while esteeming mortality hazard changes in strategy investigations of Canadian projects expected to decrease mortality chances. **(Fang et al.; Neidell)2004**. This paper studies Air pollution, health, and socio-economic status: the effect of outdoor air quality on childhood asthma. This paper estimates the effect of air pollution on child hospitalizations for asthma using naturally occurring seasonal variations in pollution within zip codes. Of the pollutants considered, carbon monoxide (CO) has a significant effect on asthma for children ages 1–18: if 1998 pollution levels were at their 1992 levels, there would be a 5–14% increase in asthma admissions. **(Fang et al.; Neidell; Desaigues et al.)2011**. This paper studies Economic valuation of air pollution mortality: A 9-country contingent valuation survey of value of a life year (VOLY). Based on the results from this 9-country CV survey we recommend a VOLY estimate of 40,000 € for cost–benefit analysis of air pollution policies for the European Union. As for confidence intervals, we argue that VOLY is at least 25,000 € and at the most 100,000 €. **(Sandstrom et al.)2003.** These studies about the need for a focus on air pollution research in the elderly. The generation of an understanding of air pollution effects in the elderly, at an elevated level, is a prerequisite to substantially reducing the adverse health effects of this population group. At local, national and European Union levels, some steps have been taken to support the research in this area. **(Oltra and Sala) 2018.** Perception of risk from air pollution and reported behaviors: a cross-sectional survey study in four cities. Preliminary modeling of four self-reported actions suggests that self-reported attention to air quality levels and worry are important predictors of self-protective and information seeking behavior. We conclude that both personal and contextual factors have to be taken into account in order to understand public reactions to outdoor urban air pollution. We discuss the implications in terms of risk and health communication. **(Van Houtven et al.) (2006).** This study Esteeming maintained a strategic distance from dismalness utilizing meta-regression investigation: what can well-being status measures and QALYs educate us regarding WTP?. Numerous financial specialists contend that readiness-to-pay (WTP) measures are generally fitting for evaluating the government assistance impacts of wellbeing changes. **(McMichael and Smith) (1999).** This study Looking for a worldwide point of view on air contamination and wellbeing. Open air contamination has for some time been the most noticeable type of ecological scourge brought about by industrialization. That distinct measurement mirrored the consolidated perils of undesirable air and dangerous drinking water,with unhealthiness, helpless lodging, and actual risk. **(McMichael and Smith; Schwartz)(1994).**This study Air contamination and every day mortality: a survey and meta investigation. The air contamination in the London debacle in 1952 set up that exceptionally undeniable degrees of particulate-based exhaust cloud can cause sensational expansions in day by day mortality. **(Wen and Gu)(2012).** This study about Air pollution shortens life expectancy and health expectancy for older adults: the case of China.This is a multilevel prospective cohort study based on a nationally representative sample of Chinese elders. Outside air contamination is quite possibly the most stressing natural danger China faces today. **(Mestl et al.) (2007).**This study Medical advantages from diminishing indoor air contamination from family strong fuel use in China — Three decrease situations. As per the World Health Organization (WHO), indoor air contamination (IAP) from the

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

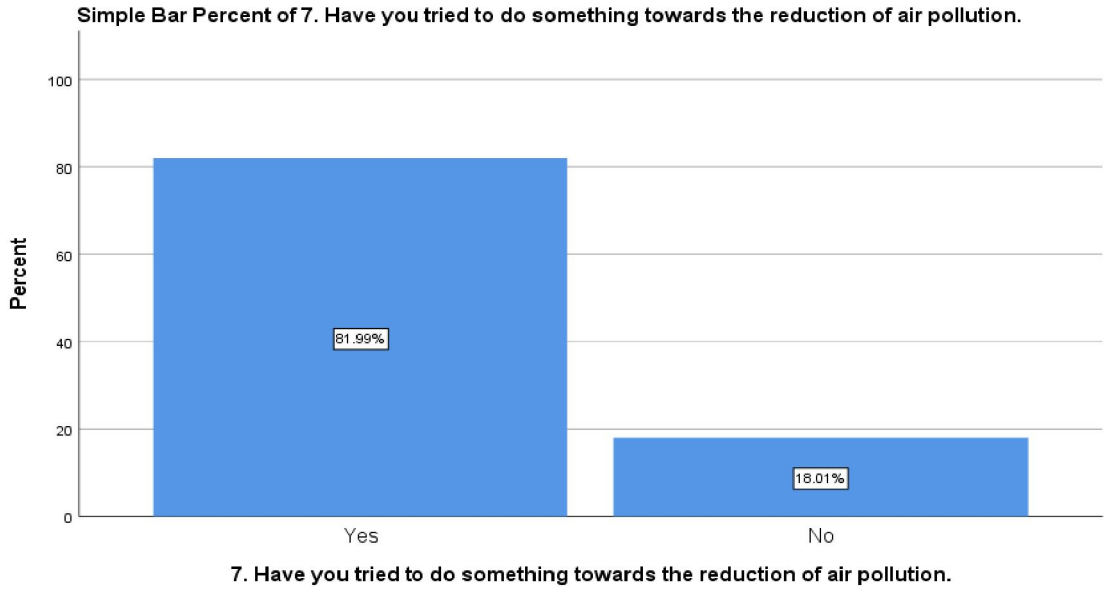
utilization of strong fills in families in the creating scene is answerable for more than 1.6 million unexpected losses every year, whereof 0.42 million happen in China alone.

III. METHODOLOGY

The research method followed is Empirical research. The info is collected through a questionnaire and therefore the sample size is 211. Convenience sampling method is adopted within the study to gather the info. The samples were collected from General Public & Friends. The independent variables are gender, age group, income level and education level, occupation & legal status of respondents. The dependent variables are causes of air pollution, the impressive solution for air pollution, and how many have tried to reduce the air pollution.The researcher used graphs to research the info collected.

IV. ANALYSIS

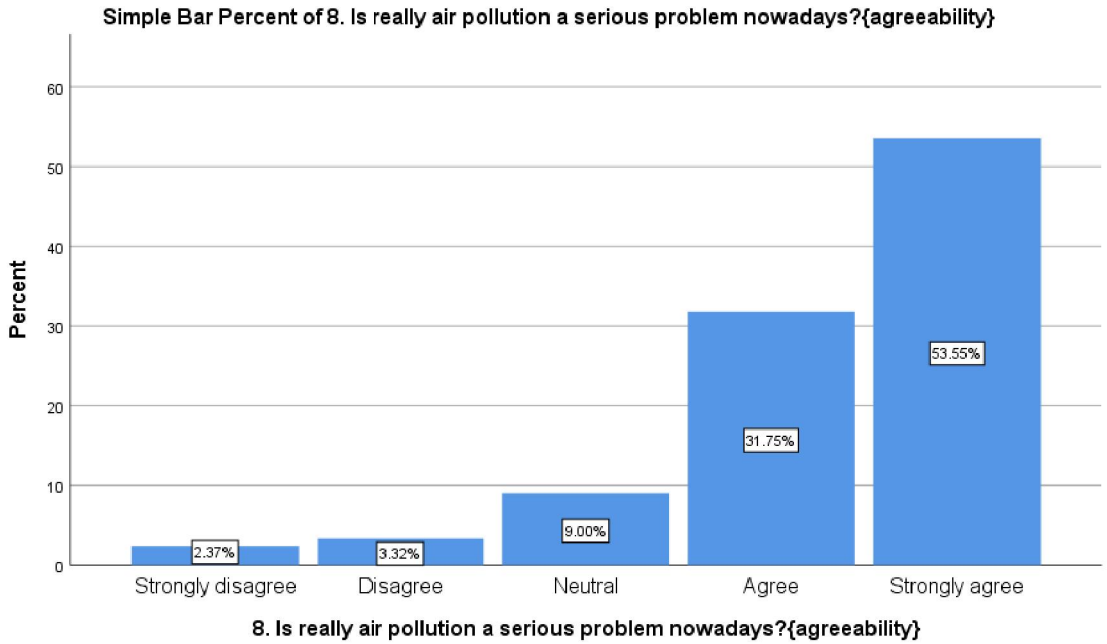
Figure 1



Legend: Figure 1 shows the response of the respondents towards the reduction of air pollution.

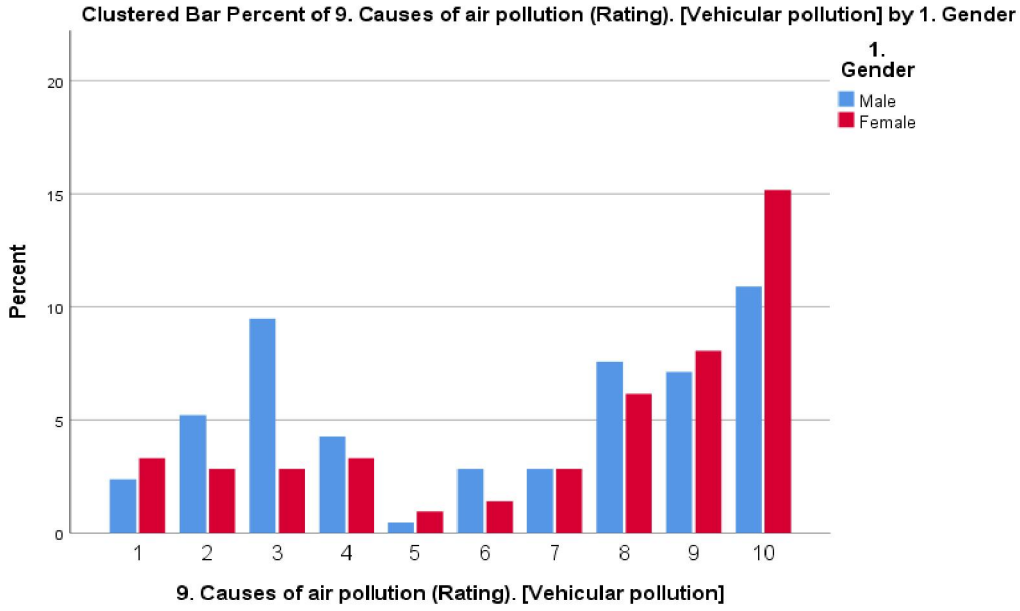
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

Figure 2



Legend: Figure 2 shows the respondents agreeability for seriousness on air pollution.

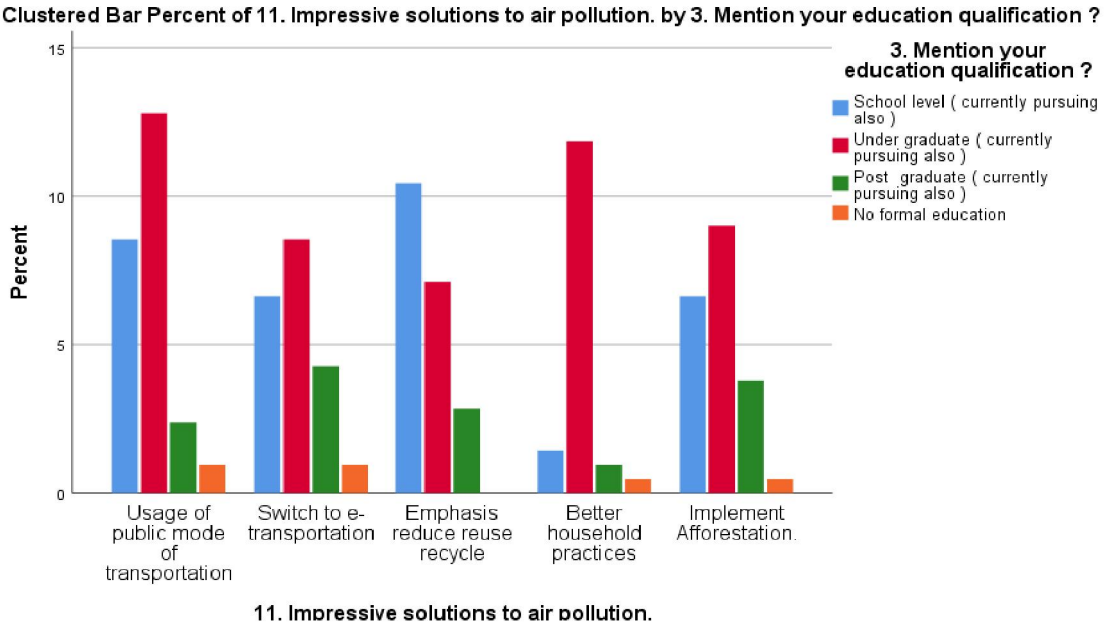
Figure 3



Legend: Figure 3 shows the rating of the respondents on the statement "causes of air pollution (vehicular pollution) based on respondents Gender.

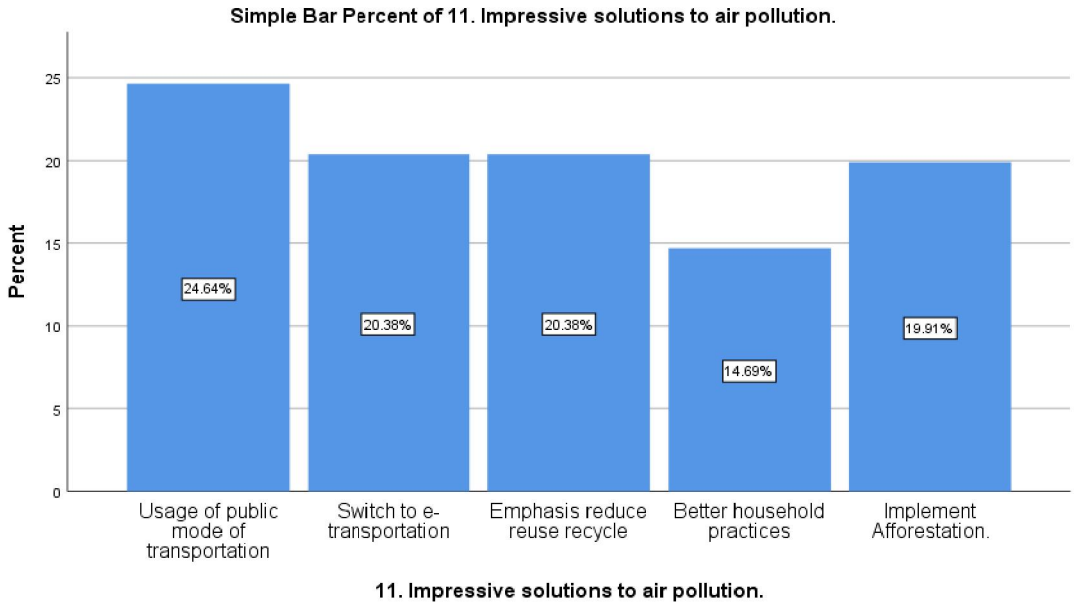
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

Figure 4



Legend: Figure 4 shows the impressive solution to air pollution based on respondents' education qualification**.**

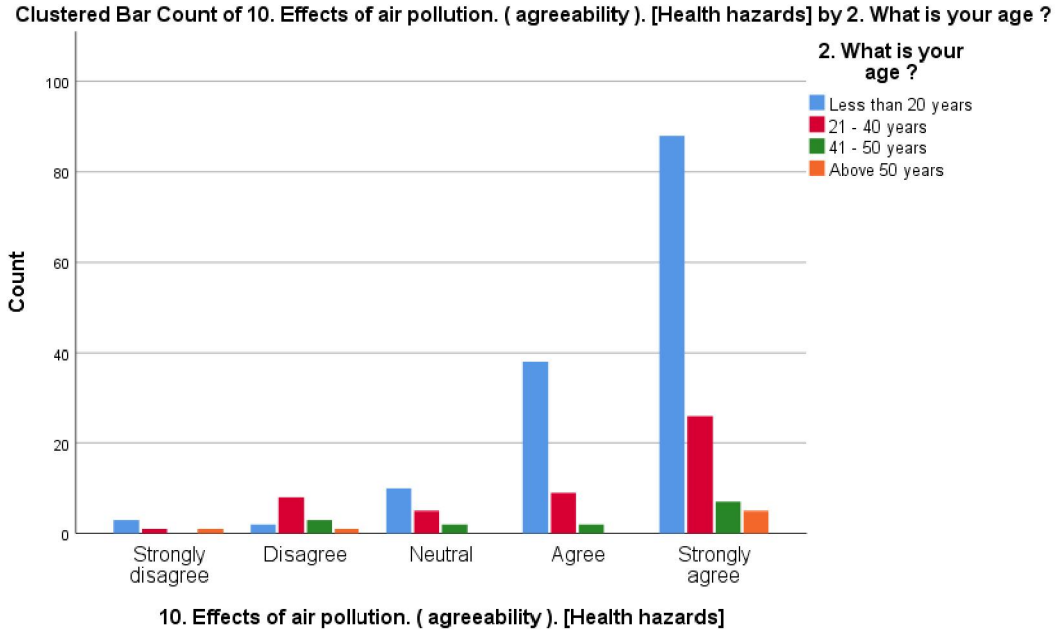
Figure 5



Legend: Figure 5 shows the impressive solution to air pollution.

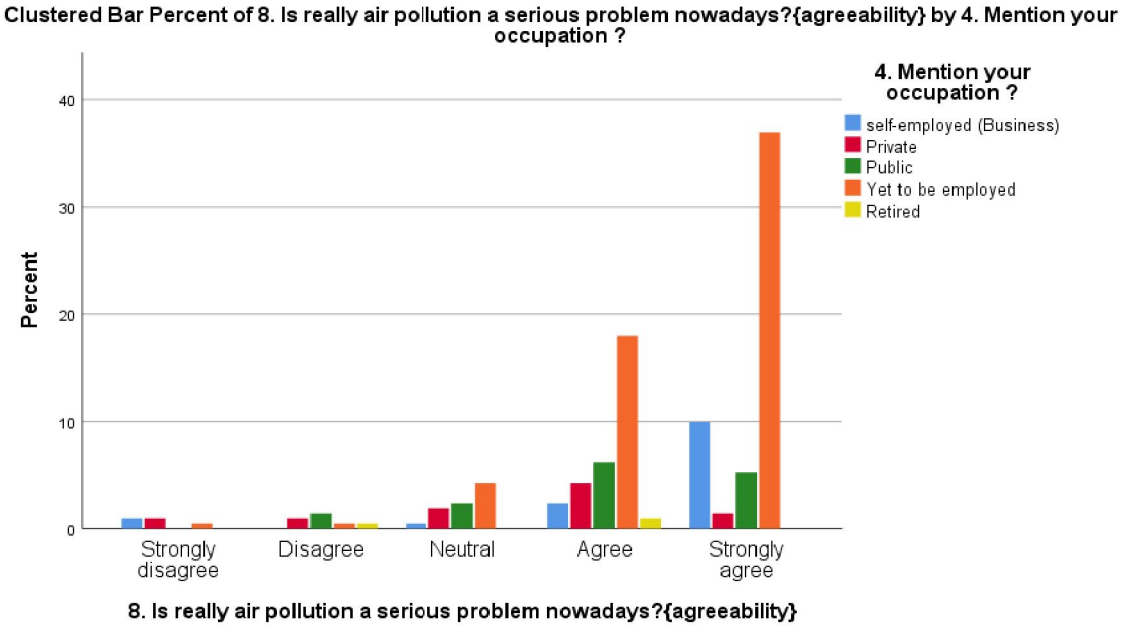
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

Figure 6



Legend: The figure 6 shows the respondents agreeability for the effects of air pollution in health hazards based on respondents age.

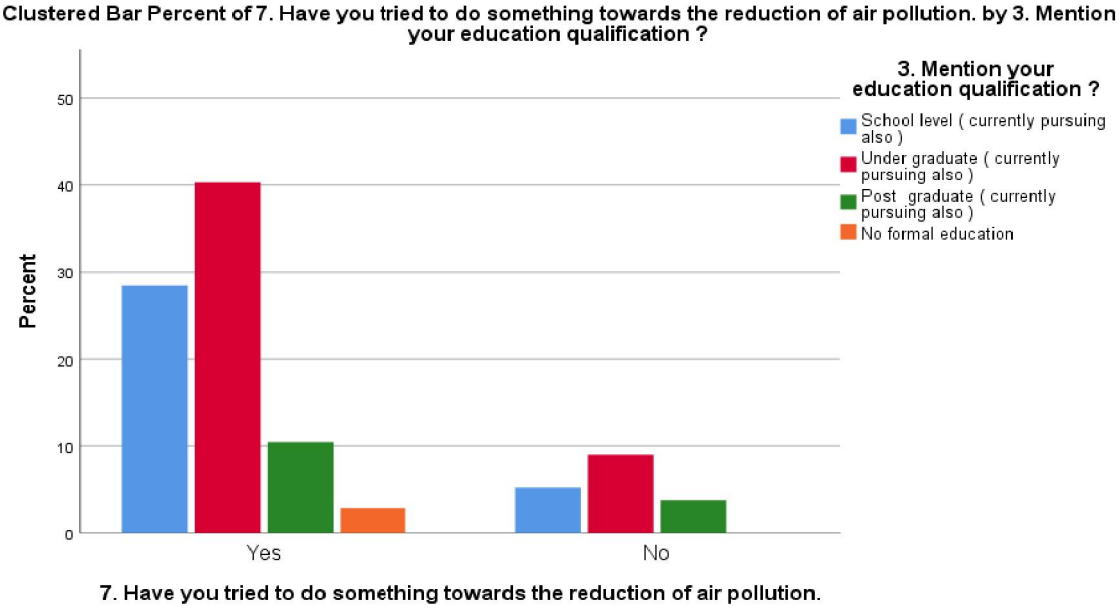
Figure 7



Legend: The figure 7 shows the agreeability of the statement "Is air pollution really a serious problem nowadays?" based on respondents occupation.

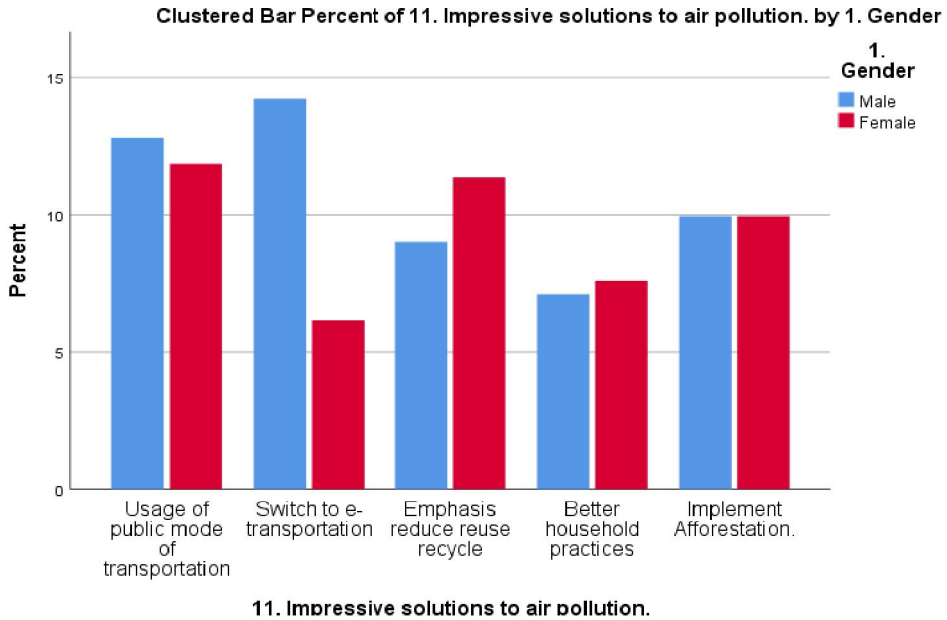
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

Figure 8



Legend: Figure 8 shows how many respondents tried to do something towards the reduction of air pollution based on the respondents education qualification.

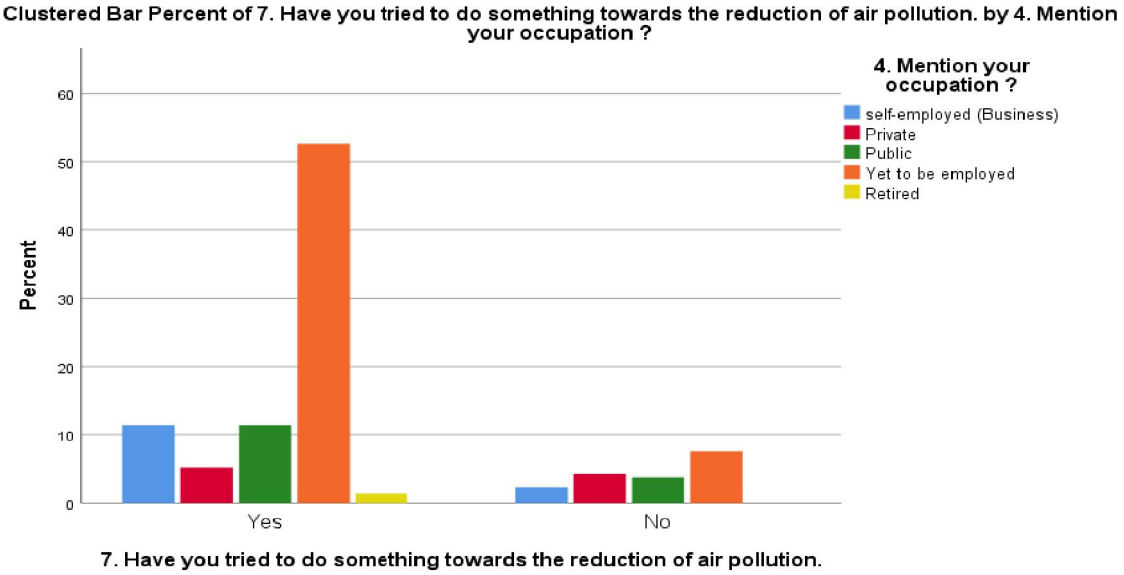
Figure 9



Legend: The figure 9 shows the impressive solution to air pollution based on respondents' gender.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

Figure 10



Legend: The figure 10 shows how many respondents tried to do something towards the reduction of air pollution based on the respondents' occupation.

V. RESULT

From **figure 1** it is clear that 81.99% of respondents tried to do something towards the reduction of air pollution, whereas 18.01% of respondents haven't tried anything towards the reduction of air pollution. **Figure 2** it is clear that 53.55% of the respondents strongly agree with the statement and 31.75% have agreed with the statement that "Nowadays Air pollution is a serious problem". From **figure 3** it is clear that the majority of the female respondents rated strongly that maximum causes if the air pollution is due to the vehicles. From **figure 4** it is clear that the maximum number of the undergraduate responded as usage of public mode of transportation. From **figure 5** it is clear that the maximum, that is 24.64% of respondents, have responded that "usage of public mode of transportation" is the most impressive solution for air pollution. From **figure 6** it is clear that respondents of all the age groups strongly agreed with the statement "health hazards" on the effect of air pollution. From **figure 7** it is clear that employees of private, self-employed, yet to employ and public agree or strongly agree with the statement. **Figure 8** it is clear that the maximum of the respondents based on education qualification have tried something towards the reduction of air pollution. From **figure 9** it is clear that male respondents have an opinion that switching to e- transportation as an impressive solution whereas female respondents have mixed responses. From **figure 10** it is clear that the maximum of the respondents based on occupation have tried something towards the reduction of air pollution.

VI. DISCUSSION

From **figure 1** we could understand that about 81.99 % of the respondents have tried doing something for the reduction of air pollution and this might be because all of them would be aware of the consequences that will lead to if we don't control air pollution. Therefore,in order to help our mother earth to survive for some more years the respondents might have taken steps to reduce air pollution. The other 18.01% has not done anything to keep air pollution in control and this might be because of their lack of awareness about what air pollution will lead to. In the above **figure 2** maximum, i.e53.55% of the respondents are aware that air pollution is a serious threat in today's world and this awareness might be due to their experience where they could have faced serious problems due to air pollution or might have seen someone facing such problems. The above **figure 3** shows that most of the female respondents strongly agree that vehicular pollution is the contributing factor for air pollution. Though there are mixed views by the male respondents finally the

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

maximum of them strongly agree to the fact and this might be from their daily experience and knowledge where in this busy world all of us use vehicle to a large extent even when we are aware of the fact that it contributes to air pollution as there is no more effective alternative for this. The above **figure 4** shows that maximum of the respondents no matter what their educational qualifications are but they go by the three ways as the most effective ways for controlling air pollution which are usage of public transport, emphasis of reduce reuse and recycle and better household practices as these might be the most impressive and affordable ways to carry on by Maximum of the population and other ways like switching to e transportation and implementing afforestation could not be affordable by most of them. From **figure 5** it is clearly understandable that all of these steps are effective ways for controlling air pollution but the maximum that is 24.64% of respondents has chosen the usage of public mode of transportation as the most impressive solution as it might be the easiest, cheapest and affordable way for all the people. We could understand from the **figure 6** that respondents belonging to all the age groups strongly agree that air pollution leads to health hazards and this might be because all of them are aware of this where all the children in the school level are taught about it and this could be the daily news that we come across and this knowledge might have led to such conclusion. The above **figure 7** shows that people who are employed in private sectors and who are self-employed that is all the working people strongly agree that air pollution is a serious problem nowadays and this might be because they are facing the polluted world every day and are personally experiencing it and are very much worried about their future generations whereas respondents who are retired have neutral opinion on this view. The above **figure 8** tells that maximum respondents from all kinds of educational qualifications have done something for the reduction of air pollution and this might be because they are much worried about their future generations and wanted the world to exist for many more healthy years so that they and their future generations could live happily for many more years. Though the **figure 9** shows mixed opinions from both the genders finally the maximum of the male respondents have an opinion that switching to e transportation as an impressive solutions and this might be due to their interest and willingness towards e transportation so that they find it an impressive way whereas maximum of the female respondents believe usage of public transportation as the most effective way and this could be due to their realization that it might be the most cheapest and effective ways. The **figure 10** shows that all the respondents irrespective of their occupation have taken steps to reduce air pollution and keep it in control and it might be due to their involvement towards keeping our world healthier as they came across a lot of natural disasters which are the results of pollution that we make to the earth. After the realization that all these are due to us, the humans, all of the respondents might want to Keep them in control as it however in turn affects us too to a very large extent.

VII. LIMITATIONS

Air pollution is a vast and complex issue, not only in India but across the globe. It involves multiple sources, effects, and control strategies that differ based on geography, urbanization, industrial activity, and government policies. Due to the broad nature of the topic, it was not possible to explore every dimension of air pollution in detail within the scope of this study. Although the questionnaire used in the study was designed to be simple and easy to understand, not all respondents had sufficient awareness or knowledge about air pollution and its control measures. This lack of understanding may have led to incompleteness and inaccuracy. These factors could have affected the authenticity and reliability of the data collected.

In addition, the study faced limitations in terms of time, resources, and geographical coverage. A more thorough and large-scale study would have allowed for a more detailed and accurate analysis. However, due to time constraints and limited access to a diverse population sample, the findings may not fully represent the views of all sections of Indian society. Despite these challenges, the study provides valuable insights into public awareness and opinions regarding air pollution control methods.

VIII. SUGGESTIONS

Air pollution has become one of the most pressing environmental challenges facing India today. While industrial emissions and large-scale pollution sources often receive the most attention, there are many small yet critical sources of air pollution present in our daily lives. These include common activities and appliances found in homes and

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

neighborhoods, such as vehicle use, construction machinery, backyard burning, lawn equipment, dry cleaners, and auto repair shops. Although each source may seem minor on its own, collectively, these contribute more to air pollution than all industrial sources combined. Addressing these everyday contributors can significantly improve air quality and public health. One of the most effective ways to reduce air pollution is by promoting the use of "Public Transportation". Buses, trains, and metros use less fuel per person compared to individual vehicles. Even carpooling can play a role in decreasing the number of vehicles on the road, reducing both traffic and pollution. Along with environmental benefits, using public transport also helps individuals save money on fuel and vehicle maintenance. "Garbage burning" is another serious issue, particularly during dry seasons when dry leaves and waste are often set on fire. This practice releases harmful pollutants into the air and reduces overall air quality. Encouraging proper waste disposal methods and increasing awareness about the dangers of open burning are essential steps in combating this source of pollution. In everyday life, "Smoking" is another contributor to poor air quality. Smoking not only poses severe health risks to individuals but also pollutes the surrounding air. Efforts to reduce smoking in public spaces can help improve air quality for everyone. "Air Conditioners" (ACs), while providing comfort, consume a large amount of electricity and release heat into the environment. Their widespread use increases the overall energy demand, much of which is met by fossil fuels. Promoting energy-efficient alternatives like fans, or encouraging responsible use of ACs, can help reduce the environmental impact. A major contributor to seasonal spikes in air pollution is the widespread use of "Firecrackers" during festivals and weddings. These events lead to a temporary but dangerous increase in airborne pollutants, often resulting in thick layers of smog in cities. Encouraging eco-friendly celebrations and limiting or banning the use of firecrackers can greatly reduce this problem. Another long-term and highly beneficial solution is to plant and nurture more trees. Trees not only help reduce pollution by absorbing carbon dioxide and other harmful gases, but also produce oxygen, improve air quality, and contribute to cooling the environment. Tree plantation drives, especially in urban areas, should be encouraged as a community effort. In addition to these individual and community-based solutions, government initiatives play a crucial role. The promotion and development of "Electric Vehicles" (EVs), clean energy sources, stricter pollution control laws, and modern pollution monitoring equipment are essential steps toward a cleaner future. Public awareness campaigns and educational programs can also play a vital role in changing people's habits and encouraging environmentally responsible behavior. Tackling air pollution in India requires both systemic changes and individual responsibility. While industries and large-scale sources of pollution must be regulated, small daily activities also have a significant impact. By adopting cleaner habits, supporting green technologies, and working with government efforts, every citizen can contribute to reducing air pollution and building a healthier, more sustainable environment for future generations.

IX. CONCLUSION

Air pollution, released into the atmosphere of various gases, finely divided solids, or finely dispersed liquid aerosols at rates that exceed the natural capacity of the environment to dissipate and dilute or absorb them. These substances may reach concentrations in the air that cause undesirable health, economic, or aesthetic effects.This paper attempts to understand the causes of air pollution, the impressive solution for air pollution, and how many have tried to reduce the air pollution. It was found that 81.99% of respondents tried to do something towards the reduction of air pollution, whereas 18.01% of respondents haven't tried anything towards the reduction of air pollution, maximum of respondents have responded that "usage of public mode of transportation" is the impressive solution for air pollution, 53.55% of the respondents strongly agree with the statement and 31.75% have agreed with the statement that "Nowadays Air pollution is a serious problem". Government initiatives play a pivotal role in combating air pollution. While significant progress has been made, challenges remain that require continuous effort, public participation, and intergovernmental collaboration. By evaluating and refining these strategies, societies can move towards cleaner air and a healthier environment.

REFERENCES

[1]. Adhikari, Naveen. Measuring the Health Benefits from Reducing Air Pollution in Kathmandu Valley. 2012.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, April 2025
Impact Factor: 7.67

[2]. Alberini, Anna, et al. "Valuing Health Effects of Air Pollution in Developing Countries: The Case of Taiwan." Journal of Environmental Economics and Management, vol. 34, no. 2, 1997, pp. 107–26, doi:10.1006/jeem.1997.1007.

[3]. Wolterbeek, Bert. "Biomonitoring of Trace Element Air Pollution: Principles, Possibilities and Perspectives." Environmental Pollution, vol. 120, no. 1, 2002, pp. 11–21, doi:10.1016/s0269-7491(02)00124-0.

[4]. Sweileh, Waleed M., et al. "Outdoor Air Pollution and Respiratory Health: A Bibliometric Analysis of Publications in Peer-Reviewed Journals (1900 – 2017)." Multidisciplinary Respiratory Medicine, vol. 13, 2019, doi:10.4081/mrm.2018.146.

[5]. Luechinger, Simon. "Life Satisfaction and Transboundary Air Pollution." Economics Letters, vol. 107, no. 1, 2010, pp. 4–6, doi:10.1016/j.econlet.2009.07.007.

[6]. Bernstein, Jonathan A., et al. "Health Effects of Air Pollution." Journal of Allergy and Clinical Immunology, vol. 114, no. 5, 2004, pp. 1116–23, doi:10.1016/j.jaci.2004.08.030.

[7]. Brunekreef, Bert, and Stephen T. Holgate. "Air Pollution and Health." The Lancet, vol. 360, no. 9341, 2002, pp. 1233–42, doi:10.1016/s0140-6736(02)11274-8.

[8]. "Clearing the Air in India." OECD Development Centre Working Papers, 2001, doi:10.1787/088226224463.

[9]. Yazdi, SoheilaKhoshnevis, and Bahman Khanalizadeh. "Air Pollution, Economic Growth and Health Care Expenditure." Economic Research-EkonomskaIstraživanja, vol. 30, no. 1, 2017, pp. 1181–90, doi:10.1080/1331677x.2017.1314823.

[10]. Fang, Shona C., et al. "Traffic-Related Air Pollution and Sleep in the Boston Area Community Health Survey." Journal of Exposure Science & Environmental Epidemiology, vol. 25, no. 5, Sept. 2015, pp. 451–56.

[11]. Chestnut, Lauraine G. Economic Valuation of Mortality Risk Reduction: Review and Recommendations for Policy and Regulatory Analysis. 2009.

[12]. Neidell, Matthew J. "Air Pollution, Health, and Socio-Economic Status: The Effect of Outdoor Air Quality on Childhood Asthma." Journal of Health Economics, vol. 23, no. 6, Nov. 2004, pp. 1209–36.

[13]. Desaigues, B., et al. "Economic Valuation of Air Pollution Mortality: A 9-Country Contingent Valuation Survey of Value of a Life Year (VOLY)." Ecological Indicators, vol. 11, no. 3, 2011, pp. 902–10, doi:10.1016/j.ecolind.2010.12.006.

[14]. Sandstrom, T., et al. "The Need for a Focus on Air Pollution Research in the Elderly." European Respiratory Journal, vol. 21, no. Supplement 40, 2003, p. 92S – 95s, doi:10.1183/09031936.03.00403503.

[15]. Oltra, Christian, and Roser Sala. "Perception of Risk from Air Pollution and Reported Behaviors: A Cross-Sectional Survey Study in Four Cities." Journal of Risk Research, vol. 21, no. 7, 2018, pp. 869–84, doi:10.1080/13669877.2016.1264446.

[16]. Van Houtven, George, et al. "Valuing Avoided Morbidity Using Meta-Regression Analysis: What Can Health Status Measures and QALYs Tell Us about WTP?" Health Economics, vol. 15, no. 8, Aug. 2006, pp. 775–95.

[17]. McMichael, A. J., and K. R. Smith. "Seeking a Global Perspective on Air Pollution and Health." Epidemiology , vol. 10, no. 1, Jan. 1999, pp. 1–4.

[18]. Schwartz, J. "Air Pollution and Daily Mortality: A Review and Meta Analysis." Environmental Research, vol. 64, no. 1, Jan. 1994, pp. 36–52.

[19]. Wen, Ming, and DananGu. "Air Pollution Shortens Life Expectancy and Health Expectancy for Older Adults: The Case of China." The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences, vol. 67, no. 11, Nov. 2012, pp. 1219–29.

[20]. Mestl, Heidi Elizabeth Staff, et al. "Health Benefits from Reducing Indoor Air Pollution from Household Solid Fuel Use in China — Three Abatement Scenarios." Environment International, vol. 33, no. 6, 2007, pp. 831–40, doi:10.1016/j.envint.2007.03.012.