
MASSIVE Effects of Passive Smoking in Respiration of Children – A Review

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Abstract: *Passive smoking is more harmful to children than adults for two reasons. The first one is children's respiratory and immune systems are not fully developed. Secondly, they spend more time at home and therefore, likely to experience more intense and prolonged smoke exposure. The right of children is a matter of global importance. In recent years, much attention has been paid to all forms of child abuse and as a result greater success has been achieved. However, the effects of passive smoking on children's health continue to be a major problem. Four main effects namely; asthma, wheezing, decreased lung function and respiratory infections, as well as two minor effects that lead to cough and night cough. The study concluded that passive smoking has serious effects on the respiratory health of children. The research recommended an in-depth study to corroborate the links between passive smoking and each of the indicated effects.*

Keywords: *Passive smoking, Children, Respiratory Health, Tobacco*

I. INTRODUCTION

According to the 2009 report of the World Health Organization (WHO) on the global tobacco epidemic, tobacco use is the leading cause of preventable death, and it is estimated that it kills more than 5 million people every year in all the world. The WHO estimated that almost half of the world's children (almost 700 million) are exposed to tobacco smoke from the 1.2 billion adults who smoke, and most exposures occur in the home (Avsar et al.2008, 969). 40% of children, 33% of non-smoking men and 35% of non-smoking women were exposed to second hand smoke in 2004 worldwide (Öberg et al., 2011, 139). Children, exposure to second-hand smoke can lead to respiratory diseases as a result of adverse effects on their immune system and on the growth and development of the lungs. Passive smoking exposure was estimated to have caused 379 000 deaths from ischaemic heart disease, 165 000 from lower respiratory infections, 36 900 from asthma, and 21 400 from lung cancer. 603 000 deaths were attributable to second-hand smoke in 2004, which was about 1.0% of worldwide mortality (Öberg et al. 2011, 139). Children are more vulnerable to the physiological effects of passive smoking and more sensitive to the adverse health effects of passive smoking than adults: physical development is ongoing with sensitivity in several organs, the immune system is less protective, and a child's breathing rate is higher than an adult's (Boldo et al. 2010, 479). Children have limited or no control over their indoor environments. They often sit near or on parents, family members, or caregivers, closer to the source of the pollutant than other passive smokers. (Boldo et al.2010, 479.)

A. Overview on Tobacco

Tobacco was introduced into Europe from the New World at the end of the 15th century. it as 'a custom loathsome to the eye, hateful to the nose, harmful to the brain and dangerous to the lungs' smoking spread rapidly. Tobacco is the second major cause of death in the world. It is responsible for the death of 1 in 10 adults' worldwide (about 5 million deaths per year). Half the people who smoke will eventually die as a direct result. In addition, for every one person who dies of a smoking-related disease there are 20 more people who suffer from at least one serious illness associated with smoking. Smoking is harmful and hazardous to the health of the general public and particularly dangerous to children. It increases the risk of serious respiratory problems in children, such as a greater number and severity of asthma attacks and lower respiratory tract infections, and increases the risk for middle ear infections.

B. *Passive smoking*

The inhalation of tobacco smoke by non-smokers has been variably referred to as “passive smoking”. The smoke inhaled by non-smokers that contaminates indoor spaces and outdoor environments has often been referred to as “environmental tobacco smoke”. Passive smoking involves the inhalation of carcinogens and other toxic components, and scientific evidence has unequivocally established that exposure to passive smoking causes death, illness and disability in children.

II. Effects of tobacco

-) Tobacco use has extremely large effects on every fibre of human life, ranging from health, financial to environmental.
-) Many serious and potentially fatal diseases are caused by smoking. It also increases the incidence of more minor complaints such as coughs and colds.
-) Cigarette smoking is the predominant cause of lung cancer, with 80–90% of lung cancers that occur in the world attributable to tobacco use.
-) It affects all people the young and old, the rich and poor, men, women the risk of developing lung cancer increases with increasing intensity of smoking and with increasing duration of smoking.

III. Effects of passive smoking on children’s health

A. *General effects*

-) Passive smoke affects children’s health in many ways by predisposing them to cancer, cardiovascular disease, asthma, lower respiratory tract infections, neurological disorders and has even be found to affect the child’s cognitive abilities.
-) Exposure to tobacco smoke was responsible for 19% of all expenses in childhood respiratory diseases.
-) Children exposed to environmental tobacco smoke have lower respiratory illness, more middle ear effusion and more viral respiratory illness than unexposed children.
-) Persistent middle ear effusion is the most common cause of deafness in children and an important cause of delayed language development.

B. *Respiratory Effects of Passive Smoking on Children*

Effects on airway development are likely to contribute significantly to the observed increased susceptibility to wheezy respiratory infections. Infants exposed to maternal tobacco smoking in utero have been noted to have airways of smaller calibre relative to somatic size, with thickened airway walls, more compliant airway walls, increased airway smooth muscle tone and decreased pulmonary elastic recoil, and are also more likely to show inflammatory changes.

Although, pregnancy and early infant life are the most critical periods during which children should be protected from exposure to tobacco smoke, there is evidence that ETS in later childhood has independent effects on respiratory health (Henderson 2008, 25).

C. *Prevention of Child Passive Smoking*

Identifying parental household smoking practices is the first step in smoking control interventions. Nurses and other health professionals have many opportunities to meet parents in clinical settings when caring for children, but parental household smoking behaviour has not been included in routine health assessments. It is recommended that smoking and behaviour of parents and other family members should be made routine in children's health assessments, and that health professionals should take every opportunity to provide advice to smoking parents to quit or at least not to smoke at home. Since most mothers who smoke during pregnancy have taken up the habit in early life and continue to smoke after the baby is born, preventive strategies need to target smokers well before they become parents.

IV. Literature Review

The purpose of a literature review is to objectively report the current knowledge on a topic and base this summary on previously published research. A literature review provides the reader with a comprehensive

overview and helps place that information into perspective. Literature review is a usual method to investigate thoroughly different approaches of the topic to be studied.

Research tools such as interview, questionnaires and spirometry were used in the various researches and in many of the researchers questionnaires were employed to gain knowledge and materials for the studies. In one of the studies, (Haltermann et al. 2010) the information was obtained directly from the parents as well as their children under a School-Bases Asthma Therapy (SBAT) trial, a study involving the promotion of medication adherence among 3-10 year-old urban children. In three of the studies analysed the effects of passive smoking on lung function in children. It was found in all the studies that parental smoking which includes “caregivers” serve as the primary source of passive smoking for all children.

V. Discussion

The purpose of this review paper is to find answers to the research question posed. The question was about the “effects of passive smoking on the respiratory health of children”. Diverse views have been projected in all the research articles. However, there are some convergent views outlined clearly among the all articles as well. Collectively, these themes of views provided by the research articles could be captured in the follow headlines as some of the effects of passive smoking on the respiratory health of children.;

1. Asthma
2. Wheeze
3. Reduced lung function
4. Respiratory infections
5. Common cold
6. Nocturnal cough

From the so many research paper studies it is review that, the most common mentioned effect of passive smoking on children’s respiratory health is asthma.

VI. Conclusion

This paper employed the method of literature review to explore the effects of passive smoking on the respiratory health of children. Asthma, wheeze, reduced lung function, respiratory infections, common cold and nocturnal cough evolved from the review. These results are based on the articles which are reviewed. Asthma is the most frequent mentioned effect among them.

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