

[Look Up Full Text](#)
[Find PDF](#)
[Full Text Options](#)
[Export...](#)
[Add to Marked List](#)

## The Prevalence of E-Cigarette Use Among Adults in Malaysia

By: [Ab Rahman, J](#) (Ab Rahman, Jamalludin)<sup>[1]</sup>; [Yusoff, MFM](#) (Yusoff, Muhammad Fadhli Mohd)<sup>[2]</sup>; [Mohamed, MHN](#) (Mohamed, Mohamad Haniki Nik)<sup>[1]</sup>; [Naidu, BM](#) (Naidu, Balkish Mahadir)<sup>[2]</sup>; [Lim, KH](#) (Lim, Kuang Hock)<sup>[3]</sup>; [Tee, GH](#) (Tee, Guat Hiong)<sup>[2]</sup>; [Mohamad, MS](#) (Mohamad, Maria Safura)<sup>[2]</sup>; [Kartiwi, M](#) (Kartiwi, Mira)<sup>[1]</sup>; [Draman, S](#) (Draman, Samsul)<sup>[1]</sup>; [Ab Rahman, NS](#) (Ab Rahman, Norny Syafnaz)<sup>[1]</sup>...More

[View Web of Science ResearcherID and ORCID](#)

ASIA-PACIFIC JOURNAL OF PUBLIC HEALTH

Volume: 31 Issue: 7\_SUPPL Pages: 9S-21S Supplement: 7\_

DOI: 10.1177/1010539519834735

Published: OCT 2019

Document Type: Article

[View Journal Impact](#)

### Abstract

Electronic cigarettes (e-cigarettes) are a new method for the consumption of nicotine. A nationwide survey among 4288 Malaysian adults was conducted in 2016 to measure the prevalence and to describe the population characteristics of e-cigarette users. A complex sampling design was used, and data were collected using a face-to-face questionnaire. The overall prevalence of current, ever, former, and dual users of e-cigarettes in Malaysia were 3.2% (95% confidence interval [CI] = 2.5-4.1), 11.9% (95% CI = 10.5-13.5), 8.6% (95% CI = 7.5-9.8), and 2.3% (95% CI = 1.8-3.1), respectively. The prevalence of all type of e-cigarette use was higher in urban than in rural areas. Current e-cigarette users were likely to be younger, males, and with higher education level. Among current e-cigarette users, 74% (95% CI = 64-82) also smoked conventional cigarettes (dual user). E-cigarette use is prevalent in Malaysia. It is common among younger adults, males, and cigarette smokers.

### Keywords

**Author Keywords:** [electronic cigarette](#); [survey](#); [complex sampling](#); [population](#); [Malaysia](#)

**KeyWords Plus:** [ELECTRONIC CIGARETTES](#); [AWARENESS](#)

### Author Information

**Reprint Address:** [Ab Rahman, J](#) (reprint author)

+ Int Islamic Univ Malaysia, Kulliyah Med, Dept Community Med, Kuantan 25250, Malaysia.

### Addresses:

+ [ 1 ] Int Islamic Univ Malaysia, Kuantan, Malaysia

+ [ 2 ] Minist Hlth, Inst Publ Hlth, Kuala Lumpur, Malaysia

+ [ 3 ] Minist Hlth, Inst Med Res, Kuala Lumpur, Malaysia

**E-mail Addresses:** [arjamal@iiu.edu.my](mailto:arjamal@iiu.edu.my)

### Publisher

SAGE PUBLICATIONS INC, 2455 TELLER RD, THOUSAND OAKS, CA 91320 USA

### Journal Information

**Impact Factor:** [Journal Citation Reports](#)

### Categories / Classification

**Research Areas:** [Public, Environmental & Occupational Health](#)

**Web of Science Categories:** [Public, Environmental & Occupational Health](#)

[See more data fields](#)

### Citation Network

In Web of Science Core Collection

2

Times Cited

[Create Citation Alert](#)

### All Times Cited Counts

2 in All Databases

[See more counts](#)

25

Cited References

[View Related Records](#)

### Most recently cited by:

[Lim, Kuang Hock](#); [Heng, Pei Pei](#); [Mohamed, Mohamad Haniki Nik](#); et al. [Prevalence and Factors Associated With Attempts to Quit and Smoking Cessation in Malaysia](#). ASIA-PACIFIC JOURNAL OF PUBLIC HEALTH (2019)

[Gartner, Coral](#); [Yusoff, Harmy Mohamed](#). [The Emergence of New Nicotine Products in Malaysia](#). ASIA-PACIFIC JOURNAL OF PUBLIC HEALTH (2019)

[View All](#)

### Use in Web of Science

Web of Science Usage Count

0

0

Last 180 Days

Since 2013

[Learn more](#)

### This record is from:

Web of Science Core Collection  
- Science Citation Index Expanded  
- Social Sciences Citation Index

### Suggest a correction

If you would like to improve the quality of the data in this record, please suggest a correction.

## Cited References: 25

Showing 25 of 25 [View All in Cited References page](#)

(from Web of Science Core Collection)

1. [How to define e-cigarette prevalence? Finding clues in the use frequency distribution](#)  
By: [Amato, Michael S.](#); [Boyle, Raymond G.](#); [Levy, David](#)

Times Cited: 73

2. Title: [not available] Times Cited: 4  
By: Asma, S; Mackay, J; Song, SY.  
The GATS Atlas: Global Adult Tobacco Survey Published: 2015  
Publisher: CDC Foundation, Atlanta, GA
3. **Prevalence and characteristics of e-cigarette users in Great Britain: Findings from a general population survey of smokers** Times Cited: 128  
By: Brown, Jamie; West, Robert; Beard, Emma; et al.  
ADDICTIVE BEHAVIORS Volume: 39 Issue: 6 Pages: 1120-1125 Published: JUN 2014
4. **Electronic cigarettes as a harm reduction strategy for tobacco control: A step forward or a repeat of past mistakes?** Times Cited: 231  
By: Cahn, Zachary; Siegel, Michael  
JOURNAL OF PUBLIC HEALTH POLICY Volume: 32 Issue: 1 Pages: 16-31 Published: FEB 2011
5. **Electronic cigarettes: human health effects** Times Cited: 196  
By: Callahan-Lyon, Priscilla  
TOBACCO CONTROL Volume: 23 Supplement: 2 Pages: 36-40 Published: MAY 2014
6. **Efficiency and Safety of an eElectronic cigAreTte (ECLAT) as Tobacco Cigarettes Substitute: A Prospective 12-Month Randomized Control Design Study** Times Cited: 426  
By: Caponnetto, Pasquale; Campagna, Davide; Cibella, Fabio; et al.  
PLOS ONE Volume: 8 Issue: 6 Article Number: e66317 Published: JUN 24 2013
7. Title: [not available] Times Cited: 1  
Group Author(s): Department of Statistics, Malaysia  
Glossary: Household  
Accessed October 11, 2018
8. **E-Cigarettes: Prevalence and Attitudes in Great Britain** Times Cited: 183  
By: Dockrell, Martin; Morrison, Rory; Bauld, Linda; et al.  
NICOTINE & TOBACCO RESEARCH Volume: 15 Issue: 10 Pages: 1737-1744 Published: OCT 2013
9. **Electronic cigarette use in the European Union: analysis of a representative sample of 27460 Europeans from 28 countries** Times Cited: 83  
By: Farsalinos, Konstantinos E.; Poulas, Konstantinos; Voudris, Vassilis; et al.  
ADDICTION Volume: 111 Issue: 11 Pages: 2032-2040 Published: NOV 2016
10. Title: [not available] Times Cited: 7  
Group Author(s): Global Tobacco Surveillance System (GTSS)  
Global Adult Tobacco Survey (GATS): indicator guidelines: definition and syntax Published: June 2009  
Accessed February 28, 2018
11. **Awareness, Trial, and Current Use of Electronic Cigarettes in 10 Countries: Findings from the ITC Project** Times Cited: 87  
By: Gravely, Shannon; Fong, Geoffrey T.; Cummings, K. Michael; et al.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH Volume: 11 Issue: 11 Pages: 11691-11704 Published: NOV 2014
12. **Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit** Times Cited: 286  
By: Hajek, Peter; Etter, Jean-Francois; Benowitz, Neal; et al.  
ADDICTION Volume: 109 Issue: 11 Pages: 1801-1810 Published: NOV 2014
13. Title: [not available] Times Cited: 13  
Group Author(s): Institute for Public Health  
Report of the global adult tobacco survey (GATS). Malaysia 2011 Published: 2012  
Publisher: Ministry of Health, Malaysia
14. Title: [not available] Times Cited: 20  
Group Author(s): Institute of Public Health  
National Health & Morbidity Survey 2015. Smoking among adults in Malaysia Published: 2015  
Publisher: Ministry of Health
15. **Electronic Cigarette Use Among Korean Adolescents: A Cross-Sectional Study of Market Penetration, Dual Use, and Relationship to Quit Attempts and Former Smoking** Times Cited: 162  
By: Lee, Sungkyu; Grana, Rachel A.; Glantz, Stanton A.  
JOURNAL OF ADOLESCENT HEALTH Volume: 54 Issue: 6 Pages: 684-690 Published: JUN 2014
16. **The Prevalence and Characteristics of E-Cigarette Users in the US** Times Cited: 38  
By: Levy, David T.; Yuan, Zhe; Li, Yameng  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH Volume: 14 Issue: 10 Article Number: UNSP 1200 Published: OCT 2017
17. **The Relationship of E-Cigarette Use to Cigarette Quit Attempts and Cessation: Insights From a Large, Nationally Representative US Survey** Times Cited: 28  
By: Levy, David T.; Yuan, Zhe; Luo, Yuying; et al.

18. **The prevalence, correlates and reasons for using electronic cigarettes among New Zealand adults** Times Cited: 48  
By: Li, Judy; Newcombe, Rhiannon; Walton, Darren  
ADDICTIVE BEHAVIORS Volume: 45 Pages: 245-251 Published: JUN 2015
  
19. **Trends in Electronic Cigarette Use Among US Adults: Use is Increasing in Both Smokers and Nonsmokers** Times Cited: 270  
By: McMillen, Robert C.; Gottlieb, Mark A.; Shaefer, Regina M. Whitmore; et al.  
NICOTINE & TOBACCO RESEARCH Volume: 17 Issue: 10 Pages: 1195-1202 Published: OCT 2015
  
20. **Awareness and Current Use of Electronic Cigarettes in Indonesia, Malaysia, Qatar, and Greece: Findings From 2011-2013 Global Adult Tobacco Surveys** Times Cited: 19  
By: Palipudi, Krishna Mohan; Mbulo, Lazarous; Morton, Jeremy; et al.  
Group Author(s): GATS Collaborative Grp  
NICOTINE & TOBACCO RESEARCH Volume: 18 Issue: 4 Pages: 501-507 Published: APR 2016
  
21. **Recommended core items to assess e-cigarette use in population-based surveys** Times Cited: 22  
By: Pearson, Jennifer L.; Hitchman, Sara C.; Brose, Leonie S.; et al.  
TOBACCO CONTROL Volume: 27 Issue: 3 Pages: 341-346 Published: MAY 2018
  
22. **Electronic Cigarette Use Among Adults: United States, 2014.** Times Cited: 92  
By: Schoenborn, Charlotte A; Gindi, Renee M  
NCHS data brief Issue: 217 Pages: 1-8 Published: 2015-Oct
  
23. **Recent Findings on the Prevalence of E-Cigarette Use Among Adults in the U.S** Times Cited: 24  
By: Wilson, Fernando A.; Wang, Yang  
AMERICAN JOURNAL OF PREVENTIVE MEDICINE Volume: 52 Issue: 3 Pages: 385-390 Published: MAR 2017
  
24. **E-Cigarettes: A Rapidly Growing Internet Phenomenon** Times Cited: 128  
By: Yamin, Cyrus K.; Bitton, Asaf; Bates, David W.  
ANNALS OF INTERNAL MEDICINE Volume: 153 Issue: 9 Pages: 607-609 Published: NOV 2 2010
  
25. **Long-term e-cigarette use and smoking cessation: a longitudinal study with US population** Times Cited: 53  
By: Zhuang, Yue-Lin; Cummins, Sharon E.; Sun, Jessica Y.; et al.  
TOBACCO CONTROL Volume: 25 Supplement: 1 Pages: i90-i95 Published: OCT 2016

Showing 25 of 25 [View All in Cited References page](#)

