

Attention young smokers: Prolonged smoking and its impact on kidney leading to Cancer

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It is horrifying to imagine the diseased life led by the prolonged consumption of tobacco and the long-practiced habit of smoking. An alarming survey on the progression of the tobacco epidemic by the Indian government reported about 7.1 million premature deaths and is predicted to reach more than 8 million by 2030 if the tobacco consumption rate keeps growing.¹ Tobacco usage is the leading cause of premature death in India where about 28.6% of the population indulges in smoking and other smokeless tobacco products.²

The hazardous effects of tobacco use on cardiac and respiratory health are widely documented. However, negligence of its progressive impact on kidneys is least spoken about. Being one of the common ill habits among the young crowd, smoking leads to a significant impact on kidneys as well. It can accelerate kidney disease in individuals leading to a decline in kidney function over time. Also, it can interfere with the effectiveness of certain treatments such as dialysis and kidney transplantation.

Smokers face a dual risk of developing both lung cancer and kidney cancer depending on the duration and intensity of smoking. It is common for a nephrologist to detect a sign of lung cancer in kidney cancer patients. Since the disease spreads faster in the lungs, there are possibilities of ignoring the presence of cancerous cells in the lungs of patients with kidney cancer.³ It's important to note that the risk of developing lung and kidney cancer is not mutually exclusive.

Additionally, tobacco use can constrict blood vessels, thereby reducing blood flow to the kidneys. The kidneys require adequate blood supply to function properly. Reduced blood flow can impair kidney function and contributes to the development of kidney

¹<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8845293/#:~:text=In%202010%2C%20WHO%20estimated%20that,consumption%20is%20unchanged%20%5B3%5D>.

² https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/gats/18_gats_analysispackage_final_23nov2020.pdf?sfvrsn=67e2065f_3

³ <https://www.curetoday.com/view/metastatic-kidney-cancer-or-a-separate-lung-cancer-expert-urges-patients-doctors-to-learn-the-difference-#:~:text=%E2%80%9CIn%20our%20case%2C%20we%20found,James%20Brugarolas%2C%20M.D.%2C%20Ph.>

disease. As popularly known, High Blood Pressure or Hypertension is a leading cause of kidney disease since the condition damages the small blood vessels in the kidneys and impairs their ability to filter waste products from the blood; this chronic illness is also associated with tobacco usage. Smoking is associated with the onset of diabetes, another major risk factor for kidney disease. Additionally, it is a well-established risk factor for kidney cancer. Smokers have a higher risk of developing kidney cancer compared to non-smokers. The risk of kidney cancer increases with the number of cigarettes smoked and decreases with the number of years since quitting.

Tobacco-induced cancers are the biggest global health concerns and majorly contribute to disease-related mortality. Therefore, it is worth noting that the best action for kidney health is quitting smoking and avoiding tobacco use altogether. Quitting smoking can help slow down the progression of kidney disease, reduce the risk of kidney cancer, and improve overall kidney function.

If you're a smoker and have concerns about your kidney health, it's important to consult with a healthcare professional for personalized advice and support. Apart from that, it is important to have a balanced diet, maintain a healthy weight, and indulge in regular body screening to ensure overall kidney health and avoid any serious kidney progressions.

Tobacco is the only preventable cause of cancer. With its epidemic on the rise especially among the young crowd, it is important to change the perception of the individuals consuming tobacco or tobacco-related products. The direct health expenditure on treating tobacco-related diseases is a drain on both the public health system and the economy, which no country can afford.⁴ To change the trajectory of modern health concerns in India, every individual must be educated about the ill effects of tobacco consumption and counselled to quit such life-threatening habits.

⁴ <https://www.who.int/india/news/detail/09-02-2021-india-loses-1-of-its-gdp-to-diseases-and-early-deaths-from-tobacco-use-finds-who-study>