E-Cigarettes in Smoking Cessation

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ABSTRACT

Smoking is the leading cause of inevitable deaths worldwide and conjointly the main reason behind various diseases. Finding effective mediations for smoking cessation has established tough and existing interventions and have restricted client appeal. Electronic cigarettes' use is gradually increasing as an attainable goal for smoking cessation which will be discussed in this review.

Electronic cigarettes are battery high-powered devices that deliver associate aerosol of alkaloid (without any combustion or smoke) by heating a mixture consisting of nicotine, gas, glycol, glycerine and flavoring agents, its use has been increased in recent days among the youngsters. Therefore, our objective is to investigate existing research to analyze the usage of digital cigarette as an efficient smoking cessation technique and whether there's any discrepancy in the effectiveness of electronic cigarettes by the presence of nicotine in smoking cessation.

Objective: The objective of current study is to determine the effectiveness of digital cigarette in smoking cessation

Keywords: Electronic Cigarettes, FDA, Nicotine Delivery device, smoking cessation, smoking reduction

INTRODUCTION

Cigarette smoking may be an intense habit and a leading cause for declining general wellbeing all over the world. Electronic cigarettes are battery driven gadgets that convey a vaporized delivery of nicotine by warming the preparation and is usually composed of nicotine, propylene glycol, glycerin and flavoring agents.

Since the launch of E- Cigarettes in 2004, numerous smokers utilizes E-cigarettes to stop smoking (27% of those got an early cessation within the UK, in May 2013) and their use is expanding so quickly that a few researchers anticipate that they will outperform cigarette usage within a decade.

In any case, the US Food and Drug administration (FDA) has not endorsed e-cigarettes as a cessation help, in spite of the fact that the UK has been using one brand. To date, clinical trials testing the viability of e-cigarettes for smoking cessation to anticipate their future use.

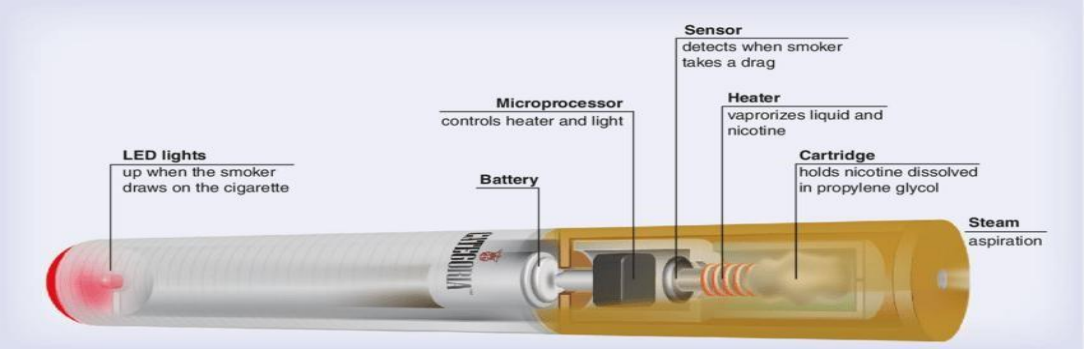
For general population, there's a concern that e-cigarettes may amplify the utilization of both items and may actually aggravate smoking habits. In reality, numerous people state that they utilize ecigarettes at times and in places where they cannot smoke. Double utilization may diminish smokers' utilization of cigarettes but it might reduce the urge to stop smoking. This would expand the nicotine enslavement and may further delay smoking cessation.

The question of how electronic cigarettes have an impact on public health gained popularity when, in 2019 a government court instructed digital cigarettes companies to submit applications to the FDA by September 2020 to continue the sell electronic-cigarettes as consumer products. When considering whether permitting the usage of a specific electronic-cigarette is "appropriate for the assurance of public health". Manufacturing companies must consider that how electronic cigarettes as consumer products may help smokers to transit away from

combustible tobacco products. The requirement to submit a pre-market tobacco product application may also motivate some other ecigarette companies to apply to Centre of Drug evaluation and research (CDER) for approval of their product as a therapeutic smoking cessation device. Up till November 2020, no e-cigarette has been endorsed as a smoking cessation medicine by the CDER, FDA.

Types Of E-Cigarettes:

- E- Cigarettes similar to general Cigarettes but can be recharged and disposed off.
- Vape pens are similar to a pen or tiny tube with a tank to deposit e-liq, and have interchangeable coils and reloadable batteries.
- Pod systems are compact reloadable devices, typically shaped like a USB disk or a pebble, with e-liq capsules.
- Mods cigarette device are available in totally different shapes and sizes. They need a replenishable tank, longer running reloadable batteries and variable power.



METHODOLOGY

In identifying sources for this comprehensive review various databases were selected the search enginesinclude PubMed, Web of science, science direct, google scholar and online library journals. The reference listing covering the systematic review were also searched. A total of 25 papers were reviewed from year 2010-2020. This kind of simplified systematic overview is beneficial in imparting a well-timed synthesis for researchers. Search phrases covered ecigarettes, digital cigarettes, vape, and smoking cessation.

Table 1. Literature of the systemic overviews.

Study and year	Location	Outcomes	Included study types
Siegel et al 2011	Boston	Probability of smoking cessation	Cross sectional, online survey
CB, NW, HM and ML 2013	Auckland, New Zealand	Probability of smoking cessation	Randomized control
Int.J.Environ 2013	Masculusia	Probability of smoking cessation	Exploratory study
Zhuang Y-L et.al 2016	California	Probability of smoking cessation	Regression study, longitudinal study
Wang et al 2020	US	Probability of smoking cessation	Systemic study

CONCLUSION

Little evidences in various studies which were reviewed in this article suggested that the digital cigarettes may be a powerful tool for smoking cessation. Nicotine digital cigarettes possibly do assist humans to caessate smoking for at least 6 months. They may be possibly more effective than nicotine alternative remedy and nicotine less e-cigarettes. However, the use of digital cigarettes in youngsters perhaps related to smoking initiation that can further results in smoking dependency. Any serious adverse effects were not reported in any of the reported studies. As far as smoking cessation is concerned the beneficial affects must be evaluated in larger population with properly designed and completely studied trials. Long term utilization safety of electronic cigarettes should also be a focus for future studies. We seek additional authentic evidence based studies to assure the efficacy of digital cigarettes, and to evaluate the effects of newer formsof electronic cigarettes that have improved nicotine delivery.

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