



# CHALLENGES AND PROSPECTS FOR IMPLEMENTING HALAL PRINCIPLES IN THE JAMU INDUSTRY IN INDONESIA

## TANTANGAN DAN PROSPEK PENERAPAN PRINSIP HALAL DALAM INDUSTRI JAMU DI INDONESIA

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### ABSTRACT

The traditional herbal medicine (jamu) industry in Indonesia faces challenges in applying halal principles due to the common use of non-halal ingredients in jamu production. Jamu is in high demand in Indonesia, a largely Muslim country with a thriving halal economy. This article reviews the challenges and prospects of implementing halal principles in Indonesia's jamu industry. The research methods employed include literature review and analysis of relevant regulations and industry practices in jamu production. The research findings indicate that the presence of non-halal ingredients in some jamu products poses obstacles to meeting halal requirements. The discussion proposes strategies and potential avenues to enhance the implementation of halal principles in the jamu industry, such as developing alternative raw materials and obtaining halal certification. The conclusion drawn from this article is that implementing halal principles in the jamu industry holds promising prospects but requires close collaboration between the government, producers, and other stakeholders.

**Keywords:** Halal, Indonesia, Jamu Industry, Challenges

### ABSTRAK

Industri jamu tradisional di Indonesia menghadapi tantangan dalam penerapan prinsip halal karena adanya bahan-bahan non-halal yang umumnya digunakan dalam pembuatan jamu. Jamu tradisional sangat diminati oleh masyarakat di Indonesia yang populasinya mayoritas muslim yang sangat erat hubungannya dengan Industri halal yang berkelanjutan. Artikel ini mengulas tantangan dan prospek penerapan prinsip halal dalam industri jamu tradisional di Indonesia. Metode penelitian yang digunakan meliputi studi pustaka dan analisis terhadap regulasi terkait serta praktik industri jamu. Hasil penelitian menunjukkan bahwa keberadaan bahan non-halal dalam beberapa produk jamu menjadi hambatan dalam memenuhi prinsip halal. Pembahasan mengemukakan strategi dan potensi untuk meningkatkan penerapan prinsip halal dalam industri jamu, seperti pengembangan bahan baku alternatif dan sertifikasi halal. Kesimpulan dari artikel ini adalah bahwa penerapan prinsip halal dalam industri jamu tradisional memiliki prospek yang menjanjikan namun memerlukan kerja sama yang erat antara pemerintah, produsen, dan pemangku kepentingan lainnya.

**Kata Kunci:** Halal, Indonesia, Industri Jamu, Farmasi Halal

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## INTRODUCTION

The tradition of concocting and consuming herbal remedies known as "jamu" for health purposes originated during the heyday of Hindu-Buddhist culture in Java. Jamu is not only regarded as a health tonic but also as a means of aiding in healing and detoxifying the body. The theory regarding the origins and development of the tradition of using jamu in Java often encompasses cultural, historical, and traditional medicinal aspects. One frequently cited theory suggests that this practice originated from the

influence of Hindu-Buddhist culture in Java in ancient times. According to this theory, knowledge of jamu concoctions and their use as health tonics has been passed down through generations since the Hindu-Buddhist era.

The UNESCO Intangible Cultural Heritage (ICH) Committee has designated "Healthy Herbal Medicine Culture" (Budaya Sehat Jamu) as an Intangible Cultural Heritage of Humanity on December 6, 2023. Budaya Sehat Jamu encompasses traditional skills and cultural values associated with traditional herbal medicines made from plants and spices, as well as traditional healing methods aimed at improving health by enhancing immune system. The Jamu culture is believed to have existed since the 8th century CE, as evidenced by reliefs in the Borobudur Temple and ancient manuscripts such as Kakawin Ramayana and Serat Centini (Anonim, 2023).

The herbal medicine industry in Indonesia has long been an integral part of the country's cultural heritage and traditional health practices. Jamu, a traditional remedy made from natural ingredients like herbs and organic materials, holds a significant position in Indonesian society as a trusted and effective alternative treatment. However, as times change and market demands become more complex, the jamu industry faces new challenges, one of which is the implementation of halal principles in its production.

Halal principles have gained increasing importance in Indonesia, which has the world's largest Muslim population. People in the country are highly concerned about consuming products that are halal, not just in terms of food and beverages but also in traditional health products like jamu. This has prompted the jamu industry to reevaluate its production processes, from sourcing halal-compliant raw materials to ensuring halal practices throughout distribution (Fahmi, 2017). Halal certification provides assurance to Muslim consumers that jamu products meet the requirements of halal (permissible) according to Islamic teachings. Observant Muslim consumers tend to seek products with halal certification, and having such certification helps maintain consumer trust. This is crucial for retaining and expanding the market share of jamu products among Muslim consumers (Alwi, 2016).

Halal certification is very important. Halal certification protects Muslim consumers from consuming products that are haram (forbidden) or contain ingredients prohibited in Islam. In the context of jamu, certain ingredients such as alcohol or non-halal animal-derived substances can be used in the production process. With halal certification, consumers can be confident that the jamu they consume is free from haram ingredients (Zulkarnain & Abbas, 2017). In many countries, including Indonesia, halal certification for jamu products is a legal requirement regulated by the government. Countries with a majority Muslim population generally have laws or regulations governing halal certification. Therefore, jamu producers need to obtain halal certification to market their products legally and comply with applicable regulations. Halal certification also plays a significant role in enhancing the competitiveness of jamu products in the global market. In recent decades, the demand for halal products has increased worldwide, including in non-Muslim-majority countries. By having halal certification, jamu producers can market their products to Muslim consumers in various countries, thus opening up export opportunities and expanding market reach (Umar, 2019).

In this context, there are both challenges and prospects for implementing halal principles in the jamu industry in Indonesia. Challenges include ensuring the compatibility of raw materials with halal requirements and improving the understanding of halal compliance among industry stakeholders. On the other hand, there are significant opportunities associated with implementing halal principles, such as gaining consumer trust and expanding into larger global markets through exports.

This study aims to thoroughly investigate the challenges and prospects of implementing halal principles in the jamu industry in Indonesia. By gaining a better understanding of these dynamics, it is hoped that insights can be gained into the necessary steps to optimize the production of halal-compliant jamu while preserving its traditional values and quality.



## METHODOLOGY

The research method you are referring to is commonly known as a literature review. It involves collecting relevant articles related to the research topic and objective, reading the articles thoroughly, understanding their content and arguments, identifying challenges faced in implementing halal principles in the herbal medicine industry in Indonesia, exploring potential prospects, conducting analysis, and drawing conclusions. The steps involved in conducting a literature review using this method typically include:

1. Defining the research topic and objective: Clearly define the focus of your research and the specific objectives you want to achieve.
2. Searching for relevant articles: Use academic databases, online libraries, and search engines to find articles that are related to your research topic. Use appropriate keywords and filters to narrow down your search.
3. Article selection: Evaluate the articles based on their relevance to your research topic, the quality of the research, and the credibility of the authors. Select articles that provide valuable insights and information.
4. Reading and understanding the articles: Read the selected articles thoroughly, making sure to understand the content, arguments, and findings. Take notes and highlight key points that are relevant to your research.
5. Identifying challenges: Analyze the articles to identify the challenges faced in implementing halal principles in the herbal medicine industry in Indonesia. Look for common themes, issues, and concerns that emerge from the literature.
6. Exploring prospects: Examine the articles for potential prospects and opportunities related to the implementation of halal principles in the industry. Consider factors such as market demand, consumer preferences, regulatory frameworks, and technological advancements.
7. Analysis and conclusion: Analyze the information gathered from the literature review, compare different perspectives, and draw conclusions based on the findings. Identify gaps in the existing literature and suggest areas for future research.

## RESULTS

This study shows that the implementation of halal principles in the herbal medicine industry in Indonesia faces several main challenges, one of which is the complexity of the raw materials used in the production of herbal medicine, where some of these materials may contain substances that require further assessment regarding their halal status (Nurrosyidah et al., 2023). In addition, the lack of sufficient understanding of halal principles by some industry players is also a constraint in implementing appropriate halal standards.

An interesting issue regarding the use of alcohol in some herbal medicine (jamu) products. It is true that there are some jamu drinks that contain alcohol, and this can be problematic for those who wish to avoid consuming alcohol. Jamu products that are clearly labeled as containing alcohol, such as "jamu anggur merah" (red wine jamu), should be avoided by those who want to steer clear of alcohol, as alcohol is a substance that is haram (forbidden) in Islam. Additionally, there is a possibility that some other jamu products may contain a small amount of alcohol as a result of natural fermentation processes, even if they are not labeled as such. In these cases, if the alcohol content is very low, some experts believe that consuming such products may be permissible. However, to be certain, you should always carefully check the labels and ingredients of jamu products before purchasing and consuming them. In general, I would suggest that you be cautious and selective when choosing jamu products, especially if you want to avoid alcohol consumption. Opt for jamu products that are guaranteed to be alcohol-free and align with the principles of your religion (Anonim, 2022).



**Figure 1. Herbal Medicines Containing Alcohol**



However, there are also opportunities that can be exploited. The implementation of halal principles can enhance consumer confidence in herbal medicine products, particularly in the global market that pays increasing attention to halal aspects. With halal certification, Indonesian herbal medicine products have a greater opportunity to be exported and widely accepted in the international market.

## DISCUSSION

Proud news for Indonesia came from the 18th session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage in the Republic of Botswana, which took place on December 6, 2023. UNESCO officially recognized Jamu as an intangible cultural heritage of Indonesia. The Jamu culture is believed to have existed since the 8th century, as evidenced by reliefs found in Borobudur Temple and other ancient manuscripts. Jamu is the 13th intangible cultural heritage from Indonesia to be included in UNESCO's list (Anonim, 2023). With the recognition of Jamu as a cultural heritage by UNESCO, it is hoped that the younger generation in Indonesia will continue to preserve the healthy tradition of Jamu for the future. This recognition may also lead to an increased popularity of Jamu as a sought-after commodity, resulting in a growing number of Jamu consumers.

The herbal medicine industry in Indonesia has a rich and long history. Jamu, or traditional herbal medicine, has been used by the local population since the time of the Hindu-Buddhist kingdoms and has continued to evolve with the introduction of Islam and Dutch colonization. Initially, jamu was known as a traditional medicinal concoction believed to have both health and spiritual benefits. However, with modernization and technological advancements, the herbal medicine industry has undergone transformations in production methods and marketing.

Halal principles are highly important in the herbal medicine industry in Indonesia due to the country's large Muslim population and the increasing awareness of halal consumption. The implementation of halal principles in the herbal medicine industry is not only a religious obligation but also a smart business strategy, as it can expand the market and enhance consumer trust (Charina & Charisma, 2023). Halal certification ensures that jamu products are produced in accordance with the principles of Halal and Tayyib, which refer to both the permissibility and wholesomeness of the products. These principles encompass the use of halal raw materials, clean and hygienic production processes, and prevention of contamination with non-halal substances. Thus, halal certification encourages jamu producers to maintain the quality and cleanliness of their products, allowing consumers to consume safe and beneficial jamu (Miftahul Jannah & Rosyidi, 2018).

According to the information provided by the Indonesian Food and Drug Review Institute of the Indonesian Ulema Council (LPPOM MUI), there are several herbal medicines that are haram (prohibited) because they contain alcohol. Alcoholic beverages that fall under the category of khamr (intoxicants) are considered impure (najis) and their consumption is prohibited (haram), regardless of

the amount. Here are three types of prohibited herbal medicines (jamu) according to LPPOM MUI (the Indonesian Food and Drug Supervisory Agency) that the public should be cautious about (Henry, 2022):

1. Alcohol-based Liquid and Capsule Herbal Medicines

Liquid and capsule herbal medicines tend to be more practical and less bitter when consumed, but LPPOM MUI urges the public to investigate the extraction ingredients used. This is because in addition to using water, herbal medicines sometimes use alcohol. Generally, in instant powder herbal medicines, the alcohol has already been evaporated until dry.

2. Apart from using plants, traditional Chinese herbal medicines also often use additional ingredients from wild animals, such as crocodile claws, tiger claws, bear liver, and snake blood. "These additional ingredients are clearly prohibited for consumption," according to LPPOM MUI.

3. Brewed Herbal Medicines Containing Arak or Wine

Brewed herbal medicines sold at roadside stalls usually use powdered herbal mixtures. As long as they only use egg or honey as an additive, the herbal medicine is not problematic.

Certainly, Here are some additional points to provide more information about the challenges faced by the herbal medicine (jamu) industry in Indonesia concerning halal certification:

1. Government regulations - Halal certification and compliance with health regulations can be complex and require coordination with various authorities.
2. Consumer acceptance - Educating consumers and building trust in herbal medicines takes time. Some may prefer conventional medicines.
3. Resource availability - Sustainably sourcing high-quality halal herbal ingredients can be challenging, depending on the required plants/herbs. Climate change can affect availability (Aji et al., 2023).
4. However, challenges exist, such as the perceived high costs and lack of public awareness, hindering the optimal implementation of halal policies, particularly for small and medium enterprises (Budiman & Mujib, 2020).
5. Despite the importance of halal certification, research indicates that its influence on purchasing decisions among NU Muslim consumers of herbal products in Boyolali regency was not significant (Mardhotillah et al., 2022). While halal certification is vital for market access and consumer trust, addressing challenges and enhancing awareness are crucial for maximizing its impact on herbal medicine exports.
6. Diversity of Ingredients of Jamu often contains a wide range of herbal ingredients, and ensuring the halal status of each ingredient can be challenging. Some herbal ingredients may not have a clear halal certification, especially if they are imported or sourced from different regions. Manufacturers need to thoroughly research and verify the halal status of each ingredient to ensure compliance with the certification requirements (WHO, 2020).
7. Traditional Production Methods of Jamu is often produced using traditional methods that have been passed down through generations. These traditional practices may not have been originally designed with halal certification in mind. Adapting traditional production methods to meet halal requirements without compromising the authenticity and efficacy of the jamu can be a complex task (Beers, 2012).
8. Limited Standardization of herbal medicine industry in Indonesia consists of numerous small and medium-sized enterprises that produce jamu using different recipes and processes. This lack of standardization poses challenges in terms of ensuring consistency in halal certification across the industry. Developing standardized procedures and guidelines for halal production while accommodating the diversity of jamu formulations can be a significant undertaking (Pols, 2016).
9. Compliance with Halal Assurance Systems obtaining halal certification requires implementing a comprehensive halal assurance system within the manufacturing facilities. This includes establishing standard operating procedures, traceability systems, and documentation processes to ensure the integrity and halal status of the products. Implementing and maintaining such systems can be resource-intensive and may require investments in staff training, infrastructure, and technology.





10. Market Competitiveness while halal certification is essential for targeting Muslim consumers, it is also crucial for competing in domestic and international markets. Non-halal certified products may face limited market access and consumer mistrust. Therefore, the jamu industry needs to balance the requirements for halal certification with the need to remain competitive and meet other regulatory standards.
11. Collaboration and Industry Support, overcoming the challenges related to halal certification requires collaborative efforts between the government, halal certification authorities, industry associations, and jamu manufacturers. This collaboration can involve providing guidance, training, and support to help manufacturers navigate the certification process effectively. It also involves continuous dialogue and feedback to address any emerging issues or concerns.

By addressing these challenges, the jamu industry can enhance consumer confidence, expand market reach, and contribute to the overall growth and development of the herbal medicine sector in Indonesia.

There have been several cases related to the halal status of herbal products or traditional Indonesian medicines, especially those formulated in the form of capsules. One of the main concerns is the use of animal gelatin, particularly pork gelatin, in the production of capsules. The presence of pork DNA in these capsules is a significant issue that requires further investigation. The objective of a particular study was to determine the presence or absence of pork DNA in the shells of jamu capsules. The researchers obtained samples from an e-commerce platform based on specific criteria. Five jamu capsules, labeled as samples A, B, C, D, and E, were selected for analysis. The researchers isolated the DNA from these samples to obtain pure DNA, which was then amplified using the polymerase chain reaction (PCR) method with specific primers. The PCR process resulted in the generation of millions of copies of DNA. Subsequently, electrophoresis was performed to visualize the DNA bands produced on an agarose gel medium. The size of these DNA bands, measured in base pairs (bp), was then compared with positive controls. The research findings revealed that four samples, B, C, D, and E, tested positive for the presence of pork DNA at 132 bp. On the other hand, the jamu capsule shell preparation in sample A tested negative for pork DNA. These findings emphasize the need for further scrutiny and quality control measures in the production of herbal products and jamu capsules to ensure their compliance with halal standards. It is essential to address the issue of non-certified halal products and take appropriate measures to safeguard consumer preferences and religious requirements (Sarina et al., 2023).

In addition to the challenges and difficulties related to the halal aspects of herbal medicine products in Indonesia, there are also opportunities and prospects that can be identified. Some of these include:

1. The increasing global Muslim population creates a potential market for halal health products. More consumers are seeking halal alternatives.
2. The growing interest in herbal and natural remedies opens opportunities to position halal herbal medicine as a safer choice compared to some synthetic drugs.
3. Digital technology can help improve production and distribution while maintaining standards. Online platforms expand reach within and across countries.
4. Collaboration with herbal extract manufacturers and healthcare providers can help enhance the acceptance of halal herbal medicine.
5. Some markets in Southeast Asia and the Middle East are more receptive due to their cultural acceptance of herbal remedies, providing early growth opportunities.
6. The Indonesian government has provided stronger support and regulations regarding halal certification. This creates an enabling environment for companies to develop and market halal herbal medicine products more easily. This support may also include fiscal incentives or other assistance that encourages the growth of the halal herbal industry.
7. Technological advancements enable the development and production of more efficient and high-quality halal herbal medicine products. Technologies such as supercritical extraction,



processing with modern methods, and the use of standardized raw materials can enhance the effectiveness and safety of products. These innovations can help companies meet halal requirements and increase their competitiveness in the market.

8. Increased education and research in the field of halal herbal medicine can provide a significant boost to the development of this industry. With more in-depth research on the health benefits of halal herbal medicine and increased knowledge of production processes that align with halal principles, companies can produce higher-quality products and gain greater consumer trust.

The Sharia Enterprise theory directs companies in the development of halal products. This theory is based on Islamic business principles that encompass justice, transparency, sustainability, and the well-being of society. In the context of the herbal medicine industry, the Sharia Enterprise theory guides companies to ensure that their products adhere to the principles of halal (Anggraeni, 2019). One of the main principles in the principles of halal is the use of halal and *thayyib* (good and wholesome) ingredients. In the context of herbal medicine, this means using natural ingredients obtained ethically and not containing elements that are prohibited in Islam. For example, avoiding the use of pork in the production process or confirming that any additives used, such as preservatives or colorants, are halal. (Athiroh, 2022). Furthermore, the principle of cleanliness (*tahir*) is also crucial. This includes aspects such as the cleanliness of production facilities, equipment, and personnel involved in the herbal medicine manufacturing process. Ensuring that the entire supply chain maintains cleanliness helps to avoid contamination that could affect the halal status of the product (Aslikhah, 2021).

Another principle that should be considered is fairness and sustainability. This includes aspects such as fair trade with farmers or raw material suppliers, as well as ensuring sustainable production practices to preserve the environment. In the context of product development, the Theory of Sharia Enterprise also guides companies to ensure that the process of product development and testing is conducted in accordance with halal principles. This may involve halal certification by relevant authorities or recognized halal certification bodies (Alfian & Muslim, 2017).

Overall, adhering to halal principles in the herbal medicine industry in Indonesia not only fosters religious compliance but also strengthens a company's reputation, expands its market, and enhances consumer trust. By following the Theory of Sharia Enterprise, companies can ensure that their products are not only legally halal but also aligned with Islamic business values that promote fairness, transparency, and sustainability (Andriani, 2023).

Even though there are many challenges, there are benefits to be gained from implementing this halal certification for all aspects of the industry, including herbal medicine. Halal certification can impact herbal medicine exports positively. Halal certification ensures compliance with Islamic dietary laws for exports (Hasan & Pasyah, 2022). Halal certification boosts herbal medicine exports in global markets. Ensures compliance with halal standards for international acceptance and sales (Hidayati et al., 2022). Halal certification moderate relationships between export performance and various factors. Certification practices moderate relationships between export performance and influencing factors (Guo, 2010).

## CONCLUSION

Implementing halal principles in the jamu industry indeed holds promising prospects. Halal certification ensures that products and processes comply with Islamic dietary laws and guidelines, which is of significant importance to Muslim consumers. By incorporating halal standards into the jamu industry, manufacturers can tap into a vast market of Muslim consumers who seek products that align with their religious beliefs and values. To successfully implement halal principles in the jamu industry, close collaboration between the government, producers, and other stakeholders is crucial. Here's why:

1. Government Support: The government plays a vital role in establishing and enforcing halal regulations. They can create a regulatory framework that outlines the specific requirements for halal certification in the jamu industry. This framework should address issues such as sourcing of ingredients, manufacturing processes, labeling, and storage. Additionally, the government



can provide financial incentives and support programs to encourage producers to adopt halal standards.

2. **Producers' Commitment:** Jamu producers need to recognize the potential benefits of catering to the halal market and demonstrate their commitment to implementing halal principles. They should invest in training and education to ensure their staff understands the requirements of halal certification. Producers should also establish robust quality control measures to ensure that their products comply with halal standards throughout the production process. Collaborating with halal certification bodies can help streamline the certification process and ensure compliance.
3. **Stakeholder Engagement:** Collaboration with various stakeholders is essential to address the complexities of implementing halal principles. This includes engaging with halal certification bodies, Islamic scholars, consumer associations, and industry experts. Their expertise and guidance can assist in formulating industry standards, certification processes, and addressing any challenges that may arise. Regular communication and collaboration ensure that all perspectives are considered, leading to more effective implementation.
4. **Consumer Awareness:** Educating consumers about the significance of halal certification and promoting awareness of halal jamu products is crucial. Effective marketing and labeling strategies can help Muslim consumers identify and choose halal-certified jamu products with confidence. Additionally, clear and accurate labeling should be implemented to provide transparency regarding the halal status of the product, including information about the certification body and relevant halal standards.

By fostering collaboration between the government, producers, and other stakeholders, the implementation of halal principles in the jamu industry can thrive. This collaboration will enhance consumer trust, open new market opportunities, and contribute to the growth and development of the industry while catering to the specific needs and preferences of Muslim consumers.

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