Studying the direct and indirect negative impacts on individual and community health

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Abstract

Some people resort to smoking as a practice that helps to relax, and is sometimes practiced in some religious rituals to give spiritual enlightenment, and one of the most common means of smoking at this time is cigarettes, whether industrial production or those damaged by hand, and there are other means and tools for smoking such as boiling and shisha. Smoking is a process in which a particular substance is burned, and the most commonly used substance is tobacco, and after burning it, the person tastes it and inhales its smoke. The purpose of the research is a detailed study of the types of smoking, tobacco, ingredients used in it, harmful substances and its negative impact on the individual and society. The findings of the study should raise awareness of the harms of smoking and the diseases it causes, such as stroke. Cardiac arrest. Cancer, especially lung and colon cancer. Respiratory-related diseases, premature death. Symptoms that come after one of these diseases may cause increased nervous and psychological pressure, which negatively affects a person's life, as the skin of a person who smokes appears to make the owner look older than he is, and affects the sense of taste and may cause impotence of men. So we have to raise awareness of this dangerous scourge that has killed the years old one before the little one.
Introduction

Passive smoking means inhaling smoke from tobacco products used by others. It is called second-hand smoke or environmental tobacco smoke. This occurs when being exposed to tobacco smoke that penetrates into any environment, causing those inside that environment to inhale it. Scientific evidence has proven that exposure to second-hand smoke causes illness, disability, and death (Al-Najjar, 2006).

Passive smoking has played a major role in the debate about the harms of tobacco products and the need to establish regulations for the use of these products. Since the early 1970s, secondhand smoke has been a major concern of the tobacco industry as it poses a serious threat to their business interests, and the idea of paying harm to "healthy" non-smokers has been the primary motivation for the imposition of stricter rules on tobacco products. Despite being aware of the potential harms of secondhand smoke, tobacco manufacturers have coordinated with each other to steer the scientific debate to prevent prior regulation of their products. There is currently scientific consensus about the health risks of second-hand smoke, and these risks are one of the main drivers behind the ban on smoking in workplaces and in enclosed public spaces (Al-Dakhil, 2001; Al-Najjar, 2006)

1- Long-term effects:

Much scientific evidence has proven that second-hand smoke leads to as many diseases as direct smoking (James E. Barnes, 1971) including heart and circulatory system diseases, lung cancer and respiratory diseases. These diseases include:

A. Cancer: In general, increased risk of infection in general. Reviewing the accumulated evidence at the global level, the International Agency for Research on Cancer concluded in 2004 that second-hand smoke exposure
to second-hand smoke or 'environmental' tobacco smoke leads to human cancer.

**B. Lung cancer:** The association of passive smoking with lung cancer has been extensively studied. A series of studies - conducted in the United States from 1986-2001, in the United Kingdom in 1998 and in Australia in 1997, as well as several studies at an international level in 2004 have established with compelling evidence that the relative risk increases dramatically among those exposed to passive tobacco smoke. (Mustafa, A., 2001) (WHO, 1997).

2- The causal effects of smoking on the health of the individual and society:

A 2004 study by the International Agency for Research on Cancer that is part of the World Health Organization reported that non-smokers are exposed to carcinogens just as much as heavy smokers. Secondary smoke from smoking contains more than 4,000 chemicals, including 69 known carcinogens. The most dangerous of these are polycyclic aromatic hydrocarbons, nitrosamines found in certain types of tobacco products and aromatic amines such as tetra-aminobiphenyl, which are all known to be highly carcinogenic. The main smoke stream from smoking, the secondary smoke stream, and second-hand smoke all contain almost the same components, except that the concentration of these components varies according to the type of smoke. Research conducted by the tobacco companies themselves has proven that more than one of the known carcinogens is found in high concentrations of secondary smoke more than in the main smoke stream (H. J. Haussmann, 2016).

The finer pollutant emissions of environmental tobacco smoke have been shown to be higher than those of low-emission diesel engines if running in stationary mode. In an experiment conducted by the Italian National Cancer Institute, three cigarettes were left to be burned and smoked without flames, one after the other, in a 60-cubic-meter garage with poor ventilation. The cigarettes released pollutant emissions beyond garage limits, as well as particulate matter concentrations up to 10 times that of a stationary engine (Peto Retal, 1994).
Effects of Environmental Tobacco Smoke: Several other studies have been conducted to determine the extent to which environmental tobacco smoke can infect laboratory animals with cancer resulting from cigarette smoke. These studies are usually conducted using laboratory environmental tobacco smoke, in which condensed secondary smoke is used.

The effect of tobacco smoke on the laboratory environment:. To simulate environmental tobacco smoke, scientists expose animals to secondary smoke, which comes from igniting a cone-shaped cigarette nozzle and surrounding leaf, or by exposing them to a mixture of primary smoke and secondary smoke. Studies by the International Agency for Research on Cancer have concluded that mice exposed to laboratory environmental tobacco smoke for prolonged periods, that is, an average of six hours per day over five days per week, for five months followed by a four-month interval before autopsy, are more likely to develop lung tumors compared to the control groups (T. Sanner, TK, 2015).

2. Intensive secondary tobacco smoke:. Studies by the International Agency for Research on Cancer have demonstrated that secondary intense tobacco smoke has a significantly higher carcinogenic effect on rats than primary intense tobacco smoke.

Nicotine poisoning:. The impact of animals in the study and research, such as laboratory animals, is not confined to inhaling second-hand smoke, but extends to include nicotine poisoning. Children may become infected, when owners of nicotine products such as cigarette butts, chewing tobacco, or nicotine gum leave them within reach. Cigarette butts thrown by smokers are a problem for children as well as in the case of domestic animal husbandry, as some small animals may count it as food and eat if found lying on the sidewalks or on the ground. Cigarette butts refer to cigarette residue after smoking, which include the filter, which is that part that aims to filter tar, fine particles
and toxins from the cigarette such as ammonia, arsenic, benzene, turpentine and other toxins (Sanner, T., 2015).

3. Level of risks:
In 2004, 2008, 2010, 2020 the International Agency for Research on Cancer which is part of the World Health Organization concluded that there is sufficient evidence that second-hand smoke causes cancer in humans.

Most experts believe that reasonable and occasional exposure to second-hand smoke places a low risk of cancer in non-smokers, but there should be careful attention. The overall risk depends on the effective dose that is passed into the body over time. The level of risk is higher if smokers spend long hours in an environment saturated with cigarette smoke, such as in a company where employees or customers smoke all day, or in residential care facilities where residents smoke freely (Amna, H.; 2011)

4. Research funded by the tobacco industry:
The role of the tobacco industry in funding scientific research on secondhand smoke has been the subject of intense debate. A review of published studies establishes the strong link between the tobacco industry and discoveries that exonerate secondhand smoke from the stigma of disease. The number of researchers affiliated with the tobacco industry who indicate that secondhand smoke is not harmful to health is twice the number of researchers not affiliated with these companies. A prime example of this is the release of tobacco industry documents, where Philip Morris executives successfully persuaded a writer to revise his tobacco industry-funded article to downplay the role of second-hand smoke in sudden infant death syndrome in its report issued in 2006 (Bailey, S.M. et al. 2009).

5. Studies based on pet observation: The common perception is that second-hand smoke is a cancer risk factor for pets. One study, conducted
at both the Tufts University School of Veterinary Medicine and the University of Massachusetts, linked cat oral cancer to exposure to environmental tobacco smoke through excessive expression of the p53 gene. Another study conducted at the same universities concluded that cats who live in a smoking house are more likely to develop lymphoma. The risk of infection increases with the increasing period of exposure to second-hand smoke and the number of smokers in the home. The study by researchers at the University of Colorado looking at dogs with lung cancer was generally inconclusive, although the researchers noted a weak association between dogs developing lung cancer and exposure to environmental tobacco smoke. No relationship has been established between dogs' risk of lung cancer and the number of smokers in the home, the amount of cigarettes smoked in the home per day, and the amount of time the dog spent indoors (Sanner, T., 2015).

6. The position of major tobacco companies and the direct and indirect impact on society

The attitudes of the major tobacco companies on the issue of passive smoking differ to a certain extent. In general, tobacco companies have continued to focus on questioning the methodology of studies indicating the harms of secondhand smoke. Some companies (e.g. British American Tobacco and Philip Morris) acknowledge the medical consensus in that secondhand smoke carries health risks, while others still maintain that the evidence in the medical community is inconclusive. A company like Imperial Tobacco describes second-hand smoke as "irritating" and "distasteful", but denies any health risks associated with it. Tobacco companies support the call for smoke-free places within public facilities as an alternative to a complete smoking ban. As a result of the health risks associated with secondhand smoke, the idea of banning smoking in enclosed public places such as restaurants and cafes has been proposed in a number of jurisdictions, at the national or local level. The Republic of Ireland was the first country in the world to issue a total ban on smoking in all enclosed workplaces on March 29, 2004. Since then, many countries have followed suit. Countries that are signatories to the WHO Framework
Convention on Tobacco Control are legally obligated to enact effective legislation “to protect against exposure to tobacco smoke in enclosed workplaces, public transportation, enclosed public places, and any other public places where possible that require the complete elimination of smoking and tobacco smoke in a specific place or environment to enjoy a smoke-free environment. Opinion polls have shown great support for the idea of a smoking ban. In June 2007, a survey of 15 countries revealed that the approval rate for a smoking ban was 80%. Another survey in France, which is a country of smokers, has shown that 70% of those surveyed support banning smoking. The ban on smoking results in several positive and negative effects, some of which spark controversy as follows:

A. Positive Effects:

The incidence rates of heart attacks decreased by 27% in the first 18 months since the city of Pueblo, Colorado, imposed its smoking ban in 2003. The incidence rates have not changed in neighboring cities that have not imposed smoking bans. Dr. Raymond Gibbons, president of the American Heart Association, states, "It is likely that the reason for the decrease in the number of heart attacks within the first year and a half following a smoking ban is the decline in the effect of second-hand smoke as a trigger for heart attacks."

In April 2010, the Journal of the Canadian Medical Association published a study evaluating the effects of a three-stage smoking ban in Toronto, the capital of Ontario, on cardiovascular and respiratory disease. The study spanned a 10-year period from 1996 to 2006, during which time Toronto phased out smoking, beginning with public places and workplaces in 1999, followed by restaurants and bowling centers in 2001, and ending with bars, casinos and racetracks in 2004. The study indicated that during the implementation of the smoking ban in restaurants, the incidence of cardiovascular diseases decreased by 39%, and the incidence of respiratory diseases decreased by 33%. The incidence of these attacks did not decrease significantly in other cities that did not impose smoking bans. The scientists who conducted the study concluded that its results call for
more efforts to be made to reduce public exposure to tobacco smoke. In May 2006, the Province of Ontario decided to introduce a comprehensive smoking ban that extended restrictions on all cities and municipalities in Ontario.

However, not all researchers agree that there is a causal relationship, and the results of one 2009 study of several smoking bans in the United States contradict such assertions.

**B. Negative Effects:**

Some studies have proven negative effects of banning smoking in public places. One study indicated negative economic repercussions from smoking bans in bars and restaurants, although this contradicts other studies on the same issue. In addition, another study concluded that bans on smoking in bars were associated with an increase in deaths from drunk driving, presumably due to smokers driving longer distances to bars, smoking jurisdictions or bars with outdoor seating (US Department of Health and Human Services, 2006).

**Results and Discussion**

An electronic questionnaire study was conducted for all parts of Iraq to find out the number of smokers and non-smokers of both sexes, aged between (18-25) for a month, amounting to 100 people, where the percentages are as follows:

1- 32% are men and 8% are women.
2- 27% of male smokers smoke hookah with cigarettes.
3- 22% of women smoke hookah with cigarettes.
4- 39% of smokers started smoking before the age of 18 years, 99% of them are males, and only 1% are women.
5- 97% of smokers are motivated by smoking because it relaxes the nerves.
6- 68% of smokers smoke because they think smoking indicates maturity and independence.

The study shows that the progress of nations, the growth of trade in goods and merchandise, and the ease of delivery through communication and the Internet made it easy for many monopolistic companies to provide different types of cigarettes and the ease of its delivery. In addition to the preoccupation of many fathers with their tasks in education, and the avoidance of holding their children accountable and providing them with entertainment without supervision, this has led to a large number of smoking among young males and females, where the percentage of smokers is equal to 32% among women and men. The lack of job opportunities has its paramount importance in increasing the tension that occurs among young people, which can be an ulterior motive for a young man to smoke as a kind of escape from reality and the unknown future in front of him/her.

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