



## **Does general public aware about air pollution? What is their attitude on health and environment? A Narrative Review**

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### **Abstract**

**Introduction:** Globally, air pollution represents the greatest environmental threat to human well-being. It has become the major worldwide hazard for people's well-being, Urban habitants in developing countries are at higher risk of CVD, and respiratory illness.

**Methodology:** A computerized systematic search of published literature from Pub Med, EBSCO and Google scholar which are available in different database from the year of 2009 to 2018.

**Result:** During initial search 2250 titles were retrieved and after screening 6 articles were selected for full text screening. Finally 6 research articles were selected based on the inclusion criteria.

**Conclusion:** The main sources for outdoor air pollution in urban areas are industries, domestic fuel burning and vehicles. The urgent need for policies to increase awareness about air pollution risks among general populace of India in order to prevent chronic illness.

**Keywords:** knowledge, environmental awareness, attitude, practices, air pollution, human health, and public

### **Introduction**

Globally, air pollution represents the greatest environmental threat to human well-being. It has become the major worldwide hazard for people's well-being, and most megacities in developing countries are experiencing the pessimism air pollution. Urban habitants in developing countries are at higher risk of CVD, and respiratory illness.

The Global Burden of Disease study has confirmed that about 90% of urban atmospheric pollution in emerging cities of developing nations can be accredited to motor vehicle emissions which are a leading risk factor for adverse health. Exposure to Household Air Pollution is responsible for a high degree of respiratory morbidity and mortality in India.

The World Health Organization (WHO) revealed that every year bad air quality causes over seven million premature true deaths universally, with excessive effects in developing nations.

### **Objective:**

To assess the level of awareness, attitude and various preventive practices followed by the general public who lives in different areas of the world and to protect themselves from atmospheric pollution and its adverse impacts on well-being.

### **Methodology:**

#### **Search strategy methods**

A computerized search have done to collect the articles which are available in different database from the year of 2009 to 2018. The search strategy was limited to only

English language and considered only the studies which are conducted on human species. Initial search strategy made by using the terminologies and its synonyms which are processed in database such as Pub Med, EBSCO and Google scholar.

### **Types of studies**

Descriptive studies, Cross-sectional studies

### **Type of participants**

Young adults, college students, traffic police officers

### **Settings**

Central city regions, suburban, college, hospital

### **Outcomes**

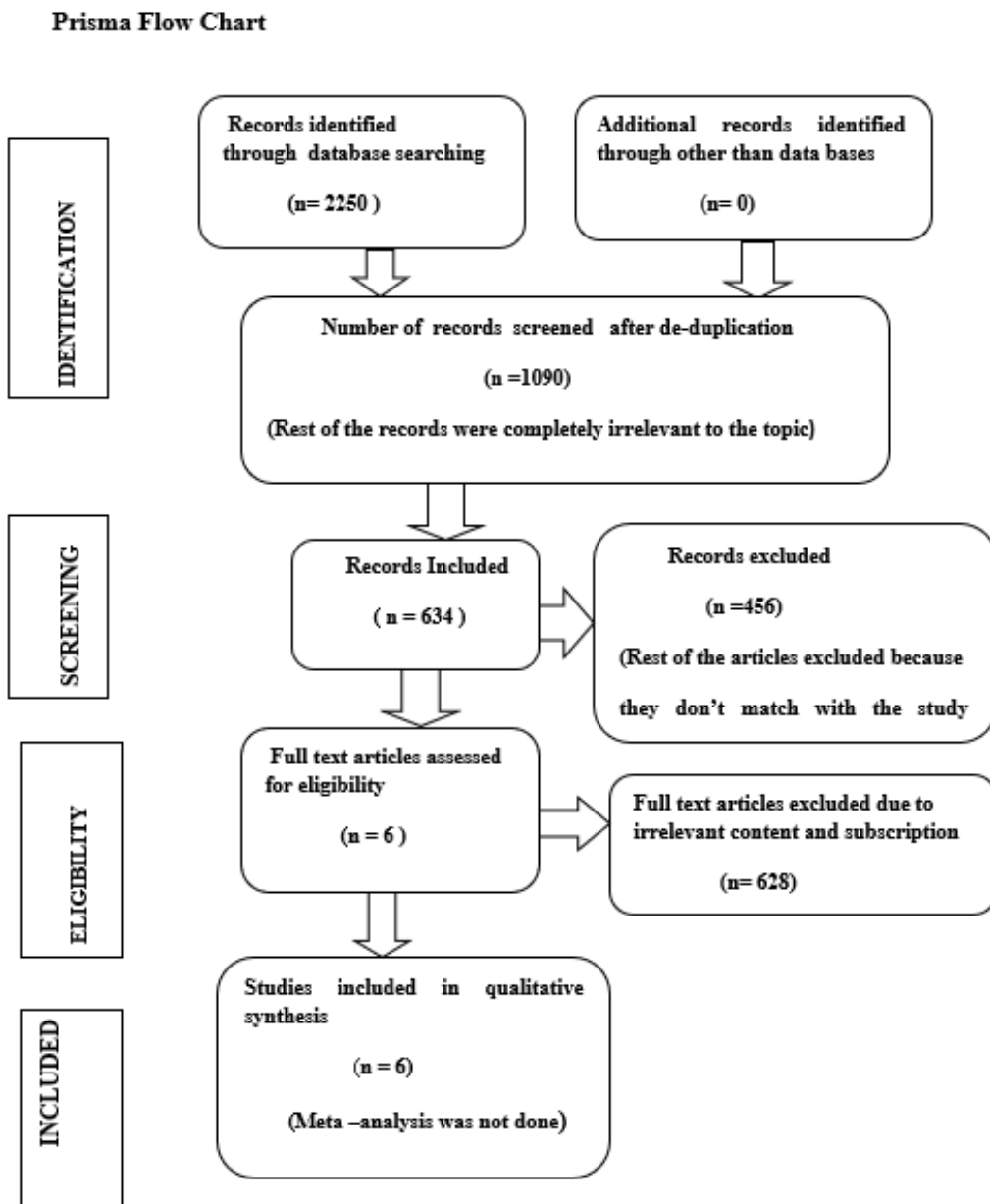
Findings of this narrative review will leads to a clear understanding regarding awareness, attitude, and practice of general public towards air pollution and its effects on health and will act as baseline information to strengthen the more activities in order to raise environmental awareness and need for better education among general population to prevent chronic disease.

### **Result**

The systematic search was conducted by framing the terms individually and in combination with all and synonyms, also according to the database. In addition to this, a manual Pub Med search was undertaken using keywords and search synonyms from already found articles. An addition of articles 6 articles were found. Initial search retrieved 2250

articles over which 1090 articles were selected manually. Duplicate were removed and reviewed 634 articles for eligibility. 456 articles were excluded because of

duplications in database. Hence 6 articles were screened which includes qualitative study.



**Fig 1:** PRISMA flow diagram showing selection of article

**Table 1:** A detailed description of studies

Author & year	Research design	Finding of the study
1-Sohail Ahmed Rajper, Sana Ullah, 2018	Descriptive research design	The study revealed that 88.9% of the participants felt the afflicted effects of air pollution, 62.0% had suffered breathing problems. About 44.1% participants said that they become aggressive due to atmospheric pollution, 68.2% of the participants using a mask to cover their nose and mouth, and 69.3% of the participants were aware that atmospheric pollution causes CVD and respiratory illness.
2- Haiying Liu, Mike Kobernus, Hong Liu, 2017	Cross-sectional study design	The study represent that about 96% knew that air pollution can have negative effects on the environment, economy, society and health and 85% felt uncomfortable or sick when they breathe polluted air. About 45% participants knew that exposure to polluted air can cause cardiac and vascular disease.
3- Samson Murangiri Mukaria, Kiemo Karatu, Raphael G Wahome, 2017	Descriptive research design	The study revealed that 40.2% respondents said that they had a good knowledge, 19.6% were very good knowledge, 13.1% poor knowledge and 27.1% very poor knowledge towards motor- vehicle pollution and health, 56.6% traffic police officers said that they strongly disagreed that adequate measures were being taken by police administration to protect police officers from motor vehicle air pollution, 62.3% said that they should be issued with protective gear to wear during duty.
4- Xiaojun Liu, Hui Zhu, Yongxin Hu, 2016	Descriptive research design	The study shows that participants (54.1%) were not satisfy with current air quality and about 46% participants expressed their anxious feelings when exposed to air pollution.

5- Xujun Qian, Guozhang Xu Yueping Shen, 2016	Cross-sectional study	The study revealed that only 5.80% of the total participators were satisfied with the quality of air, 80% of participators believed that it will take at least 3-5 years or longer before the air quality is improved. 85.2% of participators were concerned about air quality index. 48.5% of participants using face masks when going outside .
6- Pramod V Niphadkar, Kshitija Rangnekar, Pooja Tulaskar, 2009	Quantitative study	Highly educated participants were having more knowledge compared to less educated participants. Young adults are had more knowledge compared to older people.

### Summary of finding

The available literature refined to get three qualitative approach and three cross-sectional approach. Three research studies highlighted that air pollution create a negative effects on health and environment. There were need for better public health education and to raise more activities for awareness programme. One research study revealed that motor vehicle emission is a major contributor to air pollution. One research study revealed that subjects were having relatively highly knowledge awareness rate, strong health protection consciousness and more eagerness for atmospheric pollution control. The oldies and less educated inhabitants were the targetable populace for improving environment. One research study conclude that awareness and understanding about indoor air pollution creating respiratory illness is still grossly insufficient in India.

### Future significance

This study is revealed that personage is suffering from respiratory and other problems due to exposure of air pollution. There is an urgent need that the central Government of India should manage to get a legislation passes for the control of air pollution. Government should pass the 'Air pollution control Act' to meet special India condition.

### Conclusion

It is concluded that the main sources for outdoor air pollution in urban areas are industries, domestic fuel burning and vehicles. There is clearly evidence that outdoor air pollution is associated with respiratory diseases and cardiopulmonary diseases. The oldish and illiterate inhabitants are the targetable populace for improving environment. This study highlights the urgent need for policies to increase awareness about air pollution risks and possible preventive legal actions among general populace of India in order to prevent chronic illness.

### Conflict of interest

The author of this study was entirely supported by the university and there was no any financial concern between the researchers during the study period. Hence there was no any kind of conflict were existing among the researchers while, peer review and editorial decision making.

### Source of funding-

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### Ethical clearance

Ethical clearance has been obtained from the authority.

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