



## EMPHNET's Research Digest

# Public Awareness, Prevalence, and Regulations for the Sale of Electronic Cigarettes in Arab Countries: A Narrative Review

## Introduction

The introduction of electronic cigarettes (e-cigarettes) has sparked a global increase in usage, presenting an alternative perceived to be less harmful than traditional tobacco smoking. Despite the rapid adoption and marketing of e-cigarettes as a safer option, scientific literature reveals mixed findings regarding their safety and efficacy as smoking cessation tools. The lack of conclusive evidence on their long-term health impacts and their potential role in initiating smoking habits or sustaining nicotine addiction has led to varied governmental responses. Some countries have integrated e-cigarettes into existing tobacco product regulations, while others have developed new policies or adjusted current laws to address the unique challenges posed by e-cigarettes.

In the Middle East and North Africa, the prevalence of tobacco smoking

is notably high, and the use of e-cigarettes has seen significant growth. This narrative review, titled [“Public awareness, prevalence, and regulations for the sale of electronic cigarettes in Arab countries”](#) examines data from a range of cross-sectional studies conducted in seven Arab nations. The review seeks to provide a comprehensive summary of the current state of e-cigarette consumption and the factors influencing its adoption among different demographics, including the general population, students, and pregnant women.

This review searched four electronic databases up until December 2021 to identify studies conducted in Arab countries related to the prevalence of e-cigarette use, awareness among users of e-cigarettes, and e-cigarette sales, and consumption regulations. After meticulous screening, 36 cross-sectional survey-based studies conducted in Saudi Arabia, Jordan, Egypt, United Arab Emirates (UAE), Lebanon, Tunisia, and Qatar

were included. These studies were published between 2014 and 2021.

## Prevalence and Awareness

### Saudi Arabia

Most of the studies were from Saudi Arabia, which show an e-cigarette usage of 4.1% in 2014 among the general population. Subsequent research has shown that e-cigarette usage ranges from 31.8% to 77.6% among the general population, with a prevalent belief it is a safer alternative to traditional tobacco. The main reason for using e-cigarettes was to quit smoking. Among university students, the usage varied from 5.7% to 51.4%, and it was largely driven by cessation efforts. Although students acknowledged the potential harm of e-cigarettes, they still believed it is less harmful than traditional tobacco smoking.

### Jordan

E-cigarettes were legalized in 2019. Studies indicate a prevalence

range of 11.7% to 39.2%, among the general population, and an 8-10-fold rise in use among university students since 2017. E-cigarettes were considered an alternative to traditional smoking, despite limited knowledge of their content and regulations. Students believed e-cigarettes do not cause dependence, are not as harmful as tobacco smoking, are more socially acceptable than traditional cigarettes, and could reduce cravings for tobacco and help with quitting smoking. A 2021 study of pregnant women found that 10.3% used e-cigarettes alone, while 55.8% used both e-cigarettes and traditional cigarettes. Non-smoking pregnant women believed e-cigarettes were as harmful as cigarettes while smoking pregnant women thought they were less hazardous.

## UAE

E-cigarettes were legalized in 2019. In 2020, 3.8% of the general population and 8.8% of university students were using e-cigarettes. The main reasons for e-cigarette use included beliefs of safety and enjoyment of the various e-liquid flavors.

## Egypt

E-cigarettes are not officially legalized but are available. A study reported 10.4% usage among young adults with a history of waterpipe use. Prevalence of usage among university students ranged between 10.6% and 16.5%, with the most frequent reason being keeping up with fashion followed by peer influence. More than half of those who vaped also used other tobacco products. Among healthcare providers, concerns were raised about the safety and effectiveness of e-cigarettes as a cessation strategy. Studies on the general population revealed mixed awareness of the potential harms of e-cigarettes and positive perceptions about e-cigarettes as a smoking cessation method.

## Kuwait

Despite a ban on electronic cigarette sales, two studies reported over a quarter of adolescent participants as e-cigarette users, with a high incidence of dual usage.

## Lebanon

Lebanon has regulated e-cigarette imports since 2015, but usage is reported at 8-11.5% with a belief among users that e-cigarettes are less harmful or not harmful compared to traditional cigarettes. More than half consider them helpful for reducing or quitting smoking.

## Qatar

The sale distribution and/or possession of e-cigarettes in large quantities are illegal but personal use is not prohibited. E-cigarette prevalence was reported at 1.6-2.0%, with most of users being dual users. Among university students, the prevalence was higher (14.0%). Users perceived e-cigarettes as less harmful and helpful for cessation efforts, and the availability of flavors and the lack of restrictions on using e-cigarettes in public places were reported as enabling factors among the population.

## Tunisia

In a 2020 conference abstract, 4.8% of healthcare workers were reported to use electronic cigarettes, mainly for pleasure and to aid in smoking cessation. Another study highlighted that 20.5% of high school students (aged 15-20 years) used e-cigarettes, citing sociability and perception of reduced harm due to lower nicotine doses as their main reasons.

## Prevalence and Awareness

Regulatory approaches to electronic cigarettes vary across Arab countries. Bahrain, Lebanon, Oman, and Qatar have banned e-cigarette sales, yet consumption remains legal in some of these countries, and e-cigarettes are still

sold in shops and online in Bahrain and Kuwait. Only Jordan, Saudi Arabia, and the UAE have enacted specific regulations on sales and use, treating e-cigarettes similarly to traditional tobacco with taxes, manufacturing standards, smoke-free areas, and age restrictions for purchase.

Bahrain, the UAE, Kuwait, and Saudi Arabia impose a 100% excise tax, while Lebanon and Jordan have opted for a 150% tax. Egypt and Morocco also tax e-cigarette products, at 44% and unspecified rates respectively.

In countries without specific electronic cigarette regulations, general tobacco product laws apply, including bans on sales to minors and restrictions on public use. The advertising of nicotine products, including e-cigarettes, is universally banned across Arab countries. However, online sales exist despite the lack of specific policies.

## Conclusion

E-cigarettes have seen a surge in popularity across Arab countries, especially among younger adults. Their appeal lies in their ease of use, diverse flavors, and the perception of them being less harmful than traditional smoking. However, the regulatory framework for e-cigarette sales and consumption remains unclear in many countries.

Factors such as age, gender, education level, and dual cigarette smoking are linked to people's awareness of e-cigarettes. This underscores an urgent need for stricter regulations on electronic cigarette trade and sales, pending further evidence of their impact. Additionally, educational programs highlighting the potential harms and addictive nature of e-cigarettes are crucial to keep the public accurately informed.