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Social portrait of young people who use alternative types of tobacco smoking

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Соціальний портрет осіб молодого віку, які використовують альтернативні види тютюнопаління

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Introduction

Within the framework of risk factors for the development of non-communicable diseases, tobacco smoking occupies a significant position and serves as a predictor for the development of this cluster of diseases. Despite numerous programs aimed at combating the prevalence of tobacco use [4; 10], which have been adopted in more than 150 countries worldwide at the beginning of the 21st century, in Ukraine, in 2006, the tobacco industry successfully increased the number of consumers, and today every third resident of the European region [7] is a smoker.

At the present stage of societal development, medical practice pays significant attention to the impact of active and passive smoking on the health status of various population groups. As a country, Ukraine ratified the “Framework Convention on Tobacco Control” [1], aiming to implement a comprehensive set of measures to combat tobacco use, known as MPOWER. The Global Adult Tobacco Survey (GATS) [6], conducted by the World Health Organization in Ukraine in 2010, revealed that 28.4% of the adult population used tobacco products (industrially produced cigarettes), while in the 2017 survey, this figure decreased to only 23.0% among respondents. The issue of tobacco smoking prevalence remains relevant despite numerous studies and the well-established health risks supported by evidence-based medicine [2; 8; 9].

It should be noted that according to the literature, the prevalence of traditional tobacco smoking is observed among the adult population, while there is an increasing demand for alternative forms of tobacco smoking among young people. The Global Adult Tobacco Survey conducted in Ukraine in 2017 revealed that 1.7% of the adult population in Ukraine use electronic cigarettes (EC), but in 2010, this issue was not of significant relevance and was not included in the GATS survey [6].

This current study is motivated by the fact that, according to the literature, there is a lack of large-scale epidemiological studies that provide compelling results regarding the risks, safety, or dangers of electronic cigarettes.

Objective: to assess the prevalence of different forms of smoking among young people and conduct a survey to evaluate their awareness of the health risks associated with various forms of smoking.

Materials and methods

In accordance with the objectives of this study, an anonymous survey was conducted among young individuals using the Global Adult Tobacco Survey (GATS) questionnaire modified and adapted by us specifically for the use of electronic cigarettes. The survey provided the following information: the prevalence of the phenomenon, duration of usage, use in social settings, reasons for usage, and opinions on its impact on health.

The adapted questionnaire used in the actual study (consisting of 37 questions) consisted of three sections. The first section included general information about the respondent, following the requirements of the standardized GATS questionnaire. The second and third sections included questions about the use of tobacco products in the form of manufactured cigarettes and the use of alternative (electronic) forms of smoking (heat-not-burn devices and e-cigarettes). The questions also allowed for multiple-choice responses.

Participation in the survey was voluntary and anonymous, and all participants were informed about the purpose of the study and the subsequent use and publication of the results.

A total of 521 individuals aged 18 to 35 years participated in the anonymous survey. The survey was conducted over a period of three years (2018–2020) in small groups of 10–12 individuals.

Inclusion criteria: voluntary consent to participate in the study, age between 18 and 35 years.

The statistical analysis was conducted using the statistical package AtteStat, MS Excel, and the Statistika program. The normality of data distribution was tested using the Kolmogorov-Smirnov test (with Lilliefors correction). Considering the assessment result of the obtained data, which mostly did not have a normal distribution, non-parametric statistical methods were used [3].

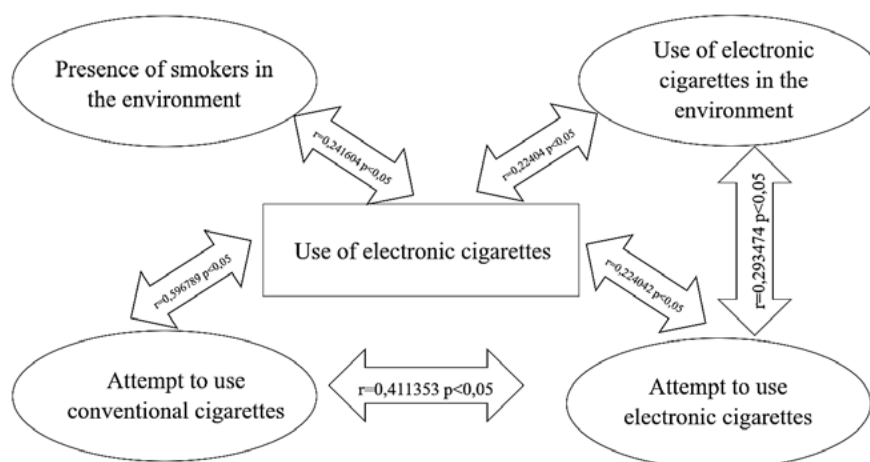


Fig. 1. The relationships between the survey results across all components

Results and discussion

The average age of the respondents was 22 years (Me (25%; 75%) 19; 24), with a gender distribution of 32% male (167 individuals) and 68% female (354 individuals). The prevalence of respondents smoking manufactured cigarettes at the time of the survey was 22.14% (95% CI 14.77 – 29.50), and the frequency of individuals who had tried smoking manufactured cigarettes or were former smokers was 51.64% (95% CI 42.77 – 60.51).

According to our data, 99.5% of the respondents had awareness of electronic cigarettes from various sources. A detailed examination of the open-ended question in the survey regarding the sources of information about electronic cigarette use revealed that the most common source (68% of respondents) was “Advertising” (media, internet, outdoor advertisements, store advertisements), followed by “Environment” (acquaintances, colleagues, friends, relatives) at 46% of respondents.

Based on our data, there were 67 active users of electronic cigarettes at the time of the survey, accounting for 12.86% of the sample. The average age of these users was 22.5 years (Me (25%; 75%) 19; 24). Additionally, 48.36% of respondents reported having used electronic cigarettes at least once (95% CI 39.49 – 57.23).

Regarding the perception of the link between electronic cigarette use and the risk of diseases, among the 521 respondents, 49.14% (n=256) believed that electronic cigarettes can cause serious illnesses, 9.02% (n=47) believed they do not cause serious illnesses, and 41.84% (n=218) responded with “don’t know”. It is worth noting that 97.43% (n=492) of respondents expressed the belief that “traditional” cigarette smoking (manufactured cigarettes) can cause serious illnesses.

When assessing the survey results regarding the section “Opinions on the reasons for using electronic cigarettes” (with multiple answer options), we obtained the following data: “trend” – 53.28%; “habit” – 52.46%; “dependency” – 32.79%; “social status support” – 9.01%; “health condition” – 4.1%; “necessity” – 1.64%; 4.92% of respondents provided their “own option”. Analysis of the “own option” for using electronic cigarettes revealed

the presence of reasons such as “variety of flavors”, “less odor”, “indoor use possibility”, and “curiosity”.

In accordance with the objectives and purpose of the research, a correlation analysis was performed on the obtained data, which allowed for identifying the relationships between the survey results across all components (Figure 1).

According to the obtained results (Fig. 1), the status of one’s own tobacco use, including the use of electronic cigarettes, is associated with the presence of smokers in the respondent’s environment, which contributes to the initiation of tobacco use and reinforces this dependence in the future. Those who have tried or are users of conventional cigarettes are more likely to have a higher risk of using electronic cigarettes as an alternative form of smoking. It is also a risk factor for nicotine-associated use of both electronic cigarettes and conventional cigarettes. Additionally, the data obtained indicate a potential risk of first-time electronic cigarette use when there is a constant presence of electronic cigarette use and continued use of alternative smoking methods, such as electronic cigarettes, in the immediate environment. The connection between trying conventional cigarettes and using nicotine-containing electronic cigarettes may be influenced by a large-scale advertising campaign promoting electronic cigarettes as a substitute therapy for smoking, as well as some data with insufficient evidence regarding their lesser impact on consumer health.

Conclusions

Among the youth, regardless of gender, every fifth person (20%) is an active consumer of electronic cigarettes. The survey results indicate socially driven reasons – for every second person, it is about following trends and maintaining their social status within society, while other respondents perceive this situation as a habit or addiction.

Individuals who have constant exposure to regular users of electronic cigarettes or any other forms of smoking are at the highest risk of attempting and using alternative forms of tobacco consumption, such as electronic cigarettes.

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Purpose: to estimate the specific weight of the use of different types of smoking among young people based on conducting an anonymous questionnaire on their awareness of the health risks of different types of smoking.

Materials and methods. The questionnaire was based and structured on the recommendations and documents of the Global Adult Tobacco Survey for Ukraine, modified and adapted for use in accordance with the intended purpose. 521 people aged 18 to 35 took part in the anonymous survey. The survey was conducted for 3 years (2018–2020) in small groups (10–12 people). Statistical processing was carried out using the AtteStat statistical package, MS Excel and Statistics.

Results. The specific weight of respondents who smoke industrial cigarettes at the time of the survey was 22.14% (95% CI 14.77 – 29.50), at the same time, the frequency of people who tried to smoke industrial cigarettes or were smokers in the past was 51.64% (95% CI 42.77 – 60.51). 99.5% of respondents were aware of the issue of electronic cigarettes from various sources. There were 67 people (12.86%) active users of electronic cigarettes at the time of the survey, the average age of which was 22.5 years (Me (25%; 75%) 19; 24). 48.36% of respondents use electronic cigarettes at least once (95% CI 39.49 – 57.23). When evaluating the results of the survey under the questionnaire heading “Opinion about the reasons for using electronic cigarettes” (with a multiple-choice answer), we obtained the following data: “fashion” – 53.28%; “habit” – 52.46%; “dependency” – 32.79%; “support of social status” – 9.01%; “disease” – 4.1%; “necessity” – 1.64%; “their option” was given by 4.92% of respondents.

Conclusions. Among young people, regardless of gender, every fifth person (20%) is an active consumer of electronic cigarettes. The highest risks of both trying and using alternative types of tobacco smoking in the form of e-cigarettes are for people in their close environment who are regular users of e-cigarettes or any other types of smoking.

Key words: e-cigarettes, tobacco smoking, survey.

Мета дослідження – оцінка питомої ваги використання різних видів паління серед молоді на підставі проведення анонімного анкетування з питань їх обізнаності про ризики різних видів куріння для здоров'я.

Матеріали та методи. Анкета базувалась і структурувалася на рекомендаціях і документах Глобального опитування дорослих щодо вживання тютюну в Україні (за модифікацією та адаптацією для використання відповідно до поставленої мети). В анонімному анкетуванні брала участь 521 особа у віці від 18 до 35 років. Опитування проводилось упродовж трьох років (2018–2020 роки) у малих групах (по 10-12 осіб). Статистична обробка проводилася за допомогою статистичного пакета AtteStat, програми MS Excel і програми Statistika.

Результати. Питома вага респондентів, які палять промислові сигарети, на момент опитування становила 22,14% (95% ДІ 14,77-29,50). Водночас частота осіб, які мали спроби курити промислові сигарети або були курцями у минулому, становила 51,64% (95% ДІ 42,77-60,51). Обізнаними з питань про електронні сигарети із різних джерел виявилися 99,5% респондентів. Активними користувачами електронних сигарет на момент опитування були 67 осіб (12,86%), середній вік яких становив 22,5 роки (Me (25%; 75%) (19; 24). Хоча б одного разу використовували електронні сигарети 48,36% опитаних (95% ДІ 39,49–57,23). Під час оцінки результатів опитування за рубрикою анкети «Думка про причини використання електронних сигарет» (за множинного варіанту вибору відповіді) нами отримані наступні дані: «мода» – 53,28%, «звичка» – 52,46%, «залежність» – 32,79%, «підтримка соціального статусу» – 9,01%, «хвороба» – 4,1%, «необхідність» – 1,64%; «свій варіант» дали 4,92% респондентів.

Висновки. Серед молоді незалежно від статі кожна п'ята особа (20%) є активним споживачем електронних сигарет. Найвищі ризики як спроби, так і вживання альтернативних видів тютюнопаління у вигляді електронних сигарет мають особи, у близькому оточенні яких є постійні користувачі електронних сигарет або будь-яких інших видів паління.

Ключові слова: е-сигарети, тютюнопаління, опитування.

Конфлікт інтересів: відсутній.

Conflict of interest: absent.

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