

Exploring The Effectiveness of E-Cigarettes usage upon Saudi Society as A Smoking cessation Tool

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MINI REVIEW

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ABSTRACT

Background

The electronic cigarette, often known as an "E-cigarette" or "vaporizer," is a nicotine delivery device that has been hailed as a healthier option for smokers. Since electronic cigarettes were first introduced, both internationally and in the Kingdom of Saudi Arabia (KSA), they have seen rapid growth in popularity, especially among the country's youth and young adults. In addition, many formerly non-smoking teens have taken up E-cigarette use. The safety profile of electronic cigarettes has been called into question by recent studies.

Objective

The purpose of this research is to quantify the extent to which youngsters and adults in Saudi Arabia use electronic cigarettes in their daily lives. The search also evaluates the potential addictiveness of electronic cigarettes and their efficacy as a smoking cessation tool.

Design and methods

Self-administered questionnaires were used in a cross-sectional study to determine how widespread the use of electronic cigarettes is in Saudi Arabia. The demographic and smoking habits of adult respondents were the primary focus of the survey's inquiry. Frequencies and reliable percentages were used to depict the data for categorical variables

Results

A total of 6,348 people participated in the internet questionnaire. Only 40.5 per cent of the individuals smoked regular cigarettes, but 59.5 per cent used electronic

cigarettes. Results showed that over half (53.3 per cent) of e-cigarette users successfully used them to break the habit. A majority of current smokers (66.7 per cent) are considering switching to electronic cigarettes. About a quarter of the population (27.9 per cent) held the opinion that electronic cigarette use is more addictive than tobacco use.

Additionally, 63.5 per cent of people said they think electronic cigarettes are safer than traditional cigarettes. Intriguingly, 41.5 per cent of those who tried quitting e-cigarettes were successful. Additionally, 63.7 per cent of respondents believed that using e-cigarettes helped them finally break the habit.

Conclusion

In conclusion, this study assessed the factors that contribute to the rising tide of e-cigarette use in Saudi Arabia and evaluated the prevalence of e-cigarette use among the population

Key Words

Electronic cigarettes, E-cigarettes, smoking cessation

Introduction

Electronic cigarettes, more commonly known as e-cigarettes, were officially recognized by the FDA in 2014 [1]. The agency categorized electronic cigarettes as battery-operated items that can deliver nicotine as well as other substances¹. Vaping, often known as the usage of electronic cigarettes, is a form of tobacco use that differs from traditional smoking in that it does not include the burning of tobacco². Electronic cigarette users draw in the vaporized nicotine, which is what makes up the vapor itself.

Research demonstrates that electronic cigarettes do offer substantial health hazards to the lungs of consumers, even though they have become increasingly popular as a supposedly safer alternative to regular cigarettes. Despite this, it continues to have widespread use and is actively marketed, particularly among young adults and people who come from wealthy homes³.

To our great regret, the mainstream media has contributed to the meteoric rise in popularity of electronic cigarettes by perpetuating the notion that these products are less

harmful than regular tobacco cigarettes⁴.

E-cigarettes are particularly popular among young adults since they are thought to be a less hazardous and more successful alternative to traditional cigarettes in terms of kicking the habit of smoking. This may be the result of the fact that younger adults are more vulnerable to the appeal and influence of new trends, particularly if they are encouraged to believe that partaking in such trends can assist them in breaking undesirable habits like smoking.

In addition to this, they are extremely popular because they are available in a wide variety of flavors⁵. People who have been unsuccessful in their attempts to quit smoking frequently consider electronic cigarettes as a healthier alternative.

Another significant drawback of electronic cigarettes is the elevated chance of developing cancer⁶. According to recent studies, the chemical analysis of e-cigarettes revealed the presence of a wide variety of carcinogens, which are substances that raise the likelihood of developing cancer. This could accentuate the symptoms of several respiratory conditions, including asthma and chronic obstructive pulmonary disease (COPD), to name just two of them.

Despite the availability of data on the dangers of tobacco smoking and e-cigarettes, the prevalence of e-cigarette usage and the causes contributing to their increased use in Saudi Arabia remain unclear. This is the case even though there is data available on the dangers of tobacco smoking.

This study aims to identify the extent to which electronic cigarettes have gained popularity in Saudi Arabia and to characterize the elements that contribute to that popularity. Additionally, the study will describe the characteristics that contribute to the popularity of electronic cigarettes⁷.

Materials & Methods

Study design

A cross sectional study intends to gain an overall picture of the use of electronic cigarettes and the range of brands available in Saudi Arabia at present by administering a questionnaire to the general population of Saudi Arabia and having them fill it out on their own. Only completed surveys were included. The inclusion criterion this study was that participants must be Saudi citizens and currently smoker Either electronic or regular cigarettes or both.

Data collection

The participants were given questionnaires to fill out by using Google form survey, and their responses were used to compile the information. A simple random technique has been used. Data collector distributed the questionnaire between February and May 2020 the questionnaire was made available on the internet, and the individuals

collecting the data asked as many people as they could find to fill it out. First page of the survey was including two questions to exclude the unsolicited sample. Participants must be citizens of Saudi Arabia and smoker either electronic or regular cigarettes. And the second page was the main survey. The purpose of the questions was to determine the frequency with which people use electronic cigarettes, the reasons why people smoke, and the socio-demographic information of the respondent.

Statistical analysis

All information was entered into an established and tested Excel spreadsheet. Frequencies and reliable percentages were used to depict the data for categorical variables. All statistical computations were done in IBM SPSS version 26 for Microsoft Windows (Statistical Package for the Social Science; IBM Corp, Armonk, NY, USA).

Results

Socio-demographic factors: Totaling 6,348, this study's sample size is considered to be high. The gender breakdown of those who participated was girls at 15.6per cent and males at 84.4 per cent. Nearly all (97.6 per cent) of those taking part were from Saudi Arabia. About 21.7per cent were in the 15-20 age range and 38.5 per cent were in the 20-25 age range, and only 7.2 per cent were 45 and up. All socio-demographic data are detailed in Table 1.

The period when participants started smoking e-cigarettes was also a topic of inquiry. 43.4 per cent of respondents have just now been introduced to it. This compares to only a very small group of people who have been using it for over five years⁶.

Questions regarding the opinion of participants on the addictiveness and harmfulness of e-cigarettes were also included in the survey. Only 27.9 per cent believed that electronic cigarettes were more addictive, and 63.5 per cent believed it was more harmful than regular cigarettes. Reasons for consuming electronic cigarettes were also requested from respondents. A total of 53.3 per cent of smokers desired to cut down their smoking habit, and 63.7 per cent considered them an effective way to quit smoking cigarettes. 24.1 per cent of the respondents reported that their daily cigarette consumption has reduced drastically, and 14.1 per cent experienced a slight reduction in consumption, whereas 20.4per cent did not notice any change in their consumption needs. Interestingly, 41 per cent of participants were successfully able to break their habit of smoking. Preferences for regular or e-cigarettes were also collected from the participants.

59.5 per cent preferred e-cigarettes over regular ones whereas the remaining 40.5 per cent of individuals still chose regular cigarettes. At the end of the study, those

participants who had never used electronic cigarettes were questioned about their level of interest in doing so. Respondents expressed an interest in trying electronic cigarettes at a rate of 67.7 per cent.

Discussion

Juvenile use of electronic cigarettes is rising worldwide in both developing and developed nations. The misconception that it is less harmful than smoking tobacco has persisted for a long time. Recent studies, however, have revealed that e-cigarettes can offer risks comparable to those of traditional cigarette. Knowing the characteristics of e-cigarettes in our countries is, therefore, crucial.

This study's objective is to determine the prevalence of the use of electronic cigarettes in the Saudi Arabian market⁷. It should come as no surprise that among this group, 59.5 per cent had already experimented with using electronic cigarettes. In addition to this, there was a statistically significant difference in the prevalence of the use of smokeless tobacco products, with people who smoked electronic cigarettes being more likely to use such products. People who used electronic cigarettes also tended to smoke traditional cigarettes more frequently⁸. Additionally, men, particularly young or teenage boys, and those between the ages of 18 and 24 were more likely to use electronic cigarettes than women, regardless of their age or status. This was especially true for younger men.

Many different kinds of studies have been carried out to investigate the frequency of usage of electronic cigarettes. Investigation shows the prevalence of the use of electronic cigarettes among young people in Canada. According to the findings of a poll that included 1188 participants, the percentage of young adults in Canada who use electronic cigarettes is 16.1 per cent⁹.

The usage of electronic cigarettes was significantly more prevalent among the people who took part in this study (26.3 per cent as opposed to 12 per cent in Canada as a whole). In addition, the male gender, a higher level of education, the usage of tobacco, and a heavier smoking frequency have all been found to be connected with e-smoking in Saudi Arabia.

An additional study on the usage of electronic cigarettes by young people in Poland was carried out by Goniewicz. According to the findings of a questionnaire with 20240 participants who responded, around 20 per cent of adults in Poland have reported using electronic cigarettes¹⁰. The findings of the study indicated that more information should be provided to young adults regarding the dangers of using electronic cigarettes.

The recent research also demonstrated that approximately 59.9 per cent of the population sample favoured using

electronic cigarettes. In addition, the current study looked into the aspects of electronic cigarette use that Czoli et al and Gronkiewicz did not look into. This was done to fill in any gaps in knowledge. In this regard, the most recent inquiry sheds lighter than any of the others that came before it. Dockrell in the United Kingdom found similar results, demonstrating that current e-cigarette users were more likely to have smoked cigarettes in the past. According to our knowledge, this is the first study to investigate the prevalence of the use of electronic cigarettes in Saudi Arabia. However, this study had numerous limitations, which cast doubt on the reliability of its conclusions.

When responding to these questions, the accuracy of the participants' reports regarding their usage of e-cigarettes was crucial to the success of the study¹¹. As a result of this, additional randomized controlled studies are required to ascertain the disease's rate of occurrence as well as any risk factors that may be related to it.

Conclusion

A survey conducted in Saudi Arabia regarding the rising fame of e-cigarettes has shown the prevalent use of e-cigarettes among youngsters and former smokers. The major reason is the cessation of the smoking habit attributed to the myth that electronic cigarettes are safer than regular cigarettes. It was also determined that the use of electronic cigarettes is more common among youngsters coming from privileged backgrounds especially male candidates.

Even though the survey was somewhat helpful in attaining information regarding the issue, however, some attributes need to be studied further hence there is still the need for more randomized trials to determine the full scope of potential dangers and threats imposed by electronic smoking in the Kingdom of Saudi Arabia. It is also crucial for healthcare providers to actively take part in spreading awareness about the risks of electronic cigarette use. The results of this survey can be used to notify the residents of Saudi Arabia about the extent of damage electronic cigarettes can cause.

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