

The importance of drug symbols and halal logos in the pharmaceutical industry: Effect, understanding, and implementation



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ABSTRACT

With its predominantly Muslim population, Indonesia has significant potential in pharmaceuticals and herbal products, making it a focal point for government initiatives to drive growth in the sector. Despite these efforts, compliance with halal standards and obtaining halal certificates still face many challenges. This research examines the efforts to fulfill halal certification obligations by implementing halal standards in pharmaceutical and herbal products. This research uses a descriptive qualitative study; the data was collected through observational reviews and interviews and supplemented with a comprehensive literature study, which includes various sources such as journals, books, online media, and other additional references. This study reveals that setting standards or halal certification involves three parties, namely the Halal Product Assurance Organizing Agency (BPJPH), the Halal Examining Agency (LPH), and the Indonesian Council of Ulama (MUI). BPJPH implements the halal product guarantee. Then BPJPH will submit it to Lembaga Pengkajian Pangan, Obat-obatan dan Kosmetika (LPPOM) as LPH to check the adequacy of documents, compile audits, conduct audits, hold auditor meetings, issue audit memoranda, and submit audit result records to the MUI Halal Fatwa Session. Together with the Fatwa Committee, MUI determines the level of halalness of the product based on the audit results and issues a MUI Halal Decree.

Keywords: Herbs, Halal Industry, Halal Certificate, Medicines

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INTRODUCTION

The halal industry has experienced significant progress in various sectors, including the drug and herbal industry. The halal pharmaceutical industry is defined as a pharmaceutical sector that consistently ensures that every stage of production, marketing, distribution, storage, supply chain, and development complies with the provisions of halal product assurance by the principles of Islamic law. The development of the drug and herbal industry that carries the halal principle is believed to continue along with the increase in production using ingredients that meet halal standards. Halal products now emphasize their functionality, while in the new concept of halal medicine, there is an attempt to combine the dimension of spiritual healing with the certainty of the halalness of such medicines. The importance of the halal industry lies not only in the product name or label but includes many aspects and reviews so that the product can be recognized as genuinely halal by the values of Islamic law (Hudaefi et al., 2021).

The State of Global Islamic Economic 2023 report reveals that Indonesia's halal medicine industry is currently ranked third in the world based on the pharmaceutical sector indicator score. This ranking increased from the previous year compared to countries such as Singapore, the Netherlands, Belgium, France, Egypt, Turkey, and the United Arab Emirates (Dinar Standard, 2023). However, in medicine, Indonesia still has delays in halal certification. This can be seen in the slow process of halal certification in the drug industry, mainly since most of the raw materials for drugs are imported, reaching 95% from abroad, including from countries such as China, India, America, and Europe.

Nonetheless, the Ministry of Health (MOH) remains optimistic by setting a target to reduce the proportion of imported raw materials to 70%.

In its evolution, the Indonesian government, the Indonesian Ulema Council (MUI), and several other institutions have issued relevant regulations, including Law No. 33 of 2014 concerning Halal Product Guarantee and the halal assurance system (HAS) 23000 as a standard or regulation for medicinal and herbal products that are certified halal by sharia principles (Adilah & Kumalasari, 2023). This regulation covers all stages of drug production, from the initial process to the final stage. Halal certificates for medicines aim to safeguard the benefits of Muslims by referring to the concept of maqashid sharia, which includes the maintenance of religion, reason, knowledge, family, and property (Hudaefi et al., 2021). Therefore, drug companies operating in the halal industry are expected to comply with all established regulations to ensure that the production process is based on the concept of halal in the pharmaceutical industry.

However, the industry still faces various challenges and issues during its development. Solutions to overcome these problems must be sought together by the government and stakeholders, with the aim that this industry can continue to develop by the principles of the halal pharmaceutical industry (Utami & Nurkhasanah, 2021). Research exploring halal standards on drugs and herbs in Indonesia is still limited (Alfath, 2023; Hudaefi et al., 2021; Iranmanesh et al., 2019; Nawi et al., 2023; Santosa et al., 2022). Their studies said the legal sanctions enforced through the current Halal Product Guarantee (JPH) regulations are only administrative, so they do not provide adequate legal certainty. This results in less-than-optimal compliance with halal standards in drug production. Although the law has stipulated this as a mandate, the sustainability of halal assurance in medicine tends to be worrying compared to food products. This fact is compared to public awareness, consumers, and producers of food products, which is relatively better (Shuhaimi et al., 2022).

Problems related to halal medicines involve several aspects, such as the use of non-halal raw materials such as animal gelatin, production processes that may involve additives or methods that are not by halal principles, lack of clear information related to halalness on drug labels, animal testing that raises ethical questions, limited alternative medicines that meet halal standards, lack of clear regulations, and consumer awareness levels that may not be adequate (Aziz et al., 2020). Overcoming these issues requires raising consumer awareness, developing clear regulations, innovating raw materials and production processes, and transparent labeling on medicine packaging. Effective solutions must consider local and global contexts and involve cooperation between industry, regulatory authorities, and the community (Hidayati et al., 2020).

Based on these problems, this study aims to analyze how implementing halal standards for medicinal and herbal products is a concrete step in fulfilling halal certification obligations in Indonesia.

RESEARCH METHOD

This study employs the descriptive qualitative research methodology, where the term "qualitative" underscores a focus on processes and meanings that are not exclusively examined or quantified in terms of quantity, number, intensity, or frequency. In a broader sense, techniques for collecting qualitative data involve interviews and surveys. On the other hand, descriptive research is characterized by an effort to depict a symptom or current event. It centers on the security awareness of real issues during the research period (Wheelen et al., 2015).

Data material used in evaluating the implementation of the halal assurance system on medicinal products is primary and secondary data; primary data is taken by observation, direct work practice, interviews, and documentation methods. The secondary data used in this study uses articles, previous journals, websites, and related books. This descriptive qualitative method is used to determine what and how phenomena occur between research variables by collecting data from literature studies (Sugiono, 2022).

RESULT AND DISCUSSION

Urgency of Halal Medicinal Products and Industry

The structure of the pharmaceutical industry in Indonesia is not considered optimal because almost 90% of the raw materials used in the pharmaceutical industry are imported. Based on data from

the Indonesian Ministry of Health in 2017, around 90% of the raw materials for the pharmaceutical industry in Indonesia come from imports. Even said by the Director General of Pharmaceutical Development and Medical Devices, Ministry of Health, the pharmaceutical raw materials with the most significant imports are currently from China, around 60%, the rest from India, around 25%, and 5% from Europe and America. Countries that export to Indonesia are predominantly non-Muslim countries, which can be considered less concerned about the halal status of drugs (Hudaefi et al., 2021).

The Muslim world's expenditure on medicines increased by 2.3%, from USD 92 billion in 2018 to USD 93 billion in 2019. Then, due to the COVID-19 issue or pandemic that resulted in a crisis, Muslim spending decreased by 6.9% in 2020 to USD 87 billion. However, the recovery of the problem in 2019 is expected to increase in 2021. It is estimated that Muslim consumer spending on pharmaceuticals will increase at a Compound Annual Growth Rate (CAGR) of 2.3% from 2019 onwards, which 2024 will reach USD 105 billion (Dinar Standard, 2020).

Currently, Indonesia has 206 companies engaged in the pharmaceutical industry. According to data owned by the Indonesian Ulema Council's Food, Drug and Cosmetic Assessment Institute (LPPOM MUI), only about 25.7% percent of all pharmaceutical companies in Indonesia have halal certificates for their products, meaning that there are only 53 companies that have undergone the halal certification process as of October 2019. Meanwhile, as of March 2021, the number of halal-certified drugs (drugs and vaccines) was 2,586, of which 19,483 were recorded at BPOM. This means that the opportunity for halal certification in the pharmaceutical and herbal medicine industry in Indonesia is still vast (LPPOM MUI, 2022b)

LPPOM MUI explained that with the issuance of derivative regulations of the JPH law, namely Government Regulation No.39 of 2021, there was a decline in 2020. From 1,891 medicinal products in 2019, it decreased in 2020 to 830 medicinal products. Article 141 (1) of the Government Regulation stipulates that halal certification obligations for drugs are carried out in stages until a maximum period of 2034. Thus, the extended transition period hinders the decline in halal certification of pharmaceutical products (LPPOM MUI, 2022a).

LPPOM MUI has made provisions for groups and types of products for the halal certification process. There is a Group of Medicines and Vaccines and a Group of Herbs and Traditional Medicines (Herbs). Drugs are a combination of substances or materials, including biological products, used to influence or study physiological systems or pathological conditions for diagnosis, prevention, treatment, rehabilitation, health promotion, and human contraception based on Government Regulation of the Republic of Indonesia Number 39 of 2021 Concerning the Implementation of the Halal Product Assurance Sector.

Table 1 presents the medicines and vaccines group and the Herbal Medicine and Traditional Medicine group by product type.

Table 1. Medical and Herbal Medicine Group

No	Medicines and Vaccines	No	Herbal
1	Internal Medicine	1	Brewed Herbal
2	External Medicine	2	Herbal Decoction
3	Injection Medicine	3	Herbal in form Medicine (Capsule, Caplet, Tablet, Liquid, etc.)
4	Infusion Medicine	4	Herbal for External Use
5	Vaccine	5	Herbal Medicine
6	Medicine Ingredients	6	Herbal Drink
		7	Phytomedicine

Herbal medicines are natural substances, processed or unprocessed, used for health purposes, and can be of plant, animal, or mineral origin. Herbs in FHI include simplisia and processed ingredients. Simplisia is a natural material that has been dried and is not processed. Drying can be done by drying in the sun, wind, or using an oven, and it is also stated that the drying temperature using an oven should not exceed 60°C (Kemenkes RI, 2017).

The results of the research interviews found that related to herbal medicines, most of them have pure and natural halal essential ingredients such as honey, olives, and so on, as said by the respondents:

"The primary raw materials for these herbal medicines are natural and halal ingredients. In our business's development, all the herbal medicines sold have halal certification and permission from BPOM. So, this herbal medicine product is guaranteed to be halal because it is produced with pure natural ingredients without elements of unclean or haram ingredients". ^{ADR}.

Based on this explanation, we know that using essential ingredients in drug stores has halal criteria and is far from haram and unclean elements. This is also in line with increasing halal awareness in society. As well as to ensure the existence of halal products, especially for medicines.

Likewise, based on the results of research on medical drugs in pharmacies, the researchers found:

"The halal labeling effort on medical drugs is indeed a mechanism that has not been fully implemented properly. This is because 90% of the ingredients are imported from outside and formulated domestically in chemical and pharmaceutical drugs. However, legally, some of these pharmaceutical factories have also included halal labeling on their medicinal products. For example, DEXA, Kalbe, and several other manufacturers have displayed halal labeling on their drugs. Although medically, there are still many medicines that are not halal certified because, in the health sector, the most dominant important element is the permission of the Health Office and BPOM; maybe in the future, the development of these medicines will also lead to halal standardization". ^{KDP}.

Based on this explanation, we know that the development of halal industries in pharmaceuticals still needs to be improved. However, pharmaceutical developments will likely remain the same over time. In implementation, many pharmaceutical and medical drug products are still not indicated by halal certification. The most essential thing in the medical world is to pass the laboratory and get a permit certificate from BPOM and MUI. Table 2 shows the examples of medicines researchers can get from observations indicating halal.

Table 2. Samples of various types of medicines

No	Herbs	Type	Category	No	Medical	Type	Category
1	Cardiona	Formulation	Halal	1	Acpulsif	Hard	Halal
2	Purina	Formulation	Halal	2	Acarbose Dexa	Hard	Halal
3	Turmanic	Single	Halal	3	Paracetamol Kaplet 500 mg	Free	Halal
4	Angkak Al-Afiat	Single	Halal	4	Pimacolin Syrup Flu & Batuk	Limited Free	Halal
5	VCO (Virgin Coconut Oil)	Single	Halal	5	Bodrex	Limited Free	Halal
6	Gamat Emas	Single	Halal	6	Tramadol	Hard	Nothing
7	Ikan Gabus	Single	Halal	7	Amitriptyline	Hard	Nothing
8	Zaitun Oil	Thibbun Nabawi	Halal	8	Chlorpromazine	Hard	Nothing
9	An-Najma	Thibbun Nabawi	Halal	9	Inpepsa Sirup Obat Maag	Hard	Nothing
10	Progona	Thibbun Nabawi	Halal	10	Boost D 1000 IU	Free	Nothing

Based on the table above, we know that the development of herbal medicines has achieved halal certification. Whereas in medical drugs, only a few have received halal certification. This is also because, in medical drugs, drug manufacturers do not necessarily register all medicinal products with the relevant institutions for halal certification.

According to research (Alfath, 2023), the market share of halal medicines in Indonesia is said to be high, especially since the Coronavirus, which has caused the pharmaceutical industry to become one of the market shares of halal medicines in Indonesia is very high, especially after the emergence of the Coronavirus pandemic, the pharmaceutical industry has surprised Indonesia's economic growth in the second quarter of 2020. However, overall, it is one of the economic sectors that can record positive

growth. This growth can be seen in several pharmaceutical companies that recorded revenue growth in the first semester of 2020. The Indonesian economy recorded a shock or negative growth of 5.32% annually, and economic growth in the first semester of 2020 decreased by 1.62% compared to the same period last year.

On the one hand, we must also pay attention to the use of drugs based on existing symbols because drugs include biological products used to affect or investigate physiological systems or pathological conditions to establish diagnosis, prevention, cure, recovery, health promotion, and contraception for humans. The safe and effective use of medicines is imperative and needs to be conveyed to the general public (Kemenkes RI, 2022).

Identification the public as drug users should be familiar with the drugs in circulation through:

1. Tree symbol

Medicines with a green symbol and a tree picture are classified as medicines made from herbal or traditional plants, usually called herbal medicine. Usually, under the symbol is written the word '*jamu*'. Historically, herbal medicine, such as *Tolak Angin*, is still considered adequate for curing various diseases.

2. Three stars symbol

Medicines with three green stars are called standardized herbal medicines or OHT. However, OHT is different from herbal medicine. The difference lies in the processing process. This medicine with natural ingredients is processed using high technology and hygienically and has been tested for toxicity and chronicity. Before being produced, OHT has gone through pre-clinical research to determine its health standards. Examples of drugs that are classified as OHT are Kiranti, which is usually consumed by women when experiencing menstrual pain, and Diapet, which is usually consumed to cure diarrhea.

3. Green snowflakes

This symbol, which looks like a green snowflake, is called a phytopharmaca. Like OHT, phytopharmaca is also made from natural ingredients processed using high technology. However, this phytopharmaceutical is on par with modern medicines. The processing process is more complex than OHT. Phytopharmaceuticals are processed using a standardized process with scientific evidence that has been clinically tested on humans using scientific criteria, approved test protocols, competent implementation with ethical principles, and where the phytopharmaca processing process is carried out meets the requirements. Examples of phytopharmaca, such as Stimuno, a drug that improves the immune system and is very easy to obtain from pharmacies, are classified as phytopharmaca.

4. Green symbol with black circle

This medicine with a green symbol and a black circle is, of course, commonly found every day. This drug is classified as a drug that circulates freely. This means that this drug can be sold or bought without restrictions. However, there is no need to worry because the packaging for this medicine usually contains instructions for use and storage. An example of this drug is paracetamol, such as Panadol, Paramex, and so on.

5. The blue symbol has a black circle

Medicines with a blue symbol circled in black are limited over-the-counter medicines. To buy it without requiring a doctor's prescription. However, this drug is also classified as a hard drug because of its content. To use it, you need to be careful and pay attention to the instructions on the packaging. Examples of these limited over-the-counter medicines are medicines for influenza. Usually, influenza medication can cause drowsiness. Therefore, you must be careful when consuming it.

6. The letter 'K' symbol is in a red circle

Drugs with the symbol 'K' in a red circle on the packaging are classified as hard drugs and psychotropic drugs. To obtain it, you need a doctor's prescription. Usually, this medicine cannot be purchased freely. Examples of hard drugs are pain relievers such as mefenamic acid, spinal, neuralgia, and so on. You need to be careful when consuming it because it can worsen disease, poison the body, and even cause death. Well, this symbol is also used for psychotropic drugs. However, psychotropic drugs are not narcotics because they differ in nature and synthesis. Psychotropics can influence the central nervous system (SPP), so they can cause unique mental and behavioral changes in people who consume them. Apart from that, psychotropics can cause hallucinations, disturb the way of thinking, reduce pain and soreness, and cause dependence in the user.

7. Red Medal Cross Symbol

The drugs that are classified as the most dangerous are the narcotics group with symbols such as a red plus sign known as the 'Red Medal Cross' symbol. Narcotics are drugs that come from plants or not, whether synthetic or semi-synthetic. Narcotics can cause effects on people who consume them, such as reducing aches and pains, reducing or changing the level of consciousness and numbness, and causing dependency effects.

Halal Standards on Medicinal Products

1. Halal Certification in Some Countries

The global surge in the adoption of the halal lifestyle extends beyond countries with Muslim-majority populations to include those with Muslim minority populations (Hidayat & Siradj, 2015). Each nation has policies governing halal certification, with certification organizers from governmental or non-governmental institutions. For instance, Malaysia's approach involves government oversight, with halal certification managed by a government body directly accountable to the state. Having declared itself an Islamic country, Malaysia places significant emphasis on adhering to halal regulations and ensuring guarantees for all citizens (Karimah, 2018). Since 1965, the Selangor Islamic Religious Department (JAIS) has implemented halal certification in Malaysia. Subsequently, in 1974, government supervision of halal certification was established, with the responsibility falling under the jurisdiction of Jabatan Kemajuan Islam Malaysia, commonly known as JAKIM. The Halal Management Division of JAKIM, in collaboration with state Departments of Islamic Religion, is specifically tasked with overseeing all aspects of halal certification in Malaysia (Rosnan et al., 2015).

In contrast to Malaysia, where governmental bodies oversee halal certification, Thailand follows a different approach, with non-governmental organizations taking charge of this process. Despite being predominantly Buddhist, Thailand has effectively implemented halal certification, particularly in the realm of food. The responsibility for halal certification in Thailand lies with the Central Islamic Council of Thailand (CICOT), a national-level institution associated with the Thai Ulama Association. CICOT operates the Halal Standard Institute of Thailand, responsible for examining and endorsing Thai products. Furthermore, Thailand hosts a halal research center within Chulalongkorn University, The Halal Science Center in the Faculty of Applied Science. Remarkably, despite Thailand's non-Muslim majority, the government actively supports halal certification due to economic considerations. The government is enthusiastic about and endorses initiatives related to halal certification, driven by the desire to expand into the global market, mainly catering to the substantial Muslim population worldwide (Aminuddin, 2016).

The existence of a halal certification body is a way to ensure the halalness of products to be exported abroad, especially in countries with a majority Muslim population. Private certification bodies or those established by non-governmental institutions are sometimes not recognized by other countries, so they are rejected. Indonesia is starting to make efforts to transfer the certification agency initially carried out by a non-governmental institution, MUI, to a government agency under the Ministry of Religion, BPJPH.

2. Halal Certification in Indonesia

Setting standards or halal certification involves 3 parties: BPJPH, Halal Examining Agency (LPH), and MUI. BPJPH implements the Halal Product Guarantee. Then BPJPH will submit it to LPPOM as LPH to check the adequacy of documents, compile audits, conduct audits, hold auditor meetings, issue audit memoranda, and submit audit result records to the MUI Halal Fatwa Session. Together with the Fatwa Committee, MUI determines the level of halalness of the product based on the audit results and issues a MUI Halal Decree. The process of halal certification for medicine is shown in Figure 1.



Figure 1. The halal certification process for medicines (LPPOM MUI, 2022c).

Government Regulation of the Republic of Indonesia Number 39 of 2021 Concerning implementing the Halal Product Assurance Sector establishes the mandatory requirement for halal certification in Indonesia. This regulation encompasses various certified products: food, medicines, cosmetics, chemical, biological, genetically modified, consumer, and used goods. Halal certification is a documented fatwa affirming the halal status of a product, including its ingredients and production processes, in alignment with Sharia principles. It serves as a crucial mechanism to ensure that the consumption of halal-certified products safeguards the body from contamination by prohibited (haram) substances.

MUI-certified medicinal and herbal products must use ingredients that meet the standards. Before applying for halal certification, companies must implement a Halal Assurance System (HAS) by government regulations and HAS 23000, which comes from the MUI fatwa. In implementing SJH, it is appropriate for companies to know the SJH standards required in HAS 23000 (LPPOM MUI, 2021).

In pharmaceutical activities, what is considered is the *lizati* audit and *lighoiri* audit. The *lizati* audit is the substance in the pharmaceutical content. In herbs, as long as they do not get specific, unique treatments, they are still said to be halal. This process must be considered if you experience special treatment, such as extracting in manufacturing. For example, equipment, whether it is only used in halal production, is acceptable. However, if the equipment is mixed with substances or objects that are haram, then washing must be done to remove these substances. At the same time, the *lighoiri* audit is a process in pharmaceutical production.

If sourced from chemicals or inorganic materials, pharmaceutical manufacturing materials fall into the positive list category or materials that are halal and do not require a halal certificate. Meanwhile, organic chemicals can be included in the positive or negative lists. If it is a negative list, it must be proven by a halal certificate or safety data sheet or the production flow of the material. The auditor must be able to assess whether the item is contaminated, such as pork or alcohol (*khamr*). Then, if there are other substances, such as fat, it must be proven that they do not come from haram animals, which is prohibited. If it comes from halal animals, it must be traced back to whether it was slaughtered in a shar'i manner.

According to the MUI fatwa, several ingredients can only be used in medicines and herbal medicine, not in halal consumer products. These raw materials include the placenta of halal animals, fur (hair, horns from animal carcasses), snails, worms, blood plasma, embryonated chicken eggs, silkworm cocoons, and gold particles (Alfath, 2023).

The criteria for the halal industry in drugs and herbs are said to meet the standards if they contain several essential points, namely: 1) Materials and production processes by Islamic law; 2) The product is halal, not made from haram or unclean ingredients; 3) The product is not contaminated or mixed with haram or unclean materials; 4) During production, storage, transportation, distribution, and presentation are not contaminated and mixed with haram or unclean materials.

Implementation of Law Number 33 of 2014 concerning Halal Product Guarantees

Government Regulation of the Republic of Indonesia Number 39 of 2021 Concerning the Implementation of the Halal Product Assurance Sector is established as the basis for guaranteeing legal certainty regarding Halal product regulations, and JPH is also expected to guarantee the comfort, safety, and availability of halal products to the public and provide added value for product entrepreneurs. Halal in producing and selling.

Before the JPH Law came into effect in 2019, there needs to be synergy in the implementation and preparation for the implementation of JPH, which will be carried out by all parties, including the government and all its apparatus, entrepreneurs, and the community. The Halal Product Guarantee System (SJPH), previously the Halal Product Guarantee System (SJH), is the main requirement in the halal certification process for a product, including medicines and herbal medicine. The Halal Inspection Institute, the Institute for the Study of Food, Drugs and Cosmetics, and the Indonesian Ulema Council (LPPOM MUI, 2022a) are key players that launched this process 32 years ago.

SJPH is a structured and integrated management system developed, implemented, and maintained to manage materials, production processes, products, personnel, and procedures so that LPPOM MUI requirements can maintain the integration of halal production processes. One of the SJPH criteria is the company's obligation to appoint an internal company auditor tasked with monitoring the progress of the company's SJPH implementation or drug production and reporting to LPPOM MUI. During the inspection, LPPOM MUI also confirmed the implementation of SJPH. If the system's implementation does not work according to the established requirements, the pharmaceutical or herbal medicine company must immediately improve it to continue halal certification.

Obligations related to these procedures are requirements that pharmaceutical and herbal medicine companies must fulfill. Companies must also register procedures for selecting new materials, developing new products, or developing new facilities. Certificates will only be issued for procedures carried out by LPPOM MUI Halal auditors during inspections or audits if the procedures are available and there is an implementation guarantee.

LPPOM MUI also conducts inspections in the pharmaceutical and herbal medicine industry or in companies that will carry out service audits, namely audits (supervision) that independent certification bodies must carry out for ISO-certified institutions. When it is detected that there is a change in halal status, LPPOM MUI takes action. In monitoring the implementation of SJPH in companies, companies must report to LPPOM MUI every six months so that changes are known (LPPOM MUI, 2022c).

If supervision related to quality is BPOM's obligation, then supervision related to halal and haram belongs to BPJPH by involving LPPOM. Supervision by BPOM is carried out from pre-market to post-market. Pre-market supervision starts from purchasing raw materials, production supervision, supervision during the process, and supervision of marking. Post-market supervision is carried out by testing samples in the laboratory. Suppose it does not meet the terms and conditions of the pharmacopeia. For example, if 5 plants are listed in herbal medicine, are there 5 types of plants in the herbal medicine? It must be ensured that herbal medicines are not mixed with chemical drugs. For example, blood sugar medicine must be ensured that it is purely from plants and that there are no chemical mixtures.

The audit process carried out by LPPOM MUI involves checking the raw materials used in making medicines and aligning them with the list in the field. Then supervision also enters the realm of production facilities, such as the weighing room, mixing room, and liquid filling room. Document

review is no less important; these documents include the Halal Quality Manual, Raw Material and Finished Product Analysis Certificate, Related Procedures, Product Manufacturing Batch Book, Halal Policy, Internal and External Halal Training Book, Product Flow and Halal Material Certificate and Halal Positive List. Quality manual, water filter halal status, indoor outdoor halal training book, and material certificate. If all supervision and audit processes are by the assessment procedures, then LPPOM MUI will complete its halal certification (Faridah, 2019).

Issues Related to Halal Certification in the Pharmaceutical Industry

Before the Halal certification initiated by the Indonesian Ulema Council (MUI) in 1989, the labeling of Halal products in Indonesia began in late 1976 under the Ministry of Health. Specifically, on November 10, 1976, all foods and beverages containing pork or its derivatives were required to carry an identity indicating the presence of pork. This was regulated by the Minister of Health of the Republic of Indonesia Decree Number 280/Men.Kes/Per/XI/76 concerning the Circulation and Labeling of Foods Containing Pig-Derived Ingredients. Food producers using pork or its derivatives were mandated to include a warning sign on the packaging, whether printed or attached, with the warning consisting of two elements: a pig image and the words "CONTAINS PORK" in red, enclosed within a red square as depicted in Figure 2 (Faridah, 2019).



Figure 2. Product warning: Contains pork ingredients.

Issues in the Pharmaceutical Industry: Challenges and Considerations for Halal Certification. There are ongoing issues in the pharmaceutical industry related to the production and cultivation processes involving enzymatic processes derived from pig organs. A prominent example of this discussion is vaccines, suspected to contain pig-derived substances, posing a potential obstacle to obtaining Halal certification. Furthermore, in small-scale pharmaceutical industries, there is often a lack of awareness that their target market extends beyond non-Muslims, as Muslims also seek assurance regarding the halal status of pharmaceutical products (Alfath, 2023).

The pharmaceutical industry faces challenges in the Halal certification process because approximately 90-95 percent of drug raw materials are imported from China, Korea, India, and the United States. Obtaining Halal certification for these raw materials is difficult as they often need halal certificates from their country of origin. Consequently, the certification process for pharmaceutical products becomes lengthy, requiring thorough traceability of the origin of these raw materials (LPPOM MUI, 2023).

Information such as the product name, ingredients or formula used, and the manufacturing process is crucial for product development. Infrastructure is also a key consideration, ensuring that facilities for producing halal and non-halal products are separate throughout the production and distribution processes. Adequate facilities are necessary, which can pose a significant hurdle for small or developing companies.

Another issue in the halal pharmaceutical industry is the quality of products. A halal label on a product does not necessarily guarantee high quality. Emphasizing safety, quality, and efficacy may be crucial for ensuring the effectiveness of drugs and vaccines. Changing the formula or composition during manufacturing requires retesting, including stability testing, clinical performance, and validated processes. This presents a challenge for the halal pharmaceutical industry that requires thoughtful solutions for the benefit of all."

The Law on the Consumption of Forbidden Medications

Health is a fundamental principle in the Quran, closely related to other human needs. Thus, health is understood as broader and more profound, encompassing physical and spiritual well-being. A person of faith is obligated to maintain both physical and spiritual health. Islam views health not only as the absence of illness but also as the purity of the soul or spiritual cleanliness (Yusoff, 2011).

The use of medications containing impure or forbidden substances for treatment is generally considered prohibited in Islam. However, this prohibition is exempted under two conditions. Firstly, in cases of necessity or emergency, where not taking the medication could endanger human life. Secondly, in situations of extreme urgency equivalent to an emergency, where not taking the medication could threaten the existence of human life in the future. In Islam, prohibited medications include those containing impure substances and substances forbidden by Allah, such as alcohol, pork, and substances harmful to the body. Generally, these medications are available in the form of solutions (syrups, elixirs, drops), antibiotic syrups for children, and emulsions (both external and internal medications) (Yusoff, 2011).

One of the notable aspects of Islamic teachings is the perfection of its legal system in regulating all aspects of human life. Islam is a flexible religion that addresses contemporary societal issues in every situation and condition through scholars who play a role in building the nation and society.

The Quran states:

حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالدَّمُ وَلَحْمُ الْخِنْزِيرِ وَمَا أُهْلَ لِغَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِفَةُ وَالْمَوْفُوذَةُ وَالْمُتَرَدِّيَةُ وَالنَّطِيحَةُ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا ذَكَّيْتُمْ وَمَا ذُبِحَ عَلَى النُّصُبِ وَأَنْ تَسْتَقْسِمُوا بِالْأَزْلَامِ ذَلِكُمْ فَسُقُ الْيَوْمَ بِئْسَ الَّذِينَ كَفَرُوا مِنْ دِينِكُمْ فَلَا تُخْشَوْهُمْ وَاخْشَوْنِي الْيَوْمَ أَكْمَلْتُ لَكُمْ دِينَكُمْ وَأَتَمَمْتُ عَلَيْكُمْ نِعْمَتِي وَرَضِيْتُ لَكُمُ الْإِسْلَامَ دِينًا فَمَنْ اضْطُرَّ فِي مَخْمَصَةٍ غَيْرِ مُتَجَانِفٍ لِإِثْمٍ فَإِنَّ اللَّهَ غَفُورٌ رَحِيمٌ ٣

"Forbidden to you (for food) are carrion, blood, the flesh of swine, and that which has been dedicated to other than Allah, and [those animals] killed by strangling, or by a violent blow, or by a headlong fall, or by the goring of horns, and those from which a wild animal has eaten, except what you [can] slaughter [before its death], and those which are sacrificed on stone altars, and [prohibited is] that you seek decision through divining arrows. That is grave disobedience. This day, those who disbelieve have despaired of [defeating] your religion; so fear them not, but fear Me. This day, I have perfected your religion for you and completed my favor upon you. I have approved Islam as your religion. However, whoever is forced by severe hunger with no inclination to sin - Allah is Forgiving and Merciful." (Q.S, Al-Maidah: verse 3)

In the context of contemporary Islamic jurisprudence, many ijtihads (legal interpretations) have been conducted by scholars to elucidate the issues of halal and haram concerning substances, addressing uncertainties and questions regarding their legal status. Islam fundamentally prohibits the use of medicine derived from forbidden sources for treating asthma.

Medications have often been mixed with forbidden or impure substances, commonly derived from pig components such as fat, bone marrow, etc. Upon reevaluation of these produced products, they no longer retain the properties or elements of pig origin. Ingredients like gelatin, fat, and other components from pigs undergo various chemical processes, resulting in substances that no longer exhibit the impurity of pig elements visible to the naked eye. When mixed in medicines for preservation purposes, they have been combined with other predominant substances, and they no longer appear as impurities on the surface (Sonifuniam, 2008).

However, since this pertains to health, where medicine is used as part of treatment, Islam regulates medical practices as it is considered a part of protection and healthcare, falling under Al-Dharuriyat Al-Kham. A fatwa (Islamic legal opinion) from MUI (Indonesian et al.) Number 30 of 2013 regarding Medicine and Medical Treatment. In the legal provisions of this fatwa, the use of impure or forbidden substances in medicines is deemed prohibited. Still, the use of medicines containing impure or forbidden substances for treatment is prohibited unless it fulfills several conditions: a) Used in a state of necessity (al-dlarurat), meaning a situation where not using it could threaten human life, or an equivalent condition of urgency (alhajat allati *tanzilu manzilah aldlarurat*), where not using it could threaten the existence of human life in the future. b) No halal and pure substance has been found. c)

There is a recommendation from competent and reliable healthcare professionals that no halal medicine is available (Hudaefi et al., 2021).

It is important to note that non-halal medicine is temporary and conditional. Additionally, the prohibition of a product is conceptually categorized into three types, one of which is forbidden due to its essence (*haramli dzzatihi*), indicating its prohibition is directly determined by Islamic law (Qaradhawi, 1993). The concession or *rukhsah* in using forbidden medicine, as outlined by Yusuf Al-Qardhawi, must meet certain conditions, including a statement from a reliable Muslim doctor, both in terms of examination and faith (Muslim, n.d.).

CONCLUSION

In achieving the goal of increasing the halal medicine and herbal industry in Indonesia today, there must be cooperation or synergy from various parties, such as the government, institutions in charge of the halal management process in the industrial sector (LPPOM MUI, BPJPH, LPH, and MUI). All forms of efforts made for the drug industry in Indonesia can only run unilaterally. Then, the pharmaceutical industry also has obligations that must be fulfilled, such as separation of places, locations, manufacturing facilities, storage, packaging, distribution, and display of products that are not halal or haram. When halal certification, provide all information on ingredients, products, and processing correctly, clearly, and honestly. Moreover, report all ingredients and suppliers. Our current task, be it the government, academics, or stakeholders, is to echo the importance and obligation of halal products, where halal products are not only owned by Muslims but are universal. For example, Korea and Japan are currently competing to become halal centers for industry, which are not majority Muslim countries.

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REFERENCES

- Adilah, A. T., & Kumalasari, I. D. (2023). Evaluasi penerapan sistem jaminan halal berdasarkan kriteria standar HAS 23000 di UMKM Sakura Mochi. *Jurnal Agroindustri Halal*, 9(1), 22–32. <https://doi.org/10.30997/jah.v9i1.5528>
- Alfath, T. (2023). Standar halal dalam industri obat-obatan dan herbal. *LIKUID: Jurnal Ekonomi Industri Halal*, 3(1), 30–44. <https://doi.org/10.15575/likuid.v3i1.18494>
- Aminuddin, Muh. Z. (2016). Sertifikasi produk halal: Studi perbandingan Indonesia dan Thailand. *SHAHIH: Journal of Islamicate Multidisciplinary*, 1(1), 27–39. <https://doi.org/10.22515/shahih.v1i1.52>
- Aziz, A., Bakar, N. A., & Zakaria, Z. (2020). Unsafe ingredients included in Malaysian food drug interphase (FDI) products: Toyyiban perspective. *Malaysian Journal of Halal Research*, 3(2), 63–68. <https://doi.org/10.2478/mjhr-2020-0011>
- Dinar Standard. (2020). *State of the global islamic economy report 2020/2021*.
- Dinar Standard. (2023). *State of the global islamic economy report 2023/2024*.
- Faridah, H. D. (2019). Halal certification in Indonesia; history, development, and implementation. *Journal of Halal Product and Research*, 2(2), 68–78. <https://doi.org/10.20473/jhpr.vol.2-issue.2.68-78>
- Hidayat, A. S., & Siradj, M. (2015). Sertifikasi halal dan sertifikasi non halal pada produk pangan industri. *AHKAM: Jurnal Ilmu Syariah*, 15(2). <https://doi.org/10.15408/ajis.v15i2.2864>
- Hidayati, N., Sunaryo, H., Pradesa, H. A., & Slamet, A. R. (2020). Exploring perception of halal product among moslem consumer: A preliminary study. *International Journal of Academic Research in Business and Social Sciences*, 10(8). <https://doi.org/10.6007/IJARBS/v10-i8/7523>

- Hudaefi, D., Roestamy, M., & Adiwijaya, A. J. S. (2021). Legal certainty regarding halal certification of medicines associated with halal product guarantee. *Jurnal Ilmiah Living Law*, 13(2), 122–131.
- Iranmanesh, M., Mirzaei, M., Parvin Hosseini, S. M., & Zailani, S. (2019). Muslims' willingness to pay for certified halal food: an extension of the theory of planned behaviour. *Journal of Islamic Marketing*, 11(1), 14–30. <https://doi.org/10.1108/JIMA-03-2018-0049>
- Karimah, I. (2018). Perubahan kewenangan lembaga-lembaga yang berwenang dalam proses sertifikasi halal. *Journal of Islamic Law Studies*, 1(1), 107–131.
- Kementerian Kesehatan Republik Indonesia. (2017). *Farmakope Herbal Indonesia*. Kementerian Kesehatan Republik Indonesia.
- Kementerian Kesehatan Republik Indonesia. (2022). Informasi umum tentang penggunaan obat yang aman. *Kementerian Kesehatan Republik Indonesia*.
- LPPOM MUI. (2021). *Yuk, kenali kriteria sistem jaminan halal LPPOM MUI*. <https://Halalmui.Org/Yuk-Kenali-Kriteria-Sistem-Jaminan-Halal-Lppom-Mui/>.
- LPPOM MUI. (2022a). *Menenteramkan umat, dirut RSUI minta sertifikasi halal obat dipercepat*. <https://Halalmui.Org/Menenteramkan-Umat-Dirut-Rsui-Minta-Sertifikasi-Halal-Obat-Dipercepat/>.
- LPPOM MUI. (2022b). *Menjamin obat halal, Kemenkes dorong industri farmasi Indonesia produksi bahan baku sendiri*. <https://Halalmui.Org/Menjamin-Obat-Halal-Kemenkes-Dorong-Industri-Farmasi-Indonesia-Produksi-Bahan-Baku-Sendiri/>.
- LPPOM MUI. (2022c). *Prosedur sertifikasi halal MUI untuk produk yang beredar di Indonesia*. <https://Halalmui.Org/Prosedur-Sertifikasi-Halal-Mui-Untuk-Produk-Yang-Beredar-Di-Indonesia/>.
- LPPOM MUI. (2023). *LPPOM MUI gelar halal award 2023 bentuk apresiasi*. <https://Halalmui.Org/Lppom-Mui-Gelar-Halal-Award-2023-Bentuk-Apresiasi-Ke-Pelaku-Usaha-Inilah-Pemenangnya/>.
- Muslim, A. H. (n.d.). *Shahih Muslim*. Dar Ihya at-Turats al-Arabi.
- Nawi, N. H. M., Ahmad, P. H. M., Ibrahim, H., & Suki, N. M. (2023). Firms' commitment to Halal standard practices in the food sector: Impact of knowledge and attitude. *Journal of Islamic Marketing*, 14(5), 1260–1275. <https://doi.org/10.1108/JIMA-10-2021-0333>
- Peraturan Pemerintah Republik Indonesia Nomor 39 Tahun 2021 Tentang Penyelenggaraan Bidang Jaminan Produk Halal, Pub. L. No. Peraturan Pemerintah Nomor 39 Tahun 2021, Presiden Republik Indonesia (2021).
- Qaradhawi, Y. (1993). *Al halal wa haram fi islam*. Al Maktabah Wahbah.
- Rosnan, H., Osman, I., Nor, N. M., & Aminuddin, A. (2015). Halal certification: An exploratory study on non-certified restaurants. *Advanced Science Letters*, 21(6), 1854–1857. <https://doi.org/10.1166/asl.2015.6136>
- Santosa, C. W., Fahma, F., & Damayanti, R. W. (2022). Effect of halal certification on logistic performance and financial performance. *Jurnal Teknik Industri*, 24(2), 117–128. <https://doi.org/10.9744/jti.24.2.117-128>
- Shuhaimi, A. A. M., Karim, M. S. A., Mohamad, S. F., Abidin, U. F. U. Z., & Arsyad, M. M. (2022). A review on halal and kosher regulations, certifications, and industrial practices. *International Journal of Academic Research in Business and Social Sciences*, 12(2). <https://doi.org/10.6007/IJARBSS/v12-i2/12175>
- Sonifuniam, A. (2008). *Penggunaan organ tubuh manusia bagi kepentingan obat dan kosmetika*. Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- Sugiono, S. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D*. CV Alfabeta.
- Utami, Z. Z., & Nurkhasanah, N. (2021). Public perception of halal medicine certification. *Journal of Halal Science and Research*, 2(2), 51–56. <https://doi.org/10.12928/jhsr.v2i2.3176>
- Wheelen, T. L., Hunger, J. D., Hoffman, A. N., & Bamford, C. E. (2015). *Strategic management and business policy* (14th ed.). Pearson Education Limited.
- Yusoff, H. M. (2011). *Fikah Perobatan*. Percetakan Zafar Sdn. Bhs.