



THE PHENOMENON OF E-CIGARETTE USE AMONG THE YOUNG GENERATION IN BANDA ACEH, INDONESIA

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Abstract

The increasing use of electronic cigarettes (e-cigarettes) among young adults in Indonesia has emerged as a growing public health concern. This qualitative study investigates the phenomenon of e-cigarette use among young people aged 18–25 in Banda Aceh by exploring the underlying motivations, knowledge levels, perceptions of health risks, and the influence of social and environmental factors. Data were collected through in-depth interviews with informants who actively use e-cigarettes. Thematic analysis revealed four major interrelated themes: reasons for use, knowledge about e-cigarettes, perceived health effects, and social support and accessibility. The findings show that many users are motivated by curiosity, a desire to follow modern trends, or as an attempt to switch from conventional cigarettes due to the perceived lower health risks. However, participants demonstrated varying levels of knowledge—while some were aware of basic components like nicotine and flavoring agents, few had an accurate understanding of long-term health impacts. Most informants believed that e-cigarettes are a “safer” alternative, despite acknowledging that their safety is not guaranteed. Social factors, such as peer influence and the presence of family members who also smoke, play a major role in normalizing the behavior. Additionally, easy access to vape products, aggressive marketing through social media, and appealing flavors further contribute to the habit’s popularity among youth. This study underscores that e-cigarette use in Banda Aceh is a socially and culturally embedded behavior, calling for comprehensive public education, regulatory enforcement, and targeted interventions to mitigate future health risks.

Keywords: E-Cigarettes, Young Adults, Vaping, Perception, Public Health, Banda Aceh

@Jurnal Ners Prodi Sarjana Keperawatan & Profesi Ners FIK UP 2025

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INTRODUCTION

Cigarettes, both conventional and electronic (vapes), remain a serious global health threat due to their widespread and complex impacts(Meister et al., 2025; Toluwalashe et al., 2024). Conventional cigarettes have been proven to be a leading cause of death from various chronic diseases such as lung cancer, heart disease, stroke, and chronic obstructive pulmonary disease (COPD)(Oh & Kacker, 2014; Yacoub et al., 2025). More than 8 million people die each year worldwide from active smoking and exposure to secondhand smoke, while cigarette butt waste also significantly pollutes the environment. On the other hand, electronic cigarettes, often perceived as a safer alternative, also contain toxic and carcinogenic substances such as nicotine, formaldehyde, and other harmful chemicals that can damage the lungs and increase the risk of cardiovascular disease and cancer(Bhatnagar, 2016; Raja et al., 2021).

The rapidly increasing use of vapes, especially among children and adolescents, raises serious concerns, as the nicotine in vapes can interfere with brain development, affect memory and concentration, and lead to dependence, potentially increasing the risk of addiction to other substances in the future. According to the latest data from the World Health Organization (WHO), the global prevalence of e-cigarette use among students reached approximately 10.2% in 2023, with higher rates among males (10.2%) than females (7.5%), and around 22% of students reported having tried e-cigarettes at least once(Organization, 2018, 2024). In the United States, the prevalence of e- cigarette use among adults increased from 4.5% in 2019 to 6.5% in 2023, with the highest usage observed among individuals aged 21–24 years (15.5%). Meanwhile, in Indonesia, the prevalence of e-cigarette use has risen significantly over the past decade—from 0.3% in 2011 to approximately 3% in 2021, representing an estimated 6 million users. In Aceh Province, data from the 2018 Basic Health Research (Riskesdas) reported an e-cigarette prevalence rate of 0.7%, with Banda Aceh City recording the highest rate among local districts and cities at 1.3%.(Renaldi et al., 2024).

Although electronic cigarettes do not contain tobacco, both the World Health Organization (WHO) and the Indonesian Ministry of Health have emphasized their dangers due to exposure to nicotine, fine particles, and other toxic substances. The Truth Initiative reported 2,051 cases of lung- related illnesses associated with electronic cigarettes, including 39 deaths—80% of which involved active users(Dahdah et al., 2022; Hackshaw et al., 2018). Growing concerns have arisen because the use of e-cigarettes has not only increased among former smokers but also

among young users aged 18–24, 44.3% of whom had never smoked before(Jackson et al., 2024; Pierce et al., 2025; Virgili et al., 2022). Qualitative research reveals dual perceptions: while some respondents expressed positive views regarding flavors, technological features, and odorless convenience, many voiced concerns about safety uncertainties and the potential for sustained nicotine addiction(Cerrai et al., 2020; Kinouani et al., 2025). Meanwhile, global regulations are becoming stricter—WHO has advocated for health warning labels and marketing restrictions, and several countries have banned disposable vapes altogether. In Banda Aceh, smoke-free zones have been expanded through regional regulations (Qanun) and mayoral decrees to control exposure to both electronic and conventional tobacco products in public spaces. Against this background, this study aims to explore in greater depth the perceptions of young adult users of electronic cigarettes at vape shops in Banda Aceh.

METHOD

This study is a qualitative research aimed at understanding social interactions through in-depth interviews in order to identify clear patterns (Moleong, 2007). It employs a non-numerical approach, focusing instead on the ideas, perceptions, opinions, and beliefs of the informants. The research was conducted in Banda Aceh City in two phases: from August 9–20, 2021, and from February 12–14, 2022. The primary locations were several coffee shops frequently visited by the informants, including Mayor Kopi, Zakir Kopi, New Normal Coffee, Island Drink House, and Kutaraja Kopi. Informants were selected based on the criteria of being e-cigarette users aged 18–24 years (young adults), consisting of 10 individuals. Of these, 8 were recruited directly from vape shops, while the remaining 2 were acquaintances of the researcher. Data collection was conducted through in-depth interviews using open-ended questions. In the first phase, 8 informants were interviewed once. In the second phase, interviews and observations were conducted with 3 informants over two separate sessions.

To ensure data completeness, the researcher obtained permission to use a voice recorder and provided a brief explanation of the research topic and objectives before each interview began. Qualitative data analysis was carried out continuously from the beginning to the end of the research, following the steps: data reduction, data display, and conclusion drawing/verification. Data reduction involved selecting, categorizing, and organizing the information to make it meaningful without eliminating its core value. Data presentation was

done in narrative form for ease of understanding, while conclusions were considered provisional until verified through the collection of additional data to support or revise the existing findings(Moleong;, 2017)

RESULTS AND DISCUSSION

Overview of the Social Environment and Characteristics of E-Cigarette Users Among Young Adults in Banda Aceh.

This study aims to explore in depth the social factors, personal motivations, individual perceptions, and knowledge that influence e-cigarette use among young adults aged 18 to 24 in Banda Aceh. Employing a qualitative approach, the research utilized in-depth interviews with 10 active e-cigarette users. All informants were selected through purposive sampling based on specific criteria, including age, current use of e-cigarettes, and willingness to participate. Participants were recruited from several popular vape stores in Banda Aceh, such as Vapor Aceh Batoh, Vapor Aceh Lampineung, and Boost Vaping, which serve as key social interaction points for the local vaping community.

The interviews revealed four key themes that reflect the experiences and views of the informants regarding e-cigarette use: (1) reasons or motivations for use, (2) knowledge about the contents and effects of e-cigarettes, (3) perceptions of benefits and risks, and (4) the role of the social environment and accessibility of vape products. These themes consistently emerged in the informants’ narratives, illustrating the complex social dynamics at play, including peer influence, perceived health risks, and lifestyle considerations.

male (9 out of 10), with only one female participant. This suggests that e-cigarette use among young adults in Banda Aceh remains male-dominated. The participants’ ages ranged from 19 to 24 years, with the youngest being 19 and the oldest 24. Notably, the youngest informant (AF, age 19) reported having used e-cigarettes since the age of 14, indicating early exposure and access to these products among adolescents. Interview durations ranged from as short as 9 minutes and 2 seconds to as long as 39 minutes and 14 seconds. Informants AJ and SA were interviewed in two separate sessions to allow for deeper exploration and clarification of previous statements.

The interviews were conducted in two phases: the first involving eight informants interviewed once, and the second involving two informants who were interviewed two to three times to obtain more comprehensive insights. Regarding their daily activities, five informants were employed full-time, four were currently enrolled in university, and one had recently completed their studies. This diversity in educational and occupational backgrounds offered rich perspectives on how social and economic status, as well as life transitions, influence e-cigarette use.

The length of e-cigarette use among informants also varied, with most having used them for at least one year and some for as long as five years. This indicates that many of the participants had sufficient experience to offer critical reflections on the impacts of e-cigarette use. Several informants reported switching from conventional cigarettes to vaping due to health concerns and the milder odor of e-cigarettes, while others began using them due to peer influence and evolving social trends.

Reasons for Using E-Cigarettes

One of the most prominent reasons identified in this study is the use of e-cigarettes as an alternative or transitional tool for quitting conventional tobacco smoking. Several informants indicated that their initial motivation stemmed from a desire to move away from traditional cigarettes, which they perceived as more harmful to their health and unpleasant due to their lingering smell. For instance, informant A1 stated, *“It’s mainly to break the habit of smoking tobacco or conventional cigarettes.”* This suggests that, for some users, vaping is viewed as a harm-reduction strategy or a stepping stone toward complete smoking cessation. Beyond health-related concerns, emotional and psychological motivations also played a critical role in the adoption of e-cigarettes. Some informants turned to vaping as a way to relieve stress, manage emotions, or seek a form of personal comfort and gratification. Informant A8

Table 1. Informant Characteristics and Interview Order

No	Informant	Code	Gender	Age	N Interview Duration
1	AZ	A1	Male	23	11:39 minutes
2	LA	A2	Male	21	10:54 minutes
3	RA	A3	Male	24	09:02 minutes
4	FE	A4	Male	23	09:27 minutes
5	DE	A5	Male	20	10:34 minutes
6	AL	A6	Male	22	11:08 minutes
7	AF	A7	Male	19	10:36 minutes
8	JA	A8	Female	20	11:09 minutes
9	AJ	A9	Male	24	34:03 & 22:56
10	SA	A10	Male	23	39:14 & 28:14

In general, the informants were predominantly

articulated this sentiment clearly, saying, *“I use it to relieve stress and for personal satisfaction.”* This indicates that vaping serves not only as a physical substitute for smoking but also as a coping mechanism for emotional regulation in daily life. Social trends and peer influence emerged as another significant factor driving e-cigarette use among young adults.

Several participants acknowledged that their initial exposure to vaping came from observing their friends. For example, informant A2 admitted, *“At first, it was because I saw my friends doing it, so I joined in too.”* This reflects the strong role of peer modeling and social acceptance in initiating and normalizing e-cigarette use, particularly in social settings where such behavior is widespread and even encouraged. Meanwhile, for other users, the choice to vape was not necessarily linked to health concerns, psychological reasons, or peer pressure, but rather stemmed from a matter of personal preference. Informant A4 expressed this clearly by stating, *“There’s no special reason really—I just prefer e-cigarettes over regular tobacco cigarettes.”* This response underscores that, for some individuals, the appeal of e-cigarettes lies in their design, taste variety, convenience, or perceived modernity, which can make them more attractive than traditional smoking options. This complexity highlights the need to view vaping not merely as a substitution for smoking, but as a behavior shaped by personal, psychological, and sociocultural dimensions. Each informant’s motivation is embedded within their individual life context, social network, and broader cultural environment, illustrating the nuanced reality of vaping behavior among this age group.

Knowledge of E-Cigarettes

The level of knowledge among informants regarding e-cigarettes varied significantly, highlighting a spectrum of awareness ranging from superficial understanding to more technical familiarity. This diversity suggests that the decision to use e-cigarettes is not always based on informed choices, but often shaped by lifestyle trends, peer influence, and subjective perceptions of safety or modernity. Some informants admitted to having minimal understanding of what e-cigarettes actually are or how they function. Their responses indicated that their usage was driven more by the appeal of the vaping culture than by scientific or technical knowledge. For instance, informant A2 responded concisely, *“I don’t really know—just thought it looks stylish.”* This kind of answer reflects a user group that is attracted to the aesthetic and social symbolism of vaping, without fully grasping its mechanics or potential health implications. In contrast, other participants demonstrated a more informed perspective. Informant A5 offered a basic technical

explanation, stating, *“E-cigarettes use liquid that is heated into vapor, so it’s different from regular cigarettes that produce smoke. It feels lighter.”*

This description reflects an elementary yet functional understanding of the vaporization process, distinguishing between combustion in conventional cigarettes and vapor production in electronic alternatives. This distinction is often cited by users who perceive vaping to be a safer, cleaner, and more modern form of nicotine consumption. When discussing the contents of e-liquids (vape juice), respondents also displayed varying degrees of awareness. Informant A6, for example, was able to list three main components: *“Yes, I know there’s glycerin glycol, then there’s artificial flavoring and nicotine—those three.”* While this shows a relatively basic familiarity with the ingredients, it also reveals a common confusion between “glycerin” and “glycol,” which are in fact two distinct substances commonly used in vape liquids—vegetable glycerin (VG) and propylene glycol (PG).

Informant A1 demonstrated a more comprehensive level of knowledge by elaborating on the specific composition of e-liquid: *“The contents include propylene glycol, glycerin, essence, and nicotine. There’s also sweetener added for taste.”* This response indicates a more in-depth understanding of the chemical makeup of vape liquids, including not only the base components (PG and VG), but also additives like flavoring agents and sweeteners, which are known to enhance user experience but may also pose unknown health risks over time. Overall, the data reveal that while some users have acquired a reasonably accurate understanding of e-cigarette composition and functioning—likely through personal research, product packaging, or peer discussions—others engage in vaping with very little factual knowledge. This disparity points to a potential public health concern, as misinformed or uninformed usage could lead to underestimation of risks, particularly related to long-term exposure to chemicals such as nicotine and flavoring compounds.

Moreover, the variations in knowledge levels suggest that current educational outreach and public health messaging regarding e-cigarettes may not be reaching all user demographics equally. Some users seem to operate under assumptions that vaping is categorically safer than traditional smoking, without access to detailed information about possible side effects, addictive properties of nicotine, or regulatory standards concerning vape products. This knowledge gap underscores the importance of targeted health communication efforts, particularly for younger age groups who are more susceptible to trends and peer influence. Some users possess relatively accurate and detailed information, while others engage with the product

primarily based on lifestyle appeal or peer conformity, with little to no understanding of the substances they are inhaling or the mechanisms behind them.

Perceptions of Positive and Negative Aspects

Most of the informants in this study perceived e-cigarettes as a lighter and less harmful alternative to conventional tobacco cigarettes. This perception is rooted in their lived experiences, such as the absence of unpleasant odors, reduced respiratory discomfort, and the availability of enjoyable flavors. Informants frequently compared the sensory and physical effects of vaping with those of traditional smoking, often favoring the former. For example, informant A1 described several perceived benefits of switching to e-cigarettes:

"From what I've experienced, when I wake up in the morning, I don't feel short of breath, and my mouth doesn't smell bad. With regular tobacco cigarettes, the smoke lingers on clothes and makes them stink. Vaping feels cleaner and it makes my breathing easier compared to tobacco." Statements like this reflect a common belief that e-cigarettes offer a "cleaner" smoking experience, with fewer immediate negative side effects. The physical comfort and the aesthetic appeal—such as pleasant aromas and absence of smoke residue—appear to reinforce users' preference for vaping, especially in social contexts. Moreover, many informants emphasized that e-cigarettes do not cause the same level of discomfort or social stigma typically associated with tobacco use.

The scent of flavored vapor is often considered more socially acceptable than the acrid smell of tobacco smoke. This also aligns with the broader trend of vaping being marketed and consumed as a modern lifestyle product, not merely as a nicotine delivery system. For some users, the positive sensory experiences (e.g., fruity or dessert-like flavors) enhance the appeal and satisfaction of vaping, which contributes to sustained use. However, despite the overwhelmingly positive perceptions, a number of informants demonstrated a degree of skepticism and critical reflection regarding the long-term effects of e-cigarette use.

While none of the participants reported any severe health issues directly linked to vaping, several admitted uncertainty about its long-term safety. Informant A1 reflected on this ambiguity by stating: *"From what I've read, research doesn't indicate anything dangerous for now. But that's also because it takes several decades to really know. Current studies haven't shown strong evidence that e-cigarettes are harmful."* This statement illustrates the paradox many users face: while there is no immediate evidence of serious harm, the absence of conclusive long-term

studies leaves space for doubt.

This "unknown risk" is acknowledged, but it is not strong enough to dissuade current usage. Many informants seem to be operating under the assumption that e-cigarettes are "relatively safer"—an assumption informed by popular discourse and the perceived lack of harmful short-term effects. Interestingly, despite this awareness of potential long-term risks, most informants expressed no intention to quit vaping in the near future. For example, informant A6 asserted confidently:

"As of now, I don't have any desire to quit using e-cigarettes." Similarly, informant A7 added: *"Not yet, because it feels good. It's comfortable and honestly, I believe it's safe—so I just keep vaping."*

These remarks highlight a cognitive dissonance: users recognize that e-cigarettes may not be entirely risk-free, yet their positive experiences, coupled with a perceived lower risk compared to tobacco, justify continued use. The feeling of comfort, enjoyment of flavor, and perceived safety appear to outweigh any lingering doubts about future health consequences. Some informants conveyed a sense of rationalization regarding their behavior. The notion that e-cigarettes are "better than smoking" often serves as a justification for continued use, even if it involves nicotine dependency. This comparative reasoning is critical to understanding why e-cigarettes are not only seen as alternatives but also as preferable lifestyle choices by many young adults.

Social Support and Access to Electronic Cigarettes

Social support and ease of access to electronic cigarettes are two important factors contributing to the adoption and continuation of vaping behavior among young adults in Banda Aceh. Social environments, both within the family and peer groups, play a significant role in shaping individual decisions to initiate and maintain the use of electronic cigarettes. Several informants reported that they had family members who smoked, either conventional cigarettes or e-cigarettes. The presence of smokers in the household normalizes the behavior, even in the absence of direct encouragement. For instance, informant A4 stated, *"In my family, it's just my brother who smokes,"* indicating exposure to smoking behavior within the home environment. Similarly, informant A7 shared, *"Some of them smoke, some use e-cigarettes,"* showing that, in certain cases, e-cigarette use has become an accepted practice among family members. Peer environments also significantly influence and reinforce e-cigarette use. As informant A4 stated, *"Most of them use e-cigarettes, though some still use tobacco,"* it is evident that within their social

circles, vaping has become a common practice. Similarity in behavior among peers creates an implicit or even explicit social pressure to conform to the trend. In this context, vaping is not merely a method of nicotine consumption but also a symbol of group affiliation and a marker of lifestyle.

From an accessibility standpoint, most informants indicated that using e-cigarettes is more cost-effective in the long run compared to conventional cigarettes. Although the initial investment in devices such as pods or mods may be higher, daily operational costs are lower because only components like coils (*occ*) and batteries need to be replaced periodically. Informant A1 elaborated, *"The most frequent purchases are the occ for vaporizing, along with liquid and a battery that needs to be replaced every six months."* This reflects the perception that e-cigarettes offer economic efficiency, especially for regular users. The need for *liquid* also varies depending on how frequently users vape. Informant A5 explained, *"For me, one 100 ml bottle of liquid lasts about two weeks,"* suggesting that most users have a consistent and manageable consumption pattern. Additionally, the availability of liquids in various sizes and price ranges allows for flexible spending, making the product accessible to a wide range of young consumers. Flavor preferences are another dimension that enhances the appeal of e-cigarettes among young adults. The variety of flavors not only adds to the sensory experience but also serves as a form of personal expression. Informant A1 described their preferences: *"Creamy flavors are sweeter; there are also chocolate, fruity flavors... the most popular ones are creamy, like strawberry, banana, donut, or blueberry."* These sweet and dessert-like flavors indicate that vaping is not just about nicotine intake but also about enjoyment and indulgence, which strengthens users' attachment to the product.

Discussion

This study reveals that the use of electronic cigarettes among young adults in Banda Aceh is not driven by a single factor but is instead the result of a complex interaction between personal motivation, perceived risks and benefits, level of knowledge, and social environmental influences. The four main themes identified—namely reasons for use, knowledge about e-cigarettes, perceptions of their effects, and social support and accessibility—are interconnected and together form a comprehensive picture of this behavioral pattern. First, in terms of reasons for use, most informants reported using electronic cigarettes as an alternative to conventional tobacco cigarettes. This motivation is largely influenced by the desire to reduce health risks and avoid the unpleasant odor caused by traditional cigarettes.

This finding is in line with previous studies that suggest switching to e-cigarettes is often associated with attempts to quit smoking or reduce nicotine dependency from tobacco products. However, on the other hand, some informants reported using e-cigarettes not for health reasons but rather out of curiosity, pleasure, or peer pressure (Yessi et al., 2025).

This reflects that e-cigarette use is not only viewed through a functional lens, but also symbolically—as part of a modern lifestyle and a prevailing social trend. Second, regarding knowledge about e-cigarettes, there is a wide variation in the level of understanding among informants. Some demonstrate adequate technical knowledge of e-cigarette components such as propylene glycol, glycerin, nicotine, and flavoring essences, while others have only superficial knowledge and view it simply as a trendy or fashionable item.

This uneven distribution of knowledge indicates a significant information gap among young users. This is a cause for concern, as the lack of accurate knowledge may lead to incorrect assumptions, such as the belief that e-cigarettes are completely safe or pose no long-term health risks. Third, in terms of perceptions of positive and negative effects, the majority of informants view e-cigarettes as a "lighter" option compared to traditional cigarettes. They mentioned perceived benefits such as reduced shortness of breath, no lingering smoke odor on clothes or in the mouth, and more pleasant flavor experiences. Nonetheless, some informants acknowledged the uncertainty surrounding the long-term health impacts of e-cigarette use.

Despite this awareness, it was not strong enough to motivate them to quit, as the prevailing belief in their safety remains dominant among users. These findings highlight how risk perception plays a critical role in shaping behavior and is formed through a combination of personal experience, media exposure, and the social discourse within the user's environment. Fourth, social support and accessibility are key factors in sustaining this habit. The family and peer environment exerts a strong influence on an individual's decision to initiate or continue using e-cigarettes. Many informants reported having family members or close friends who also use, creating a socially permissive atmosphere. Furthermore, access to e-cigarette products is relatively easy—available through physical stores such as Vapor Aceh Batoh and Boost Vaping, as well as online platforms.

The cost is also perceived as more economical over time once the device is owned, and the wide range of appealing flavors that align with young people's preferences further strengthens the appeal of e-cigarettes as a more "convenient" alternative. These four findings

reinforce the notion that e-cigarette use among young adults cannot be fully understood through an individual perspective alone. Instead, it must be analyzed within broader social and cultural contexts. This phenomenon reflects a shift in nicotine consumption patterns from conventional forms toward a new form perceived as more modern, cleaner, and customizable. However, behind this perception lies a significant public health challenge related to education, policy regulation, and protection of vulnerable age groups from misinformation and the normalization of smoking behavior in any form. The use of electronic cigarettes among adolescents and young adults is a complex phenomenon influenced by the interaction of individual, social, and structural factors.

A study by novadiana et al. (2020) found that peer influence plays a significant role in the habit of vaping, with many university students starting to use e-cigarettes after being encouraged by close friends or due to a desire to conform to their social environment (Nova Diana et al., 2020). This aligns with the findings of Shaskia (2025) who revealed that social environments—such as families where other members also smoke—and the perception that e-cigarettes are “safer” than conventional cigarettes, reinforce this behavior among students (Penelitian et al., 2025). Additionally, curiosity, the desire to follow new trends, and the availability of attractive flavors are key motivators for use.

This was also demonstrated in a study by vander (2021), which found that over 60% of respondents were drawn to e-cigarettes due to their more pleasant aroma and flavor compared to traditional tobacco products (van der Eijk et al., 2021). From a health perspective, a quantitative study by Sreeramareddy et al. (2022) using spirometry measurements on e-cigarette users aged 18–25 recorded a significant decrease in lung capacity values (FEV1 and FVC) compared to non-smokers. This suggests that e-cigarette use still has a negative impact on respiratory function, even though it may appear less harmful at a glance. These results are supported by a systematic review conducted by Ngo et al. (2022) in Southeast Asia, which noted a rise in e-cigarette use among adolescents over the past five years, especially in countries with weak regulations and high exposure to product promotion through social media. The review also highlighted the widespread misconception about the safety of vaping, particularly among novice users, many of whom do not receive accurate health information from reliable sources.

Meanwhile, a 2023 report by the Southeast Asia Tobacco Control Alliance (SEATCA) emphasized that aggressive marketing strategies by the e-cigarette industry—especially through digital platforms favored by youth—have

contributed to the normalization of vaping behavior (Mohdkhairi & Mulenga, 2025; Nga & Anh, 2023). The report points out that regulatory weaknesses and the absence of explicit bans on advertising and sales to minors have created significant gaps, allowing the increasing prevalence of new users among the productive age group. These findings further support the research conducted in Banda Aceh, which showed that the use of e-cigarettes among young adults should not be viewed merely from an individual perspective, but rather as the result of interconnected social, cultural, and informational structures.

CONCLUSION

The results of this study reveal that the use of electronic cigarettes among young adults in Banda Aceh is shaped by a complex interplay of knowledge, risk perception, flavor preferences, and strong social influences. While some informants demonstrated a technical understanding of the structure and types of e-cigarettes, their knowledge of the long-term health effects remains limited and is often based on unverified assumptions. E-cigarettes are often perceived as a “lighter” alternative by some users; however, their effectiveness in reducing or quitting conventional cigarette use is still questionable. A number of informants reported successfully reducing their tobacco consumption, yet many others continued to use both e-cigarettes and conventional cigarettes simultaneously—a dual-use practice that undermines the goal of complete cessation. Most informants showed a tendency to continue using e-cigarettes without any intention to quit, driven by factors such as convenience and a variety of flavors that are perceived as more pleasant and less intrusive than traditional cigarettes. Features like appealing aromas and unique flavors reinforce the perception that e-cigarettes are safer and more modern, although some users acknowledged potential health risks that remain unclear due to the lack of long-term research. Environmental influences, particularly from family and peers, also play a major role in initiating and sustaining this behavior. Having family members or close friends who also smoke—whether conventional or electronic—strengthens the permissive social norms surrounding e-cigarette use (Hasibuan et al., 2025). This creates a social atmosphere that not only encourages but also normalizes and facilitates the habit. Although e-cigarettes are often positioned as a cleaner and more user-friendly alternative, in reality, these devices have not yet proven to be an effective tool for smoking cessation. In some cases, they may even contribute to the emergence of new smoking habits that carry their own set of health risks,

warranting greater attention in terms of public health education and regulatory intervention.

Acknowledgment

The authors would like to express their sincere gratitude to all informants who willingly participated in this study and shared their valuable insights. Special thanks are also extended to the local authorities in Banda Aceh who provided administrative support during the research process. This research would not have been possible without the guidance and encouragement from faculty members of the Master of Public Health Study Program, Universitas Muhammadiyah Aceh

Author Contributions

All authors contributed equally to the conception, data collection, analysis, and writing of this manuscript. Each author approved the final version and agrees to be accountable for all aspects of the work.

Disclosure Statement / Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article. No financial or personal relationships influenced the outcomes of this study.

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