

Analysis Of Factors Influencing Adolescent Using Electric Cigarettes (Vape) In Indonesia

Analisis Faktor yang Mempengaruhi Remaja Menggunakan Rokok Elektrik (Vape) di Indonesia

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Article Information	ABSTRACT
<p>Riwayat Diterima: 10 September 2022 Direvisi: 19 Oktober 2022 Disetujui: 1 Desember 2022</p> <p>Kata Kunci: Rokok elektrik, remaja</p> <p>Keywords: <i>E-cigarettes, teenagers</i></p>	<p>Abstract <i>Adolescence is a transitional period in human life where it connects children with adulthood. Recently, there has been a trend of cigarettes in Indonesia which is commonly called by teenagers, namely vaping. The use of e-cigarettes (vape) is not only used by parents but teenagers and children also use it. It is known that users of e-cigarettes (vape) can increase the risk of adolescents to the risk of tobacco cigarettes. This type of research is using cross sectional method. The population in this study were all teenagers using electric cigarettes (vape) in Bengkulu City from the age of 20-24 years, with a total sample of 99 teenagers with purposive sampling. The data collection technique used is a questionnaire. The results showed that the most influential factor in the use of e-cigarettes (vape) among teenagers in the city of Bengkulu was environmental factors (friends environment) 90.90%, then environmental factors (family environment), economic factors, the media factor is and the lowest is the environmental factor (lifestyle environment). It is hoped that parents can control their children's behavior through adequate supervision and parents should always follow technological developments so that they can provide education to children.</i></p> <p><i>Keywords: E-cigarettes, teenagers</i></p> <p>Abstrak Masa remaja merupakan masa transisi dalam kehidupan manusia dimana masa yang menghubungkan anak-anak dengan masa dewasa. Baru-baru ini muncul tren rokok di Indonesia yang biasa disebut kalangan remaja yaitu vape. Penggunaan rokok elektrik (vape) tidak hanya digunakan oleh orang tua tetapi remaja dan anak-anak juga menggunakannya. Diketahui bahwa pengguna rokok elektrik (vape) dapat meningkatkan resiko remaja terhadap resiko rokok tembakau. Penelitian ini bertujuan untuk mengetahui faktor reinforcing yang paling dominan terhadap responden, yang berhubungan dengan penggunaan rokok elektrik. Jenis penelitian ini yaitu menggunakan metode cross sectional. Populasi pada penelitian ini adalah seluruh remaja pengguna rokok elektrik (vape) di kota Bengkulu dari usia 20-</p>

24 tahun, dengan jumlah sample sebesar 100 remaja dengan pengambilan sample menggunakan purposive sampling. Teknik pengumpulan data yang digunakan adalah kuesioner. Hasil penelitian menunjukkan bahwa faktor yang paling berpengaruh dalam penggunaan rokok elektrik (vape) pada remaja di kota Bengkulu adalah faktor lingkungan (lingkungan teman), selanjutnya adalah faktor lingkungan (lingkungan keluarga), faktor ekonomi, faktor media dan yang terendah faktor lingkungan (lingkungan gaya hidup). Diharapkan orang tua dapat mengontrol perilaku anak melalui pengawasan yang cukup dan hendaknya orang tua selalu mengikuti perkembangan teknologi agar bisa memberikan edukasi ke anak.

Kata Kunci : Rokok elektrik, remaja

1. Introduction

Adolescence is a transitional period in human life where it connects children with adulthood (Santrock, 2011). Teenagers have developmental tasks that are not easy. In achieving these developmental tasks, of course, health is needed. Teenagers who have health and are accompanied by good thoughts will not fall into negative things that can harm themselves. But in reality this is contrary to the facts of youth in the field. Teenagers are in negative things that greatly affect health, one of which is smoking. The habit of smoking has become a culture in Indonesia. Not only parents, even teenagers and children also have smoking behavior and habits.

According to Maziak (2014), smoking among adolescents is influenced by the immature mindset of a person, due to a lack of skills in making decisions, the desire to imitate adult behavior, and pressure from peer groups. Even though many teenagers already know the harmful effects of smoking, many teenagers still try to smoke, this is motivated by the influence of friends, the environment, communication, and is used as a way to get rid of loneliness and tension.

Other things that affect smoking teenagers are joining groups or gangs to make them look more manly, the influence of cigarette advertisements, and to make them look mature. Human age can be divided into several ranges or groups where each group describes the stage of human growth.

The category according to WHO, which is called youth are those who are in the transitional stage between childhood and adulthood. The age limit for adolescents according to WHO is 12-24 years.

The age category according to the Ministry of Health of the Republic of Indonesia (2009) is that adolescence is divided into 2 stages where early adolescence is from 12-16 years old, late adolescents are 17-25 years old. Meanwhile, according to Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, adolescents are residents in the age range of 10 to 18 years and according to the National Population and Family Planning Agency (BKKBN), the age range of adolescents is 10-24 years and unmarried. Thus youth is when humans are in their teens. During adolescence, humans cannot be called adults, but neither can they be called children. Adolescence is a period of human transition from children to adults.

With the increasing number of smoking problems in Indonesia, recently a smoking trend has emerged in Indonesia which is commonly called by teenagers,

namely vape. An electric cigarette (vape) is a device that functions to convert chemical substances into vapor and flow it into the lungs where the chemical is a mixture of substances such as nicotine and propylene glycol (Ministry of Health RI, 2014). The contents contained in electric cigarettes (vape) are in the form of nicotine, propylene glycol, glycerol, water and various flavoring ingredients (BPOM, 2015). Like conventional cigarettes in general, vape can also be addictive. The American Food and Drug Administration (FDA) conducted a study in 2009 on the content of liquid vape. The study stated that vapes contain Tobacco Specific Nitrosamine (TSNA) which are toxic and Diethylene Glycol (DEG) which are known carcinogens (FDA, 2016). BPOM RI (2015) also found several other hazardous substances, namely metals, carbonyl substances, and other substances.

The impact of the social construction that has occurred on e-cigarettes has begun to be seen, this is evidenced by the large number of users of e-cigarettes (vape) found in Bengkulu City. This is marked by the existence of groups of vape lovers and it is easy to find vape bars that have started to appear. The transition from tobacco smokers to electric smokers indirectly illustrates the existence of use and symbolic values. This can be seen from the encounter of e-cigarette users who initially did not smoke but started using it because they were considered stylish and became a trend in their environment. Some even say that electric cigarettes are not considered harmful to health and are a trend in their social environment (Sarah, 2017).

Based on the data and background description above, the researchers felt interested in conducting research on the analysis of the factors that influence adolescents to use e-cigarettes in Indonesia.

2. Metode

This research is a quantitative research using cross sectional method. This research explores how and why health phenomena occur (Notoadmojo, 2012). Cross Sectional is a study that studies the relationship between risk factors (independent), variable measurements are carried out once and at the same time (Riyanto, 2011).

The population is each subject being studied based on the goals to be achieved, so the population in this study is 100 adolescents in Indonesia aged 20-24 years.

Data Collection Data collection in this study was obtained from:

a. Primary data

Primary data was obtained by disseminating Google Forms to respondents using available questionnaires to obtain the identity of respondents and the factors that influence the use of e-cigarettes, namely environment, economy and media. The questionnaire is a well-organized list of questions or statements, where the respondent only has to give answers.

b. Secondary data

Secondary data was obtained by researchers directly, namely from library sources, data from the Indonesian Ministry of Health, data from the Health Service in Indonesia and the vape community.

3. Result and Discussion

Univariate analysis was used to determine the frequency distribution of the independent variable to the dependent variable regarding electric cigarettes.

Data were analyzed to test the hypothesis of the sample to see the factors associated with e-smokers. The results of the univariate analysis are presented in the form of tables and narratives which display the frequency and percentage of each variable as follows:

- a. Description of adolescents who use e-cigarettes in the city of Bengkulu

Tabel 4.1
Distribution of the frequency of adolescents who use e-cigarettes

Teenagers who use electric cigarettes	n	%
Nonelectric smoking	41	41
electric smoking	59	59
Result	100	100

Based on these data, adolescents who use e-cigarettes do not smoke with a percentage of 41%, while adolescents who use e-cigarettes have a percentage of 59%. According to Garindra Kartasasmita (2019), Chair of the Organizational Division of the Personal Vaporizer Association (APVI) revealed that until 2018 alone the number of e-cigarette users in Indonesia reached 1.2 million people. And in 2019 it is estimated that vapor users will increase to 1 million users, including tobacco smokers who have turned to electric smokers.

- b. Description of the factors that influence teenagers to use electronic cigarettes

The factors examined in this study are environmental factors, economic factors, and media factors in adolescents in Indonesia.

Table 4.2
An overview of the status of the social environment that influences adolescents to use e-cigarettes

variable	N	%
Family environment		
Bad	24	24%
Good	76	76%
Friend Environment		
bad	10	10%
good	90	90%
Lifestyle environment		
bad	49	49%
Good	51	51%
result	100	100

Based on table 4.2, it is obtained an overview of the status of the social environment that influences adolescents to use electric cigarettes in the family environment, almost all of them are good, 76 teenagers or 76%,

while the category is not good as many as 24 teenagers or 24.24%. The influence of the family or the presence of parents who smoke is very influential for teenagers to use cigarettes. Almost all friends' environment is good by 90 teenagers or 90% while the category is not good as many as 10 teenagers or 10%. The influence of the environment of friends is very influential on the behavior of teenagers, having friends who smoke can cause teenagers to use cigarettes. The lifestyle environment is mostly good for 51 teenagers or 51%, while the category is not good for 49 teenagers or 49%. The influence of the lifestyle environment is also very influential for teenagers. One of the effects of teenagers using e-cigarettes is that they feel cooler than if they use conventional cigarettes. Friends who use e-cigarettes will influence teenagers to use e-cigarettes more, compared to the family environment and lifestyle.

This is because the influence on social media is very large in people's lives, especially teenagers. Social media provides access for teenagers to more easily obtain various information (Sitinjak & Susihar, 2020). An overview of the environmental status that influences adolescents to use e-cigarettes

Based on the analysis that has been carried out, the description of the status of the social environment that influences adolescents to use electric cigarettes in the family environment is mostly good, 75 teenagers, while the category is not good, as many as 24 teenagers. Most of the friends' environment is good by 90 teenagers while the category is not good as many as 9 teenagers. The lifestyle environment is mostly good for 51 teenagers, while the category is not good for 48 teenagers.

The results of research conducted by Angraini (2019) show that most of the environmental factors of friends influence adolescents to use e-cigarettes. The existence of friends who consume electric cigarettes will mutually influence someone in consuming cigarettes. Teenagers will be more than happy to spend time with their friends, apart from that teenagers tend to be curious about new things so that a desire arises to try one of them, namely trying to consume electric cigarettes which is a new product from cigarettes. Friends who use electric cigarettes will influence more teenagers use electric cigarettes, compared to the family environment and lifestyle (Angraini, 2019).

- a. An overview of the socioeconomic status that influences adolescents to use e-cigarettes

Based on the analysis that has been carried out, the description of the socio-economic status that influences adolescents to use electric cigarettes is mostly good, 75 teenagers, while the category is not good, 24 teenagers.

The results of research conducted by Dania (2019) show that most economic factors influence adolescents to use e-cigarettes. Irwan (2017) explains that income from parents affects adolescents' knowledge about smoking. Teenagers will find it easy to get information and buy e-cigarettes because the price of e-cigarettes will be easily accessible to people with high incomes. Parents of students give pocket money to their children quite a lot. This is possible because

the income of students' parents is quite large.

b. Media depiction of influencing youth to use e-cigarettes

Based on the analysis that has been carried out, media descriptions that influence adolescents to use electric cigarettes are almost all good, as many as 74 teenagers, while the category is not good, 25 teenagers.

The results of research conducted by Ade Sulistiawan (2017) showed that almost all media factors influence adolescents to use e-cigarettes. The influence of social media is very large in people's lives, especially teenagers, it can be said that technological developments are now very rapid in the community environment. Currently, there are many media that are easy to use, such as YouTube, Instagram and others (Sitinjak & Susihar, 2020).

c. The relationship between family environmental factors that influence adolescents to use e-cigarettes

In the statistical test the relationship between environmental factors that influence respondents to use electric cigarettes is the family environment. This is in line with research conducted by Kustanti (2014) which said there was a relationship between the influence of the family environment and electric smoking behavior. However, this is not in line with El Hasna's research (2017) which stated that there was no relationship between the influence of the family of electric cigarettes and the use of electric cigarettes in novice smokers in high school in Bekasi city.

The family is an environment that is very influential for the development of children who are responsible for instilling values and norms in the formation of children's behavior. Parents become role models for their children both positive and negative behavior. Wrong parenting of parents can cause their children to fall into deviant acts such as smoking, using illegal drugs, promiscuity (King, 2013). In a family, if one of the family members smokes, it is likely that it will influence them or other family members to join in smoking, especially in children, they smoke to show their identity so they can look more mature like their father or their siblings. others (Septian, Syahrul & Hermansyah, 2016). The results of research conducted by Theodorus (2014) explained that smoking families greatly influence the smoking behavior of their children compared to non-smoker families.

d. The relationship between friends' environmental factors that influence adolescents to use e-cigarettes

In the statistical test the relationship between environmental factors that influenced respondents to use e-cigarettes was the environment of friends. This was in line with research conducted by Devhy (2017) which stated that there was a significant influence between peers on e-smoking behavior in adolescents. This is also in line with research conducted by Hastinfritria (2019) which states that there is a peer relationship with smoking behavior in early adolescents at

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Adolescence is a process in which a person will imitate the things that are done by the closest people who are around their environment, psychologically teenagers are very vulnerable to influences that are around their environment. This influences a teenager to do various things to be accepted in his playgroup. Teenagers tend to do things that are done by their peer group, for example if a friend smokes, the teenager will automatically be influenced and imitate this behavior and think anything is a form of loyalty.

The existence of friends who use electric cigarettes is a major factor in the social environment of adolescents who are affected by their use. The characteristics of adolescents who tend to group with their peers cause adolescents to obtain information about e-cigarettes and get it from friends who first know and use e-cigarettes.

The need to be accepted and efforts to avoid group rejection are needed by adolescents. Teens who don't follow what their group is doing will be ostracized. If a group of peers has smoked, the individual must do so too. Therefore, teenagers use e-cigarettes in order to join their peers and as a form of friendship loyalty.

4. Conclusion

Based on the research objectives and the research results obtained from the reinforcing factor the most dominant reinforcing factor for respondents, which is related to the use of electric cigarettes, the researchers draw the following conclusions:

- a. Teenagers in Indonesia who use e-cigarettes are almost entirely due to environmental influences.
- b. Almost all young people who use e-cigarettes in Indonesia have a good economy.
- c. Teenagers who use e-cigarettes are almost entirely influenced by the media.
- d. There is a relationship between environmental knowledge that influences adolescents to use electric cigarettes.
- e. There is a relationship between economic knowledge that influences adolescents to use e-cigarettes.
- f. There is a relationship between media knowledge that influences adolescents to use e-cigarettes.
- g. The most dominant reinforcing factor for adolescents, which is related to the use of electric cigarettes is the environment of friends.

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