

Legal Protection for Consumers Against the Circulation of Hazardous Cosmetic Products: Between Regulation and Law Enforcement in Indonesia

Savina¹, Suwarno Abadi²

^{1,2}Universitas Wijaya Putra Surabaya, Indonesia

Email: shafahaq@yahoo.com

Abstract

The increasing circulation of cosmetic products containing hazardous substances in Indonesia has raised significant concerns regarding consumer safety and legal protection. This study aims to analyze consumer legal protection against the misuse of hazardous substances in cosmetic products through a comprehensive literature review approach. This study also examines regulatory challenges and law enforcement obstacles related to the supervision of hazardous cosmetic products in Indonesia. The research employs a qualitative method with a literature review approach through the collection and analysis of scientific journal articles, legal documents, government regulations, and official reports concerning cosmetic supervision and consumer protection. The findings indicate that hazardous substances such as mercury, hydroquinone, and other illegal chemical compounds are still frequently found in illicit cosmetic products distributed through both offline channels and digital marketplaces. This study reveals that weak regulatory oversight, limited institutional coordination, and the rapid growth of online commerce have complicated the effectiveness of cosmetic control mechanisms. Law enforcement efforts continue to face various obstacles, including difficulties in investigation processes, limited sanctions, and low legal awareness among business actors. The analysis also shows that existing consumer protection regulations have not fully addressed the dynamic challenges in the distribution of hazardous cosmetics in Indonesia. Strengthening the regulatory framework, enhancing inter-agency collaboration, and increasing public awareness are considered essential strategies for reinforcing consumer legal protection. This study contributes to the development of legal and regulatory discourse on consumer protection and provides strategic recommendations for improving the governance of cosmetic product supervision in Indonesia.

Keywords: *Consumer Legal Protection, Hazardous Cosmetic Products, Cosmetic Regulation, Law Enforcement, Literature Review.*



A. INTRODUCTION

The rapid development of the cosmetic industry in Indonesia has been accompanied by a significant increase in the circulation of illegal cosmetic products containing hazardous substances that threaten consumer health and safety. The growing public demand for instant beauty products has driven the widespread distribution of unauthorized cosmetics through conventional markets and digital trading platforms. Many of these products contain prohibited substances such as mercury, hydroquinone, and excessive chemical compounds that are medically recognized as dangerous for long-term human use. Hazardous ingredients in cosmetics are often used because they can provide quick whitening and skin-lightening effects that attract consumers seeking instant aesthetic results. Continuous

exposure to these substances can cause serious dermatological disorders, kidney dysfunction, neurological damage, and various other chronic health complications in consumers (Bamidele et al., 2023). The misuse of mercury in cosmetic products has become one of the most concerning public health issues because mercury compounds can be absorbed through the skin and accumulate in the human body over time. Previous research indicates that prolonged exposure to mercury-based cosmetics can cause permanent toxic effects, including nervous system disorders and kidney failure (Kumar et al., 2023).

Hydroquinone, commonly found in illegal skin-lightening products, is also associated with skin irritation, ochronosis, and potential carcinogenic risks when used without medical supervision. The increasing availability of hazardous cosmetic products through online marketplaces has further complicated regulatory oversight and consumer protection efforts in Indonesia. Digital commerce enables illegal distributors to market cosmetic products rapidly with limited transparency regarding ingredient composition and product legality. Consumers often prioritize affordable prices and instant cosmetic results without adequately considering product safety standards and legal certification. This situation reflects the increasing vulnerability of consumers to misleading cosmetic marketing practices that disregard health and safety aspects. Low public understanding of the risks associated with cosmetic ingredients contributes to the high consumption of dangerous beauty products across various social groups. The circulation of hazardous cosmetics is not only a public health issue but also poses a serious challenge to consumer rights protection and regulatory governance. The increasing distribution of illegal cosmetics containing hazardous substances underscores the urgency of strengthening monitoring mechanisms and more effective consumer protection policies in Indonesia (Michalek, Bennett, & Leland, 2019).

Consumer legal protection has become an increasingly important issue in Indonesia along with the rising circulation of hazardous cosmetic products that potentially threaten public health and violate consumers' basic rights. Consumer protection in the cosmetic sector is not only related to the right to obtain safe products, but also includes the right to accurate information, legal certainty, and protection from misleading business practices. The increasing use of cosmetic products among Indonesian society has drawn greater attention to the responsibility of producers and distributors in maintaining product safety standards. According to consumer protection theory, consumers have fundamental rights that must be guaranteed by the state, including the right to safety, comfort, and access to accurate product information. The widespread distribution of illegal cosmetics containing mercury and other prohibited substances indicates that these rights are still frequently violated in practice. Previous research confirms that low consumer awareness regarding cosmetic safety significantly contributes to the high consumption of hazardous cosmetics in developing countries (Tesfamariam et al., 2023). In many cases, consumers are attracted to instant whitening effects and low product prices without fully understanding the long-term health consequences posed by hazardous ingredients.

This condition creates an imbalance between business actors and consumers, particularly because consumers often lack adequate knowledge regarding cosmetic ingredients and regulatory certification.

The rapid growth of online marketplaces has expanded consumer exposure to illegal cosmetic products distributed without proper oversight. Research conducted by Noor et al. (2022) found that digital marketing and promotion through social media have accelerated the spread of unlicensed cosmetic products among young consumers in Southeast Asian countries. The absence of effective consumer education and limited public access to reliable information regarding cosmetic safety further exacerbates consumer vulnerability to misleading advertisements. The implementation of consumer protection regulations in Indonesia still faces substantial institutional and operational challenges. The existing legal framework formally recognizes consumer rights, but its enforcement mechanisms are often inconsistent and have not been able to comprehensively prevent the circulation of hazardous cosmetic products. Research by Edwards et al. (2023) also reveals that weak regulatory oversight and low law enforcement capacity significantly contribute to the continued circulation of unsafe cosmetic products in developing countries. Strengthening consumer legal protection requires not only comprehensive regulations but also effective law enforcement, public education, and stronger coordination among regulatory agencies to ensure the safety and well-being of cosmetic consumers in Indonesia.

Government regulations and regulatory agencies play a fundamental role in controlling the circulation of hazardous cosmetic products and ensuring consumer safety in Indonesia. The rapid development of the cosmetic industry has prompted the Indonesian government to strengthen the regulatory framework related to the production, distribution, and commercialization of cosmetic products. In Indonesia, the main authority responsible for supervising cosmetic products is the National Agency for Drug and Food Control (BPOM), which has the authority to regulate product registration, licensing, inspection, and post-market surveillance. BPOM has established various regulatory mechanisms aimed at preventing the distribution of cosmetic products containing prohibited substances such as mercury, hydroquinone, and rhodamine B.

These regulations are designed to ensure that cosmetic products circulating in the Indonesian market meet safety, quality, and efficacy standards before reaching consumers. The implementation of cosmetic supervision also reflects the broader objectives of consumer legal protection as mandated in Indonesian consumer protection law. Previous research indicates that regulatory agencies play an important role in reducing public exposure to unsafe cosmetic products through market surveillance activities and law enforcement (Anisa & Ramli, 2022). In practice, BPOM routinely conducts inspections, laboratory testing, product withdrawals, and public announcements regarding illegal cosmetic products found in the market. However, the effectiveness of regulatory oversight still faces various limitations due to the rapid growth of online cosmetic transactions and the increasing complexity of distribution

networks. The emergence of e-commerce platforms has significantly expanded the circulation of unlicensed cosmetic products that can easily bypass conventional market surveillance mechanisms. According to Dutta et al. (2021), the digital trading environment creates significant challenges for regulatory agencies because illegal products can be distributed anonymously through various online platforms within a short period.

Limited institutional coordination between regulatory agencies, law enforcement officials, and digital marketplace providers often weakens the overall effectiveness of the cosmetic control system. The level of business actor compliance also remains relatively low, particularly among small-scale cosmetic manufacturers seeking economic gains through the use of prohibited ingredients. Low public awareness regarding the importance of BPOM certification also contributes to the high consumption of unsafe cosmetic products by consumers. Research conducted by Abbas et al. (2020) affirms that effective cosmetic regulation requires not only stringent legal instruments but also preventive public education and integrated institutional cooperation to reduce the circulation of hazardous cosmetic products. Strengthening the regulatory role of government and oversight agencies is a crucial step in enhancing consumer protection and minimizing the circulation of hazardous cosmetic products in Indonesia.

The increasing circulation of hazardous cosmetic products in Indonesia indicates that the implementation of regulations and law enforcement mechanisms still faces considerable challenges in practice. Although the government has established various legal instruments to regulate cosmetic safety and consumer protection, the enforcement process remains inconsistent and is often ineffective in preventing violations committed by irresponsible business actors. One of the main challenges is the widespread misuse of prohibited substances such as mercury, hydroquinone, and rhodamine B in cosmetic formulations aimed at providing instant whitening effects for consumers. These illegal practices are generally driven by economic motivation, intense market competition, and high public demand for beauty products with quick results. In many cases, producers and distributors deliberately disregard safety standards to reduce production costs and maximize commercial profits.

The rapid growth of online commerce has further complicated regulatory oversight because cosmetic products can now be distributed anonymously through digital marketplaces without undergoing adequate safety verification procedures. According to Almeman (2024), the development of digital commerce has significantly increased the circulation of counterfeit and unregulated consumer products through online distribution channels. This condition weakens the capacity of regulatory authorities to monitor the legality, composition, and safety of cosmetic products circulating in the market. Furthermore, law enforcement officials often face difficulties in tracing the distribution chain of illegal cosmetics because distributors frequently operate through informal networks and temporary online accounts. The limited number of supervisory personnel and laboratory facilities also poses obstacles to

improving the effectiveness of product inspections and post-market surveillance activities. Previous research indicates that weak regulatory coordination and suboptimal institutional oversight significantly contribute to the continued distribution of unsafe cosmetics in developing countries (Ali & Yousaf, 2023). The sanctions imposed on violators are also often considered insufficient to create a deterrent effect against future violations. Many business actors continue to operate illegal cosmetic distribution because the economic benefits obtained are perceived as greater than the legal risks faced.

Consumer behavior further amplifies regulatory challenges, as some members of society prioritize low prices and instant cosmetic results over product safety and legal certification. Low public awareness regarding the dangers of hazardous cosmetic ingredients further increases consumer vulnerability to misleading product advertisements and unsafe beauty trends. Technological developments and the extensive influence of social media marketing also accelerate the spread of cosmetic products without adequate regulatory oversight. Research conducted by Roman and Rusu (2022) affirms that effective law enforcement in consumer product regulation requires an integrated surveillance system, stronger institutional cooperation, and sustained public education initiatives. Therefore, addressing cosmetic regulatory and law enforcement challenges in Indonesia requires comprehensive legal reform, strengthened monitoring mechanisms, and more intensive collaborative approaches between government institutions, digital platforms, and the community to reinforce consumer legal protection.

Although various regulations governing cosmetic safety and consumer protection exist in Indonesia, there remains a considerable gap in the integration between regulatory policies, consumer protection mechanisms, and law enforcement practices related to hazardous cosmetic products. Previous research has largely focused on the dermatological effects of hazardous cosmetic ingredients, consumer purchasing behavior, or technical aspects of cosmetic product supervision. Limited academic attention has been given to examining the relationship between consumer legal protection, regulatory effectiveness, and law enforcement challenges in the cosmetic industry in Indonesia. Existing literature often discusses cosmetic safety from medical and public health perspectives but still lacks analysis regarding the broader implications for consumer rights and legal accountability. Furthermore, many previous studies tend to analyze cosmetic regulations separately from the institutional and technological challenges arising from the development of digital commerce. This fragmented analytical approach has created a research gap regarding a comprehensive understanding of legal protection against the misuse of hazardous substances in cosmetic products.

The rapid development of online marketplaces has significantly changed cosmetic distribution patterns by enabling unlicensed products to circulate more easily without adequate regulatory oversight. Consumers are increasingly exposed to persuasive digital marketing strategies that highlight instant cosmetic results but often ignore product safety standards and legal certification requirements. According

to Tran and Trang (2023), the rapid growth of digital commerce and online marketing has increased the circulation of unregulated consumer products and complicated regulatory oversight in developing countries. Previous research indicates that weak institutional coordination and inadequate law enforcement mechanisms remain major obstacles to the implementation of effective consumer protection (Nashwan et al., 2021).

Regulatory agencies often face operational limitations in monitoring cosmetic circulation on rapidly growing online trading platforms. The increasing complexity of cosmetic distribution networks requires more integrated legal and regulatory analysis that combines consumer protection perspectives with technological and institutional considerations. Previous studies have also not sufficiently explored how Indonesian consumer protection law can adapt to the evolving dynamics of cosmetic commercialization in the digital era. This study seeks to fill this research gap through a comprehensive literature review on consumer legal protection against hazardous cosmetic products by critically analyzing regulatory and law enforcement challenges in Indonesia. This study also aims to contribute to the development of legal discourse and policy recommendations regarding cosmetic safety governance and the protection of consumer rights. Through this literature review-based approach, the research is expected to provide a broader conceptual understanding of the effectiveness of the current legal framework in addressing the circulation of hazardous cosmetic products in Indonesia.

This study was conducted to analyze consumer legal protection against the misuse of hazardous substances in cosmetic products and to examine the regulatory and law enforcement challenges related to cosmetic supervision in Indonesia. The increasing circulation of illegal cosmetic products containing hazardous chemical substances has raised serious concerns regarding consumer safety, public health, and the effectiveness of the current legal framework. Although the Indonesian government has implemented various regulations regarding cosmetic safety and consumer rights protection, hazardous cosmetic products continue to circulate widely through both conventional markets and digital marketplaces. This condition indicates that existing regulatory mechanisms and law enforcement practices have not yet been fully capable of addressing the complexity of cosmetic distribution in the contemporary digital era. Therefore, this study seeks to provide a broader understanding of how legal protection mechanisms function in protecting consumers from unsafe cosmetic products.

This study aims to identify the institutional, technological, and operational challenges faced by regulatory authorities in controlling the misuse of prohibited substances in cosmetic products. Previous research indicates that consumer vulnerability in the cosmetic sector is strongly influenced by weak regulatory oversight, misleading product advertisements, and low public awareness of cosmetic safety standards (Bakırcı & Akın, 2021). The development of e-commerce platforms and social media marketing has further amplified these challenges by accelerating the distribution of unlicensed cosmetic products to various regions without effective

monitoring systems. Research conducted by Ariawan (2025) affirms that consumer protection in the cosmetic industry requires an integrated legal approach through preventive supervision, institutional coordination, and stronger law enforcement mechanisms to reduce public exposure to hazardous products. This study also aims to critically evaluate the effectiveness of consumer protection policies in Indonesia in responding to technological developments and the evolving structure of the cosmetic market.

Through a literature review approach, this study seeks to synthesize findings from various previous academic studies, official regulations, and policy reports to build a comprehensive analysis of cosmetic governance and consumer legal protection. This study is expected to contribute theoretically to the development of legal and regulatory discourse regarding consumer protection in developing countries. The results are also expected to provide policy recommendations for improving the cosmetic monitoring system, strengthening the effectiveness of law enforcement, and increasing public awareness of the dangers of hazardous cosmetic ingredients. This study is also intended to support future academic research on consumer rights, digital trade regulation, and public health governance in the cosmetic industry. The urgency of this study lies in its effort to integrate legal, regulatory, technological, and consumer protection perspectives into a comprehensive analysis of the circulation of hazardous cosmetic products in Indonesia.

B. METHOD

This study employs a qualitative research design with a literature review approach to examine consumer legal protection against the misuse of hazardous substances in cosmetic products and to analyze regulatory and law enforcement challenges in Indonesia. The literature review method was chosen because it enables a comprehensive exploration of prior academic discussions, legal frameworks, and institutional perspectives related to cosmetic regulation and consumer protection (Kraus et al., 2022, Subagyo et al., 2024). This study focuses on the collection, evaluation, and synthesis of secondary data derived from scientific publications, legal documents, government regulations, institutional reports, and scientific research related to cosmetic safety and hazardous substances (Anisa and Ramli, 2022). This study emphasizes the identification of conceptual patterns, legal issues, regulatory weaknesses, and law enforcement barriers in the cosmetic industry in Indonesia.

Data sources were obtained from various academic databases and official institutional publications that address consumer rights, cosmetic governance, public health protection, and law enforcement practices. The literature selection process prioritized scientific publications with strong academic relevance and a clear contribution to the discussion on cosmetic regulation and consumer safety. In addition, official regulations and policy documents related to cosmetic supervision were also analyzed to strengthen the legal analysis in this study (Afandi, 2022). This study also includes publications that discuss the impact of digital trade and online

marketplaces on the distribution of cosmetic products. The collected literature was then systematically categorized based on themes related to consumer legal protection, hazardous cosmetic substances, regulatory supervision, and institutional enforcement mechanisms (Kraus et al., 2022).

The analysis process was conducted by identifying similarities, differences, and recurring findings in previous research on cosmetic safety governance. This study explores how technological advancements and digital commercialization affect the effectiveness of regulations in controlling cosmetic distribution. The literature review approach enables the study to critically evaluate the existing legal framework and identify limitations in the current consumer protection system. This study also analyzes how institutional coordination and law enforcement capacity affect the implementation of cosmetic regulations in Indonesia. The qualitative analysis is focused on understanding the relationship between legal norms, policy implementation, and practical challenges faced by regulatory authorities. Through thematic interpretation, this study identifies various key issues that contribute to the continued circulation of hazardous cosmetic products in the Indonesian market. This study also examines how consumer behavior, public awareness, and economic motivations affect the effectiveness of the cosmetic supervision system.

The literature review process was conducted systematically to ensure consistency, depth of analysis, and conceptual clarity throughout the study. The findings obtained from the selected literature were critically interpreted to build a comprehensive understanding of consumer protection challenges in the cosmetic sector. This method also allows the study to evaluate broader legal and regulatory trends affecting cosmetic governance in developing countries. The qualitative literature review approach is considered appropriate for generating an integrated analysis of consumer legal protection, hazardous cosmetic products, and regulatory.

C. RESULTS AND DISCUSSION

1. **The Existing Consumer Protection Legal Framework in Indonesia Has Not Been Fully Effective in Preventing the Circulation of Cosmetic Products Containing Hazardous Substances**

This study finds that the consumer protection legal framework in Indonesia has not been fully effective in preventing the circulation of cosmetic products containing hazardous substances in the market. Although the government has established various legal regulations related to cosmetic safety and consumer rights protection, many illegal cosmetic products still circulate widely through both conventional and digital distribution channels. This study identifies that regulatory implementation often fails to adapt to the rapid transformation in cosmetic commercialisation and online marketing practices. Regulatory agencies still experience difficulties in supervising cosmetic products marketed through social media platforms, e-commerce applications, and informal digital networks. This study also reveals that many cosmetic business actors deliberately exploit weaknesses in the oversight system to distribute products containing prohibited chemical substances. In

many cases, manufacturers prioritise commercial profits and market competitiveness over consumer safety and legal compliance. This study further shows that consumers remain highly vulnerable to misleading advertisements promoting instant beauty effects without transparent information regarding product composition and health risks.

Many consumers continue to purchase cosmetic products without verifying legal certification or product registration status issued by regulatory authorities. This study also finds that public understanding of hazardous cosmetic ingredients remains relatively limited, particularly among consumers attracted to low-priced beauty products. Furthermore, regulatory oversight is often more focused on reactive law enforcement actions rather than preventive supervision systems capable of reducing product circulation before reaching consumers. This study identifies that institutional limitations, including a lack of supervisory personnel and limited monitoring resources, further weaken the effectiveness of cosmetic control mechanisms.

Coordination among government agencies responsible for cosmetic supervision is also often inefficient, thereby reducing the overall effectiveness of consumer protection policies. This study also shows that the current legal framework still emphasises formal regulatory compliance and has not fully been able to address the technological challenges arising from digital cosmetic transactions. The prevailing law enforcement mechanisms often fail to create a strong deterrent effect against cosmetic producers and distributors involved in illegal practices. This study concludes that the consumer protection legal framework in Indonesia currently still faces various significant structural and operational weaknesses in protecting consumers from hazardous cosmetic products.

2. Misuse of Hazardous Substances in Cosmetic Products Continues to Increase Due to Weak Regulatory Oversight and High Market Demand for Instant Beauty Products

This study finds that the misuse of hazardous substances in cosmetic products continues to increase due to weak regulatory oversight and high market demand driving the circulation of unsafe beauty products in Indonesia. Many cosmetic manufacturers deliberately use prohibited substances such as mercury, hydroquinone, and other hazardous chemical compounds to produce quick whitening effects that attract consumers seeking instant beauty results. Business actors often prioritise financial profits and market expansion over legal compliance and the obligation to maintain consumer safety. This study reveals that high consumer demand for cosmetic products that deliver fast results at affordable prices has created conditions that support the continued production and distribution of hazardous cosmetics.

Many consumers tend to focus on visible cosmetic outcomes without carefully evaluating product safety standards or verifying legal certification. This study also shows that aggressive cosmetic marketing strategies often influence consumers to purchase products based on promotional claims rather than scientifically verified

safety information. Social media platforms and online marketplaces significantly accelerate the spread of cosmetic products containing hazardous substances because digital transactions allow distributors to operate with minimal oversight. This study identifies that many illegal cosmetic distributors continuously create new online accounts and distribution channels to evade regulatory monitoring and law enforcement actions. Weak oversight systems further enable hazardous cosmetic products to circulate in various regions without undergoing adequate safety inspection processes. This study also finds that low public awareness regarding the long-term health risks of using hazardous cosmetic ingredients contributes to the persistence of unsafe consumption behaviour.

Many consumers still do not understand the harmful effects of prohibited substances that can cause serious skin disorders, organ damage, and chronic health complications. This study shows that some cosmetic manufacturers deliberately manipulate product labels and packaging to create an impression of legality and product safety. Regulatory agencies still face operational difficulties in identifying and controlling cosmetic distribution networks that change very rapidly in digital marketplaces. This study further reveals that law enforcement mechanisms often fail to respond quickly to the emergence of new cosmetic products marketed through online platforms. Existing sanctions have also not always been able to deter business actors from repeating illegal cosmetic production and distribution practices. This study concludes that weak oversight systems accompanied by high consumer demand for instant beauty products have significantly contributed to the increasing misuse of hazardous substances in cosmetic products in Indonesia.

3. The Rapid Development of Digital Trade and Online Marketplaces Has Complicated the Supervision and Control of Illegal Cosmetic Distribution in Indonesia

This study finds that the rapid development of digital trade and online marketplaces has significantly complicated the supervision and control of illegal cosmetic distribution in Indonesia. Technological developments have transformed cosmetic marketing patterns and purchasing behaviour by enabling consumers to access various beauty products through digital platforms with minimal regulatory barriers. Online marketplaces allow cosmetic distributors to promote and distribute products quickly across various regions without direct physical oversight from regulatory authorities. This study reveals that many illegal cosmetic products containing hazardous substances circulate through social media platforms, e-commerce applications, and informal digital communities. Digital commerce has created a highly dynamic distribution environment that changes more rapidly than the capacity of existing regulatory oversight systems. Many cosmetic sellers operate anonymously through temporary accounts and continuously change their distribution strategies to avoid detection by regulatory agencies. This study also identifies that online transactions often limit consumers' ability to verify product authenticity, ingredient composition, and legal certification status before making a

purchase.

Consumers often rely on promotional content, influencer endorsements, and visual product testimonials rather than scientifically verified safety information. This study shows that persuasive digital advertising strategies significantly influence consumer purchasing decisions and increase public exposure to cosmetic products without distribution permits. In many cases, cosmetic sellers deliberately provide incomplete or misleading product information to attract consumers seeking instant beauty results. This study further reveals that regulatory agencies face considerable operational difficulties in tracking digital cosmetic transactions because online product distribution occurs simultaneously across multiple platforms. Limited technological infrastructure and supervisory resources further weaken the authorities' capacity to conduct comprehensive digital monitoring.

Cross-regional and cross-border online transactions increasingly complicate law enforcement efforts against illegal cosmetic distributors operating in digital marketplaces. This study also finds that the rapid emergence of new cosmetic brands and online sellers often exceeds the capacity of regulatory agencies to conduct timely product verification and safety inspections. The current legal framework still faces challenges in adapting to the evolving structure of electronic commerce and digital marketing practices. This study concludes that digital trade has fundamentally transformed cosmetic distribution patterns while simultaneously increasing regulatory complexity and consumer vulnerability to hazardous cosmetic products in Indonesia.

4. Law Enforcement Against Producers and Distributors of Hazardous Cosmetic Products Remains Hindered by Institutional, Operational, and Regulatory Limitations

This study finds that law enforcement against producers and distributors of hazardous cosmetic products in Indonesia still faces various institutional, operational, and regulatory limitations. Regulatory authorities still experience difficulties in conducting investigations and supervisory activities effectively because illegal cosmetic distribution networks often operate through informal channels and change rapidly. Many cosmetic distributors deliberately avoid regulatory oversight by utilising anonymous online accounts, temporary business identities, and decentralised marketing systems. This study reveals that limited institutional coordination among regulatory agencies, law enforcement officials, and digital marketplace providers weakens the overall effectiveness of law enforcement mechanisms. Various institutions often work with overlapping responsibilities and inconsistent enforcement procedures, thereby reducing the efficiency of regulatory responses to illegal cosmetic circulation. This study also identifies that regulatory agencies often lack the personnel, laboratory facilities, and technological infrastructure necessary for comprehensive cosmetic inspection activities. These limitations reduce the authorities' capacity to conduct periodic product testing and post-market surveillance in the constantly evolving cosmetic market.

This study further shows that sanctions imposed on violators often fail to create a strong deterrent effect because some business actors still consider illegal cosmetic distribution as a financially profitable activity despite legal risks. Many law enforcement actions focus more on product confiscation and administrative sanctions rather than comprehensive criminal proceedings against producers and distributors. This study also finds that lengthy bureaucratic procedures often slow down the law enforcement process and reduce the effectiveness of rapid intervention against hazardous cosmetic products newly circulating in the market. Technological developments and the expansion of digital trade continue to create new law enforcement challenges that the current legal framework has not yet been fully able to address.

Regulatory agencies often experience difficulties in monitoring cross-border cosmetic transactions conducted through international marketplaces and social media platforms. This study identifies that weak public reporting systems and low consumer participation further reduce the effectiveness of law enforcement activities against illegal cosmetic circulation. Many consumers remain reluctant to report hazardous cosmetic products due to low legal awareness and lack of understanding regarding consumer rights protection mechanisms. This study also shows that preventive law enforcement strategies have not yet been optimally developed compared to reactive approaches that are only undertaken after hazardous products have widely circulated in the community. The current regulatory system still emphasises formal legal compliance and has not fully integrated adaptive technology monitoring mechanisms and digital supervision. This study concludes that institutional weaknesses, operational limitations, and regulatory adaptation challenges continue to hinder the effectiveness of law enforcement against hazardous cosmetic products in Indonesia.

5. Strengthening Consumer Legal Protection Requires Integrated Regulatory Reform, Stronger Institutional Coordination, Public Education, and Adaptive Oversight Mechanisms in the Digital Era

This study finds that strengthening consumer legal protection against hazardous cosmetic products in Indonesia requires integrated regulatory reform, stronger institutional coordination, comprehensive public education, and adaptive oversight mechanisms capable of responding effectively to digital market developments. The current regulatory framework still faces various limitations in addressing changes in cosmetic distribution structures and rapidly evolving online trading activities. This study shows that effective consumer protection cannot rely solely on formal legal regulation because technological transformation continues to create new challenges in cosmetic supervision and law enforcement. Regulatory agencies need to develop more adaptive monitoring systems to be able to supervise the circulation of cosmetics on digital platforms, social media networks, and electronic marketplaces in real time. This study also reveals that stronger coordination among government agencies, law enforcement officials, public health authorities, and digital marketplace providers plays an important role in improving the effectiveness of

cosmetic supervision. Integrated institutional cooperation can strengthen information exchange, accelerate law enforcement responses, and enhance preventive supervisory activities against illegal cosmetic distribution.

This study further identifies that public education significantly influences the level of consumer awareness regarding cosmetic safety and legal certification standards. Many consumers still purchase hazardous cosmetic products because they have limited understanding of prohibited ingredients, health risks, and consumer protection rights. Educational campaigns focused on cosmetic safety awareness can reduce consumer vulnerability to misleading advertisements and unsafe beauty trends. This study also finds that preventive supervision strategies need to receive greater attention in consumer protection policies in order to reduce the circulation of hazardous products before they enter the market. Regulatory authorities need to strengthen digital supervision systems and improve technological infrastructure to be able to monitor online cosmetic transactions more effectively.

This study shows that legal reform must also be able to address the characteristics of electronic commerce and evolving digital marketing practices in the cosmetic industry. The existing legal framework requires greater flexibility and technological adaptation to respond to anonymous digital transactions and rapidly changing online distribution patterns. This study also affirms that stronger sanctions and more consistent law enforcement mechanisms can enhance the deterrent effect against producers and distributors involved in illegal cosmetic activities. Consumer participation and public reporting mechanisms also play an important role in supporting regulatory supervision and identifying hazardous cosmetic products circulating in the community. This study concludes that sustainable consumer legal protection requires collaboration among regulatory agencies, business actors, digital platforms, and consumers to create a safer and more responsible cosmetic market environment in Indonesia.

The findings of this study indicate that the consumer protection legal framework in Indonesia is still not effective in controlling the circulation of cosmetic products containing hazardous ingredients, particularly in the rapidly growing digital market. This finding is consistent with previous research which affirms that developing countries often experience regulatory weaknesses in cosmetic safety oversight because institutional capacity is frequently unable to keep pace with industrial and technological developments. Research conducted by Akram et al. (2023) shows that ineffective regulatory enforcement and weak monitoring mechanisms contribute significantly to the continued circulation of unsafe cosmetic products in the consumer market. This study also finds that cosmetic manufacturers and distributors continue to exploit regulatory loopholes to distribute products containing prohibited ingredients despite formal legal restrictions. The findings of this study support the argument put forward by Bamidele et al. (2023), who explain that hazardous cosmetic products remain widely available because regulatory agencies in many developing countries face operational limitations in product monitoring and market surveillance activities.

This study extends that perspective by demonstrating that regulatory authorities in Indonesia face additional challenges related to online cosmetic distribution and anonymous digital transactions. The findings of this study are also consistent with research conducted by Ariawan (2025), which affirms that consumer protection frameworks in the digital era require more adaptive legal mechanisms to respond to the evolving structure of online trade. This study identifies that the current legal framework in Indonesia still emphasizes a conventional oversight approach, while digital cosmetic transactions increasingly dominate market activity. This study finds that low public awareness regarding cosmetic safety standards further reduces the effectiveness of legal protection mechanisms, particularly among consumers influenced by persuasive online advertising strategies. Previous research also argues that inadequate consumer education often weakens the practical implementation of consumer protection policies because consumers are unable to critically evaluate product safety information. The analysis of this study indicates that the ineffectiveness of the consumer protection framework in Indonesia is not only caused by regulatory limitations but is also influenced by technological transformation, institutional weaknesses, and low public awareness of the dangers of hazardous cosmetic products.

The findings of this study reveal that weak regulatory oversight and high market demand for instant beauty products have significantly contributed to the increasing misuse of hazardous ingredients in cosmetic products in Indonesia. This finding supports previous research stating that consumer preference for quick cosmetic results often drives manufacturers to use prohibited chemicals despite the associated health risks. Research conducted by Edwards et al. (2023) shows that skin lightening practices remain very common in developing countries because consumers often associate lighter skin color with social appeal and economic advantage. This study also finds that cosmetic manufacturers deliberately exploit these consumer perceptions by promoting products containing hazardous ingredients that can provide instant whitening effects. The findings of this study are consistent with research by Yayehrad et al. (2023), which explains that weak product oversight and suboptimal market monitoring create conditions that support the widespread circulation of unsafe cosmetic products in a highly competitive beauty industry. This study further identifies that digital marketing strategies and promotion through social media amplify consumer exposure to hazardous cosmetic products by emphasizing cosmetic effectiveness over product safety aspects. The analysis of this study also aligns with the argument put forward by Pan et al. (2021), who state that the cosmetic industry operating in a weak regulatory environment tends to prioritize profitability and market expansion over consumer health protection. This study extends previous findings by showing that many cosmetic distributors actively manipulate labels and promotional content to create misleading perceptions regarding product safety and legality. This study finds that low public understanding of hazardous cosmetic ingredients increases consumer vulnerability to misleading marketing practices. Previous research also affirms that limited consumer awareness reduces the

effectiveness of cosmetic safety regulations because consumers often fail to evaluate product composition and certification status before purchasing cosmetic products. The analysis of this study indicates that the increasing misuse of hazardous ingredients in cosmetic products is the result of an interaction between high consumer demand, profit-oriented business practices, weak regulatory oversight, and low public awareness regarding cosmetic safety standards in Indonesia.

The findings of this study indicate that the rapid development of digital trade and online marketplaces has significantly complicated the monitoring and control of illegal cosmetic distribution in Indonesia. This finding is consistent with previous research which affirms that electronic commerce has transformed traditional product distribution systems and created new regulatory challenges for consumer protection authorities. Research conducted by Tesfamariam et al. (2023) explains that online trading platforms often facilitate the circulation of cosmetic products containing hazardous ingredients because digital transactions reduce direct regulatory oversight and increase anonymous product distribution. This study also finds that illegal cosmetic distributors actively utilize social media platforms, online marketplaces, and temporary digital accounts to avoid regulatory detection and expand their market access. Furthermore, the findings of this study are consistent with research by Roman dan Rusu (2022), who argue that digital marketing strategies significantly influence consumer purchasing behavior by encouraging impulsive cosmetic consumption through persuasive visual promotions and influencer endorsements.

This study extends that perspective by showing that many consumers in Indonesia prioritize cosmetic trends and instant beauty results over product safety verification and legality certification. The analysis of this study also supports the argument put forward by Almeman (2024), who affirms that regulatory agencies often face substantial technological and operational difficulties in overseeing rapidly evolving digital trade activities. This study further identifies that the current regulatory framework in Indonesia remains heavily reliant on conventional oversight approaches that are less effective in controlling digital cosmetic transactions. The findings of this study reveal that cross-regional and cross-border online distribution systems increase the complexity of law enforcement because cosmetic products can circulate very quickly across various jurisdictions without effective monitoring mechanisms. Previous research also notes that digital trade weakens traditional regulatory boundaries and complicates institutional coordination among consumer protection authorities. The analysis of this study indicates that the expansion of online marketplaces and digital commercialization has fundamentally transformed cosmetic distribution patterns while simultaneously increasing consumer vulnerability and reducing the effectiveness of conventional cosmetic surveillance systems in Indonesia.

The findings of this study indicate that law enforcement against manufacturers and distributors of hazardous cosmetic products in Indonesia remains ineffective because institutional, operational, and regulatory limitations continue to undermine existing enforcement mechanisms. This finding is consistent with previous research which affirms that developing countries often face difficulties in implementing

consistent law enforcement systems against illegal cosmetic distribution. Research conducted by Bamidele et al. (2023) shows that hazardous cosmetic products continue to circulate widely because regulatory agencies often lack adequate resources, technological infrastructure, and monitoring capacity to conduct comprehensive market inspections.

This study also finds that regulatory authorities in Indonesia face operational challenges in tracking illegal cosmetic distribution networks operating through anonymous digital platforms and informal trade channels. The findings of this study support research by Arora & Amin (2024), which explains that weak institutional oversight and ineffective regulatory implementation significantly contribute to the widespread use and distribution of hazardous skin lightening products in developing countries. This study further identifies that overlapping responsibilities among institutions and inconsistent law enforcement procedures often slow legal responses against hazardous cosmetic distributors. The analysis of this study also aligns with the argument put forward by Gavigan et al. (2021), who state that regulatory sanctions often fail to create a strong deterrent effect when law enforcement agencies focus more on administrative sanctions rather than comprehensive criminal proceedings.

This study extends previous findings by showing that many cosmetic business actors continue to engage in illegal distribution practices because they perceive economic profits to outweigh the legal risks they face. This study reveals that law enforcement authorities remain heavily reliant on reactive supervisory approaches, taking action only after hazardous products have already circulated widely in the community. Previous research also affirms that preventive law enforcement strategies and adaptive technology monitoring systems have yet to develop optimally in many cosmetic regulatory environments. The analysis of this study indicates that institutional fragmentation, limited law enforcement capacity, inadequate sanctions, and weak technological adaptation collectively reduce the effectiveness of law enforcement mechanisms against hazardous cosmetic products in Indonesia.

D. CONCLUSION

This study concludes that consumer legal protection against the misuse of hazardous substances in cosmetic products in Indonesia still faces various significant legal, regulatory, and institutional challenges. This study shows that the circulation of cosmetic products containing harmful chemical substances continues to occur extensively despite the existence of various consumer protection laws and cosmetic safety regulations. This study finds that weak regulatory oversight enables many illegal cosmetic products to enter the market through conventional distribution systems as well as digital trading platforms.

This study also reveals that many cosmetic manufacturers and distributors deliberately prioritize commercial profits over consumer safety by using prohibited substances that can produce rapid cosmetic effects. This study identifies that the high consumer demand for instant beauty products contributes significantly to the continued circulation of hazardous cosmetics in the Indonesian market. Many

consumers still purchase cosmetic products without adequately verifying legal certification, ingredient composition, or product safety standards. The findings of this study further indicate that marketing through social media and online marketplaces accelerates the distribution of illegal cosmetic products because digital trade enables the formation of anonymous and rapidly changing distribution networks. This study also shows that regulatory authorities still face operational limitations in monitoring the circulation of cosmetics in the digital environment. Limited institutional coordination among oversight agencies further reduces the effectiveness of cosmetic regulations and law enforcement mechanisms.

This study finds that the current law enforcement system still relies more on reactive approaches rather than preventive oversight capable of reducing the circulation of products before they reach consumers. This study also identifies that sanctions imposed on violators often fail to create a strong deterrent effect against repeated illegal cosmetic distribution practices. Many business actors still consider the distribution of hazardous cosmetics as an economically profitable activity despite the legal risks. The findings of this study also reveal that public awareness regarding the dangers of prohibited cosmetic substances remains relatively low. Many consumers remain vulnerable to misleading advertisements that promote instant cosmetic benefits without transparent safety information.

This study further indicates that technological development continues to create new regulatory challenges that the current legal framework has not yet been fully able to address. The existing cosmetic monitoring system still heavily relies on conventional surveillance approaches that are less effective in the rapidly evolving digital trading environment. This study emphasizes the importance of strengthening an adaptive regulatory system capable of responding to technological transformation and the expansion of electronic commerce. This study also highlights the need for stronger collaboration between regulatory agencies, law enforcement officials, digital marketplace providers, public health authorities, and consumers. Comprehensive public education programs regarding cosmetic safety and consumer rights can significantly increase public awareness and reduce exposure to hazardous products. This study concludes that effective consumer legal protection in Indonesia requires integrated legal reform, strengthened institutional oversight, adaptive technology-based monitoring systems, and sustained public participation to create a safer and more responsible cosmetic industry environment.

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