

Challenges and Opportunities in the Halal Pharmaceutical Industry in Malaysia

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Abstract: Following the global significance of halal pharmaceutical products, Malaysia has positioned itself as a key manufacturer to increase industrial demand. This study examines Malaysia's halal pharmaceutical industry by internalizing consumer preferences for halal pharmaceuticals and the associated complexities. The data derived from literature reviews were subjected to documentation analysis. Consumer preference was substantially influenced by religious beliefs, product quality, and health concerns. Halal certification, cross-contamination concerns, and regulatory compliance were the key issues underlying halal pharmaceutical products. Overall, this empirical work expanded the current literature with pivotal insights into the future developments of halal pharmaceuticals in Malaysia. Industry players, policymakers, and stakeholders can utilize such knowledge to develop strategies that enhance the halal pharmaceutical industry and meet Muslim consumers' preferences.

Keywords: *Halal pharmaceuticals, Malaysia, consumer preferences, future directions.*

1. Introduction

The recent demand for halal-certified products among the global Muslim population has increased the number of halal pharmaceutical products in Malaysia (Norazmi & Li Sze, 2015; Yvonne, Ab Ghani, A. Navamukundan, Jahis, & Gamil, 2019). In other words, the demand for halal pharmaceuticals is evident worldwide (Hussein, 2016), specifically among Muslim consumers. Compared to its previous valuation of US\$94 billion in 2019, the halal pharmaceutical industry worldwide could reach US\$105 billion by 2024 (MIDA, 2021). Javeed, Mohamed Mokhtar, & Lebai (2018) and Ab Latiff, Zakaria, & Man (2021) explained that Muslim consumers gravitate towards Shariah-compliant products with specific dietary requirements and religious beliefs. Having transcended its religious role, the halal concept is currently a standard preferred by both Muslims and non-Muslims (Ambali & Bakar, 2014; Hiong Lim, Suddin, Rahat, & Abdul Adis, 2016; Haque, Kabir, Tarofder, Yasmi, & Mhm, 2019). In this regard, Malaysia has domestically and globally expanded the halal pharmaceutical industry (Muhamad Suhaini, 2022; Abdul-Talib & Abd-Razak, 2013; Whitehead, 2021). Consumer preferences for halal pharmaceutical products, associated challenges, and the future direction of the halal pharmaceutical industry in Malaysia were examined in this study. The elicited results expanded the current body of literature on the halal pharmaceuticals industry in Malaysia and facilitated stakeholders, policymakers, and industry players to make informed decisions.

2. Methodology

This qualitative work comprehensively analyzed current publications (including journals and other pertinent periodicals) on the halal pharmaceutical industry to internalize consumers' selection of halal pharmaceutical products, associated issues, and future developments in Malaysia. These articles were analyzed to extract information, determine key themes, and derive key outcomes. This analysis was built on the foundation laid by past scholars and added to the current body of literature.

3. Consumer Preferences for Halal Pharmaceutical Products

Halal pharmaceutical product selection is influenced by various factors. For example, religious beliefs significantly impacted consumer preferences in choosing halal pharmaceutical products. Those abiding by Islamic dietary restrictions prefer products that (i) fulfil halal requirements (Awan, Siddiquei, & Haider, 2015; Tatiek & Hendar, 2020; Vanany, Mei Soon, Maryani, & Wibawa, 2020) and (ii) use Shariah-compliant ingredients and (iii) manufacturing, processing, and labelling practices (Norazmi & Li Sze, 2015). It is vital for Muslim consumers seeking halal pharmaceutical products to fulfil these prerequisites. Following the significance of religious beliefs in the decision-making process, consumers who ensure that the manufacturing procedures comply with halal standards, the ingredients used are permissible, and the product labelling corresponds to

halal status can use halal pharmaceutical products that meet their religious obligations (Saha, Rifat, & Shimanto, 2019; Norazmi & Li Sze, 2015). Halal-conscious consumers actively authenticate a product's halal certification pre-purchase to meet religious beliefs and health requirements.

Quality and safety are also considered during halal pharmaceutical product selection. Consumers are aware of the need to practice rigorous quality standards when selecting products to sustain their health and well-being. Halal certification assures consumers of product safety and efficacy (Rahim, 2017; Maison, Marchlewska, Dewi Syarifah, Zein, & Purba, 2018). For example, halal-certified pharmaceuticals implement stringent quality control measures in the manufacturing process (prohibiting pork- or alcohol-based ingredients) to ensure optimal quality standards (Mukhtar & Butt, 2012). Consumers who acknowledge this certification as an embodiment of quality and safety develop a high level of trust in these pharmaceuticals (Ab Talib, Md Sawari, Abdul Hamid, & Ai Chin, 2016; Atieqoh, Waseso, & Hamidi, 2023). Only a carefully examined pharmaceutical product that meets certain prerequisites is awarded halal certification. Thus, consumers prioritize halal-certified products over non-certified ones. This preference ensures their Shariah compliance while also maintaining their health and safety. Consumers can trust in these products' quality and effectiveness, which reflect their choices and values.

People who prioritize well-being actively seek products that reflect their health standards and religious beliefs (Saha, Rifat, & Shimanto, 2019). As such, consumers' emphasis on health and wellness has substantially influenced their preference for halal pharmaceutical products (Vizano, et al., 2020). Much emphasis is placed on a product's Shariah compliance in addition to its efficacy (Suryani & Ahkman, 2020). Thus, Shariah-compliant pharmaceutical products with health benefits have garnered much popularity among halal-conscious consumers (Kasri, Ahsan, Widiatmoko, & Hati, 2023). Commonly regarded as solutions that holistically address physical and spiritual well-being, these products are perceived to fulfil health objectives while adhering to religious tenets (Abdalla, 2019; N.A. Vizano, et al., 2020). Consumers' preference for halal pharmaceutical products stems from their obligation to Islamic tenets. Overall, consumers are reassured of and satisfied with halal pharmaceutical products that fulfil health and religious requirements (Hehanussa, 2022). Such standards allow consumers to prioritize their health and well-being while making decisions that parallel individual beliefs and values.

4. Challenges in Halal Pharmaceutical

Distinctive attributes of the halal pharmaceutical industry render it challenging to ensure its adherence to halal standards. These conundrums adversely affect halal pharmaceutical product elements, such as the manufacturing process, certification procedures, and consumers' product perceptions. Notably, the authentication of pharmaceutical ingredients is a key concern. Pharmaceutical formulations include a diverse range of active and inactive components, some of which may originate from animal sources. Thus, pharmaceuticals that label their products as halal must perform extensive documentation and compliance monitoring to ensure that all ingredients and manufacturing procedures comply with the necessary standards (Norazmi & Li Sze, 2015). Deemed a meticulous and time-consuming process, the sourcing and manufacturing of each ingredient must be extensively examined and verified to ensure its halal standards (Zehra & Naqvi, 2017).

Pharmaceutical products' halal integrity is hampered by cross-contamination. For example, manufacturing facilities that produce both halal and non-halal products pose cross-contamination risks. The development of unique halal pharmaceutical products proves complex following the need to identify halal alternatives for ingredients sourced from non-halal origins or those containing potentially non-halal additives. Consequently, holistic studies, resource allocation to create and apply advanced technologies, and collaboration with halal science experts must be seriously considered (Mohezar, Zailani, & Zainuddin, 2016). Stringent measures involving distinct production lines, dedicated equipment, and strict cleaning protocols should also be implemented throughout the manufacturing process to lower contamination risks. Such precautions can prevent unintentional contamination and uphold the end products' halal integrity (Noronha, 2020).

Certification requirements and the interpretation of halal requirements also hamper halal pharmaceuticals (Mahidin, Othman, & Mohd Saifudin, 2016; Jaswir, 2019). The tedious and time-consuming process of obtaining

halal certification for pharmaceutical products and the presence of diverse certifying bodies or authorities with distinct halal compliance criteria are challenging due to strict requirements (E Azam & Abdullah, 2021). Such variations can lead to discrepancies in halal labelling standards, specifically for globally marketed pharmaceutical products. Standard guidelines must be developed via harmonization and standardization to ensure consistent and reliable halal certification across different regions and regulatory frameworks (Annabi & Ibadapo-Obe, 2017).

Halal labelling for pharmaceutical products must meet regulatory compliance under the purview of the Department of Islamic Development Malaysia (JAKIM). This regulatory body is responsible for halal certifications in Malaysia. As such, local pharmaceuticals must follow JAKIM regulations to obtain halal certification. Despite being complex and time-consuming, it is vital to comply with specific nations' halal regulations and certification requirements by understanding and fulfilling the diverse regulatory frameworks and documentation requirements of different jurisdictions (Eun Kyeong, Hee-Yul, & Dong-Hwan, 2020).

Future Directions of Halal Pharmaceutical Products in Malaysia: Halal pharmaceutical products in Malaysia must exercise focus and strategic planning in several key areas. First, the regulatory framework underpinning halal pharmaceuticals must be constantly upgraded. Holistic and globally recognized halal standards must also be developed in line with the pharmaceutical industry (Mohd Fauzi, Ab Rahman, Wan Hassin, & Shah Shahara, 2020). These measures require regulatory bodies, industry stakeholders, and Islamic scholars to collectively ensure halal pharmaceutical product compliance and integrity and improve consumer confidence and trust (Baker, Bayirli, & Zakzouk, 2020). For example, stakeholders can address relevant challenges, leverage resources, and optimize the industry. Halal pharmaceutical products' compliance and integrity can be enhanced with high halal standards.

Second, halal pharmaceutical products' growth and advancement depend on significant research and development (R&D) investments (Muhamad Zain, Nor Muhamad, Che Yaacob, & Sayed Ahmad, 2017). Novel halal options, procedures, and technologies can improve production quality and efficiency via ongoing research and innovation (Zehra & Naqvi, 2017). Government bodies that offer financial assistance, tax exemptions, and additional incentives to enterprises that allocate resources for R&D are key to leveraging the halal pharmaceutical sector. Research centers and universities focusing on halal pharmaceutical research can also be established. Meanwhile, the industry and academia can exchange resources and expertise to develop unique halal products. Both governments and pharmaceutical companies can expand and develop the halal pharmaceutical industry via R&D investments.

Third, Malaysia can broaden the market scope and examine export prospects by functioning as a global hub for halal pharmaceutical products (Mazlan & Hamzah, 2015). Relevant government bodies can establish mutual recognition agreements on halal pharmaceutical product certification with other countries to export halal pharmaceuticals. These products can be promoted at global halal conferences and exhibitions to widen the customer base. Overall, Malaysia can provide new employment opportunities and strengthen the national economy by establishing itself as a global halal pharmaceutical industry.

5. Conclusion and Suggestions

Key stakeholders must collaborate to attain future goals in the halal pharmaceutical industry. In ensuring global recognition tailored to the pharmaceutical sector, regulatory bodies should continuously refine halal standards. Certifying authorities must perform harmonization to minimize discrepancies in halal labelling standards for globally distributed products. Strong support from research institutions is key to driving pharmaceutical innovations and advancements. Consumer advocacy groups also play a pivotal role in increasing awareness and educating consumers, who can be empowered to make informed choices. The essentiality of religious compliance, quality, and safety must also be emphasized. Guided by shared objectives, this collective effort can optimize the local industry while positioning Malaysia as a global leader in halal pharmaceuticals. Collaborative governance, innovative research, and the commitment to meet different consumer preferences in halal pharmaceutical products are key to positioning Malaysia as a global industry player. Such strategic measures increase industry growth, resilience, and worldwide recognition.

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References

- Abdul-Talib, A. N. & Abd-Razak, I. S. (2013). Cultivating export market-oriented behavior in halal marketing: Addressing the issues and challenges in going global. *Journal of Islamic Marketing*, 4(2), 187-197.
- Ab Latiff, J., Zakaria, Z. & Man, S. (2021). The challenges in the implementation of halal vaccine certification in Malaysia. *Journal of Food and Pharmaceutical Sciences*, 9(1), 366-371.
- Ab Talib, M., Md Sawari, S., Abdul Hamid, A. & Ai Chin, T. (2016). Emerging Halal Food Market: An Institutional Theory of Halal Certificate Implementation. *Management Research Review*, 39(9), 987-997.
- Abdalla, M. (2019). Effect of halal awareness, halal logo and attitude on foreign consumers' purchase intention. *British Food Journal*, 121(9), 1998-2015.
- Abdul Aziz, N., Sulaiman, S., Roslan, M. & Ku Yusof, K. (2021). Is The Covid-19 Vaccine Halal? Revisiting The Role of National Pharmaceutical Regulatory Agency (NPRA) and. *Malaysian Journal of Social Sciences and Humanities*, 6(10), 413-428.
- Ambali, A. & Bakar, A. (2014). People's awareness on halal foods and products: potential issues for policymakers. *Procedia-Social and Behavioral Sciences*, 121, 3-25.
- Annabi, C. A. & Ibadapo-Obe, O. (2017). Halal certification organizations in the United Kingdom: an exploration of halal cosmetic certification. *Journal of Islamic Marketing*, 8(1), 107-126.
- Atieqoh, S., Waseso, H. P. & Hamidi, A. (2022). Halal Certificate and Public Trust Local Food and Beverage Business Development. 3rd International Conference on Halal Development (p. 74). Springer Nature.
- Awan, H., Siddiquei, A. & Haider, Z. (2015). Factors affecting Halal purchase intention—evidence from Pakistan's Halal food sector. *Management Research Review*, 38(6), 640-660.
- Bakar, A., Richard, L. & Rungie, C. (2013). The effects of religious symbols in product packaging on Muslim consumer responses. *Australasian Marketing Journal*, 21(3), 198-204.
- Baker, A., Bayirli, M. & Zakzouk, F. (2020). Awareness towards Halal pharmaceuticals: an analysis of pharmacists' views. *International Journal of Islamic Marketing and Branding*, 5(1), 43-57.
- Cochrane, P. (29 September, 2016). How attractive is Malaysia's halal pharmaceutical sector? Retrieved from Salaam Gateway: <https://www.salaamgateway.com/story/overview-how-attractive-is-malaysias-halal-pharmaceutical-sector>
- E Azam, M. & Abdullah, M. (2021). Halal Standards Globally: A Comparative Study of Unities and Diversities Among the Most Popular Halal Standards Globally. *Halalpsphere*, 1(1), 11-31.
- Eun Kyeong, Y., Hee-Yul, L. & Dong-Hwan, K. (2020). Is halal certification necessary for exporting to Islamic countries? Focus on OIC countries. *Cultura*, 17(1), 173-192.
- Haque, A., Kabir, S., Tarofder, A., Yasmi, F. & Mhm, N. (2019). Pharmaceutical Marketing Ethics in Healthcare Quality for Patient Satisfaction: An Islamic Approach. *International Journal of Pharmaceutical Research*, 11(1), 1688-1697.
- Hehanussa, U. (2022). Analysis of Non-Halal Drug Use in the Perspective of Maqashid Syariah. *Jurnal Ilmiah Ekonomi Islam*, 8(1), 437-443.
- Herdiana, Y. & Rusdiana, T. (2022). Indonesian Halal Pharmaceutical: Challenges And Market Opportunities. *Indonesian Journal of Pharmaceutics*, 3(3), 99-115.
- Hiong Lim, Y., Suddin, L., Rahat, U. & Abdul Adis, A. A. (2016). Non-Muslim customers' purchase intention on halal food products in Malaysia. *Culinary Science & Hospitality Research*, 2(1), 108-116.
- Hussein, E. (2016). Halal industry: Key challenges and opportunities. Retrieved from Researchgate: https://www.researchgate.net/publication/295351450_Halal_Industry_Key_Challenges_and_Opportunities
- Jaswir, I. (2 November, 2019). Opinion: Harmonizing Halal Standards. Halal Focus: Halal & Ethical Business News Updates & Analysis. Retrieved from HalalFocus: <https://halalfocus.net/opinion-harmonizing-halal-standards/>

- Javeed, A., Mohamed Mokhtar, S. B. & Lebai, O. B. (2018). Conceptualizing the relation between halal logo, perceived product quality and the role of consumer knowledge. *Journal of Islamic Marketing*, 9(4), 727-746.
- Kasri, R. A., Ahsan, A., Widiatmoko, D. & Hati, S. H. (2023). Intention to consume halal pharmaceutical products: evidence from Indonesia. *Journal of Islamic Marketing*, 14(3), 735-756.
- Mahidin, N., Othman, S. & Mohd Saifudin, A. (2016). Halal logistics issues among the food industry companies: A preliminary study. *Journal of Global Business and Social Entrepreneurship*, 2(1), 34-40.
- Maison, D., Marchlewska, M., Dewi Syarifah, Zein, R. & Purba, H. (2018). Explicit versus implicit "halal" information: Influence of the halal label and the country-of-origin information on product perceptions in Indonesia. *Frontiers in Psychology*, 9, 382.
- Mazlan, A. & Hamzah, H. (2015). Malaysian halal export market: a case study on developing countries. Malaysian National Economic Conference (pp. 99-107). Melaka: Persidangan Kebangsaan Ekonomi Malaysia .
- MIDA. (9 September, 2021). Halal pharmaceuticals market set to grow to US\$105 bln by 2024 – Azmin. Retrieved from Malaysian Investment Development Authority (MIDA): <https://www.mida.gov.my/mida-news/halal-pharmaceuticals-market-set-to-grow-to-us105-bln-by-2024>
- Mohd Fauzi, N., Ab Rahman, M., Wan Hassin, W. & Shah Shahara, W. (2020). Halal economic: Challenges and emerging opportunities in Malaysia. *Journal of Islamic Philanthropy & Social Finance*, 1(1), 29-37.
- Muhamad Suhaini, N. (11 May, 2022). Malaysia's halal pharmaceutical industry continues stellar growth. Retrieved from Salaam Gateway: <https://salaamgateway.com/story/malaysias-halal-pharmaceutical-industry-continues-stellar-growth>
- Muhamad Zain, N., Nor Muhamad, N., Che Yaacob, A. & Sayed Ahmad, S. (2017). 2017). Halal science curriculum and research: development among Organisation of Islamic Cooperation (OIC) countries. *International Journal of Asian Social Science*, 7(9), 718-727.
- Mukhtar, A. & Butt, M. (2012). Intention to choose Halal products: the role of religiosity. *Journal of Islamic Marketing*, 3(2), 108-120.
- Norazmi, M. & Li Sze, L. (2015). Halal pharmaceutical industry: opportunities and challenges. *Trends in pharmacological sciences*, 36(8), 496-497.
- Noronha, M. (22 October, 2020). Halal for health: Scaling up halal pharmaceuticals. The Economist. Retrieved from Economist Impact: <https://impact.economist.com/perspectives/health/halal-health-scaling-halal-pharmaceuticals>
- Pin, J. & Marta, A. (2020). Conceptual models of food choice: influential factors related to foods, individual differences, and society. *Foods*, 9(12), 1898.
- Rahim, N. (2017). Consumer behavior, perception and planning towards halal marketing. *Advances in Islamic Finance, Marketing, and Management: An Asian Perspective*, 271-307.
- Rejeb, A. (2018). Halal meat supply chain traceability based on HACCP, blockchain and Internet of things. *Acta Technica Jaurinensis*, 11(4), 218-247.
- Saha, T., Rifat, T. & Shimanto, S. (2019). Prospects of Halal Pharmaceuticals. *Asian Journal of Ethnopharmacology and Medicinal Foods*, 5(2), 17-23.
- Salama. (3 March, 2023). Opinion: A glimpse into the global halal industry 2023. Retrieved from HalalFocus: <https://halalfocus.net/opinion-a-glimpse-into-the-global-halal-industry-2023/>
- Suryani, S. & Ahkman, W. (2020). Purchase behavior analysis of halal medicines among Muslim consumers. The 6th International Conference on E-Business and Applications (pp. 28-32). Association for Computing Machinery.
- Tatiek, N. & Hendar, H. (2020). Personal intrinsic religiosity and product knowledge on halal product purchase intention: Role of halal product awareness. *Journal of Islamic Marketing*, 11(3), 603-620.
- Vanany, I., Mei Soon, J., Maryani, A. & Wibawa, B. (2020). Determinants of halal-food consumption in Indonesia. *Journal of Islamic Marketing*, 11(2), 507-521.
- Vizano, N. A., Fitriah, A., Nuryansah, M., Muqtada, M., Farhan, G. & Puwerto, A. (2020). Halal medicine purchase intention among Southeast Asian consumers. *European Journal of Molecular & Clinical Medicine*, 7(7), 58-77.
- Whitehead, R. (21 March, 2021). Malaysia to boost halal pharma as exports plunge and investment into dedicated hubs rise only slightly in 2020. Retrieved from Salaam Gateway: <https://salaamgateway.com/story/malaysia-to-boost-halal-pharma-as-exports-plunge-and-investment-into-dedicated-hubs-rise-only-slight>

- Yvonne, K. S., A. A., A. A., N. & A. G. (2019). Unique Product Quality Considerations In Vaccine Development, Registration and New Program Implementation In Malaysia. *Human Vaccines & Immunotherapeutics*, 3(16), 530-538.
- Zehra, F. & Naqvi, A. (2017). The Global Halal Pharmaceutical Market: Strengths, Challenges, and Prospects. *Archives of Pharmacy Practice*, 8(3), 85-87.