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A REVIEW ON THE HISTORY OF THE AIR POLLUTION

AkhileshKallumpurat
Assistant professor, Department of Forensic Science,
School of Sciences, B-II, Jain (Deemed to be University), Bangalore-560027, India.
Email Id:k.akhilesh@jainuniversity.ac.in.

Abstract

For humans, indoor air is the primary exposure. More than half of the world'sAir inhaled in the home is the body's consumption over a lifetime. Therefore, most diseases exposure to the atmosphere results from exposure to indoor air.For more than a hundred years, from the beginning of the hygienic movement around 1850 until outdoor environmental problems entered the scene, and became dominant around 1960, indoor air was considered to be a significant environmental factor. Outdoor air quality, electricity usage, and sustainable structures, although not indoor air quality, are major environmental concerns today (IAQ). But, there is growing evidence that the cause of excessive morbidity and mortality is exposure to IAQ.The indoor burning of biomass for cooking is the cause of at least 2,000,000 deaths each year in developing regions (mainly women and children), and the large cause of allergies, other hypersensitivity reactions, airway infections and cancers in the developed world is IAQ. Lung cancer is linked to exposure to indoor radon and ETS.Allergies, airway infections and sick building syndrome are associated with a low ventilation rate, plasticizers and, for example, ‘‘dampness ". More focus on IAQ and health problems must be put in the future.

Keywords: *Allergy;Dampness; Health; IAQ; Indoor environments; Ventilation.*

I. INTRODUCTION

The root of man lies in the tropical or near-tropical areas of the planet. It was only possible to spread to cold climates because of innovations such as clothes, accommodation and the use of fire [1]. However, it is not just the thermal atmosphere in houses and shelters that has changed. The air shell also prevents the flow of free air. Dilution of Close-Toman contaminants the sources of pollution are reduced. Indoor sources such as humans, open fires (still a major cause of indoor air pollution in many developing regions), construction materials, indoor activities, etc. still pollute the atmosphere inside a shelter rather than

outdoor air. This was and is the basis for the need for ventilation and for indoor air quality discussions (IAQ). Humans arrived a million years ago in southern Europe and China, for instance, but only around 10,000-40,000 years ago in America, northern Europe, Japan, etc., a time too short for significant genetic changes. As human beings, we are still used to living outside in the warm regions of Africa.Since we spend most of our lives indoors (more than 90 percent in many regions), it is easy to understand that the most important environment in relation to our environment is the indoor atmosphere is safe (Sundell, 1999)[2]. From the middle of the 19th century, indoor environmental problems gained a lot of attention during the breakthrough of modern sanitation, as did the quality of drinking water and sewage treatment (e.g., linked to plagues such as cholera and tuberculosis).

Ventilation comes from the Latin word " ventilare " which means"to expose the wind.' Buildings are specifically designed to create an environment that is more conducive for people and processes than the outside climate. Consequently, the primary purpose of ventilation in buildings is to produce a more optimal indoor air quality.For people and procedures that occur naturally in an unventilated setting, and to reintroduce the beneficial impact of being "exposed to the wind," i.e. to dilute and eliminate the toxins that man himself creates, his actions, and the indoor climate.Man has understood throughout history that contaminated air can be harmful to health. The harmful effects of contaminated air in crowded cities and mines, for example, were known to the Greeks and Romans (Hippocrates, 460-377 BC).

Issue of the Environment

Environmental problems were primarily focused on IAQ until about 1960. Rachel Carson (followed by numerous other writers) shifted the view of "environment" from all environments (with an emphasis on indoor air) to "nature" with "Silent Spring " in 1962. Around this time, studies were also published more regularly on health issues related to contaminated air in factories, etc. Moving the emphasis from the indoor, non-industrial air.“Environment " was suddenly associated with industrial conditions and ambient air. In several regions of the world, environmental protection agencies, as well as authorities concerned with occupational safety and health, have become stronger. IAQ was not on the list of environmental issues in non-industrial indoor settings.Not before the issues that occurred in the late 1960s with radon, formaldehyde in the early 1970s, house dust mites and SBS (sick building Syndrome) in the late 1970s, and allergies have once again entered the science agenda over the last decade with health problems related to indoor air.There is growing evidence today of the importance of indoor air pollution, and thus ventilation, from the perspective of public health.

Health Effects due to the exposure IAQ

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It is evident in developing regions of the world that the burning of biomass (particularly for cooking) produces a deadly mix of pollutants. Because of this, more than 2,000,000 people, mostly women and children, die annually (Smith, 2003). This is one of the world's biggest environmental/health concerns, but little acknowledged so far.In addition to radon and ETS as the causes of lung cancer, we have concentrated in the developed world on volatile organic compounds, VOCs, particles, allergens, and microbial agents. In general, with respect to IAQ and disorders, including allergies, not much is known. Multidisciplinary analyses of the overall scientific literature have been performed in the Nordic countries (NORDWORKS) and in Europe to give prominence to state-of-the-art scientific information on exposures in non-industrial indoor environments and health (EUROWORKS). Over the past 30 years, the prevalence of asthma and allergies has risen in the developing world.The short period during which this rise has occurred suggests that it is due not to genetic changes but to changes in environmental exposures. Changes in indoor environments need special consideration because indoor air is a dominant route of exposure. Increased exposures (enhancing factors) to allergens and/or adjuvants can each be partially responsible for the rise. A variety of multidisciplinary research literature reviews have been performed on associations between indoor health/asthma exposures and allergies (Andersson et al., 1997; Ahlbom et al., 1998; Bornehag et al., 2001; Wargocki et al., 2002b; Schneider et al., 2003; van Odijk et al., 2003)[3].Scientific evidence exists today that concentrations of single VOCs or the total mass of such (measured) TVOC compounds are not a reliable measure of health risks and that more appropriate risk measures for indoor air exposure to organic compounds in non-industrial environments are required (Andersson et al., 1997)[4]. In relation to particles in indoor air, there is minimal scientific information from a health point of view about their significance (Schneider et al., 2003) as opposed to such exposures in outdoor air. This may be due to a small number of studies and difficulties in characterizing particles related to health (so far, mainly mass or number).Microbes are the source of a variety of different substances, such as microbial volatile organic compounds (MVOCs), toxins and glucans, in addition to spores. To date, it has not been determined which of these substances is responsible for the increased prevalence of health effects in " humid " buildings (Bornehag et al., 2001). It is not scientifically established that, from a health perspective, certain molds are more relevant. In general, not much is known about the health significance of indoor microbial development.

Building factors and health

An connection has been identified in a large number of studies (including more than 100,000 people) between living or working in a "moist" building and health effects, such as cough, wheeze, allergies and asthma (Sundell, 1999; Bornehag et al., 2001)[5]. There are, however, signs that dampness is often associated with other health effects, such as general symptoms (e.g., weakness, headache, etc.), discomfort and airway infections. Relative risks are comparable for babies, children and adults, in homes and in workplaces, in the range of 1.4-2.2., commonly suggested by odds ratios. Relative risks are associated with irrespective of the outdoor temperature, in the same range.It is not possible to establish a more accurate

health-relevant description of a "moist" building from current scientific literature, or to determine the agents are the causes of health effects in damp buildings.

Ventilation

There is an unusual study of the relationship between ventilation and wellbeing. Just 30 scientific studies have been considered definitive by the European Multidisciplinary Scientific Review Group on the subject (Wargocki et al., 2002a). Scientific evidence suggests that ventilation rates (outdoor air) below 25 l/s per person in commercial and institutional buildings are correlated with increased ventilation rates (outdoor air) below 25 l/s per person, danger of SBS, increased short-term sick leave, and decreased productivity (Sundell et al., 1993; Sundell, 1994; Wargocki et al., 2002b)[6].Studies are unusual on the relationship between health effects and rates of ventilation in homes. The literature on " dampness " however, particularly with regard to " dampness "

Condensation on window panes means that a significant risk factor for health effects (cough, wheeze, asthma and airway infections) is poor ventilation in homes (Sundell et al., 1995; Bornehag et al., 2001; Wargocki et al., 2002a)[7]. It is well known that, as a result of energy efficiency, ventilation rates in homes have been decreased over recent decades.Measures in the Nordic countries and other countries in the West. The rise in allergies may be correlated with this growth.The same trend is now increasingly taking place in former Eastern Europe as a result of increased energy costs, and thus increased building tightening, resulting in reduced ventilation.

Indoor Air Chemistry

Numerous innocuous natural poisons in indoor air respond with, e.g., ozone, delivering profoundly responsive mixes, that rapidly respond on/with skin or mucous films (Sundell et al., 1993; Weschler, 2000)[8]. Large numbers of these mixes (e.g., free extremists) are not handily estimated, however might be unmistakably more applicable from a wellbeing perspective than their forerunners. This indoor air science happens noticeable all around, yet additionally on room surfaces. Moistness, ventilation rate, PVC, wood, cleaning specialists, airfresheners, and so forth should be seen in another light.

II. CONCLUSION

It can be learned from the history of IAQ/health that the growth that began in philosophy was later divided into, for example, medicine and technology. Much of the research activities over the last few decades have been in particular fields such as construction physics, HVAC engineering, architecture, medicine (a variety of disciplines), organic chemistry, microbiology, sociology, psychology, physics, economy, etc.Relationship. The pattern has accompanied the general evolution from philosophy (general science) to more and more advanced sciences within sciences.Today, inside a very specialized science, the fundamental academic training is. Within a single discipline, and by far the most IAQ/health-related study and training. A new multidisciplinary paradigm is what is required where generalized

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knowledge (putting results in a complete perspective) is as important as knowledge within science.

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