HALAL HERBAL MEDICINE MARKET IN MALAYSIA AND INDONESIA: CHALLENGES AND ITS GLOBAL SIGNIFICANCE

*Ayurisya Dominata Dumiadi^{1,2}, Razlini Mohd Ramli¹

ABSTRACT

Malaysia and Indonesia have tropical climates with a wealth of natural resources forming strategic raw material capital for producing halal herbal medicines. This research focuses on analysing the halal herbal medicine market in the context of Indonesia and Malaysia's halal herbal medicine industry. This research also uncovers the awareness level of world community to use natural treatment by adhering to *halal* and Islamic herbal medicine, known as the basic treatment of *Thibbun Nabawi*. The potential for developing halal herbal medicinal products to meet basic needs based on demand and *sharia* compliance is analysed. The development of standardised and Islamic-oriented treatment is also discussed, giving rise to new concepts such as *sharia*-compliant treatment, which refers to Islamic considerations regarding the availability of drugs and treatment measures that are alcohol-free, free from *haram* ingredients, well-produced and *halal*.

Keywords: Global, Halal Herbal Medicine, Islamisation, Sharia

INTRODUCTION

Malaysia and Indonesia's tropical climate is endowed with a wealth of strategic natural resources suitable for the production of halal herbal medicines. As of 2021, Directorate General of Natural Resources Ecosystem Conservation of the Indonesian Ministry of Environment and Forestry has identified that areas outside conservation areas covering an area of 15,595,352 hectares throughout Indonesia of which 66% (10.3 million) hectares as having a high biodiversity score (Indonesia, 2022). In Malaysia, more than half of Malaysia's land area is forest. In Peninsular Malaysia, this forest is called the Central Forest Spine (CFS). This area is divided into four complexes, with a total area of 5.3 million hectares in eight states (Malaysia, 2014). Based on this data, it can be said that these two Muslim-majority countries in Southeast Asia have enormous potentials to produce halal herbal medicines for the world herbal medicine market. This market has significant potential to be developed, both domestically and globally because the majority of the population of Indonesia and Malaysia are Muslim. Muslims are not the only one interested in halal herbal medicine. Non-Muslims are also showing interest in halal products.

The Covid-19 pandemic which occurred globally caused many deaths raising people's awareness that they cannot depend solely on chemical drugs for recovery. The fact is that during the pandemic, even though patients visited doctors and consumed chemical drugs, the number of fatalities remained high globally. Many doctors and health experts also appealed the public to return to nature as a means of natural treatment, including sunbathing in the hot sun,

drinking warm water and evaporation. These are alternative methods to seek healing which were highly recommended during the pandemic. However, majority of Muslim patients believe that healing does not come from consumed medicines alone, but God's pleasure and halal treatment are also very important to provide healing. This implies what Muslims eat and drink, and how medicine is produced, must be free from ingredients that are forbidden in Islam. High demand for herbal medicines throughout the world enables herbal medicines not only made available in drug stores, but also in food stores and supermarkets. However, halal and quality guarantee of herbal medicines are often not available, despite its importance. One of the most serious dangers associated with herbal medicines is that consumers often assume herbs are obtained from nature, so when comes to *halal* issue, those should be safe (Parle & Bansal, 2006). Even when comes to *halal* issue, often there is no guarantee irrespective of whether medicine is chemical or herbal based.

Ideally, herbal medicines must be *halal* and its quality guaranteed before they are marketed and consumed by Muslim communities or others. Unfortunately, the number of factories that can produce quality halal herbal medicines from upstream to downstream is still very limited, both in Indonesia and Malaysia when compared to chemical-based medicine factories. It is proven that the majority of doctors in hospitals only prescribe chemical drugs rather than herbal medicines to their patients. The majority of doctors in Indonesia only prescribe chemical medicines for their patients, and almost no doctors prescribe halal herbal medicines for Muslim patients.

Islamic medicine follows the teachings of the Prophet Muhammad SAW, whose principles of disease treatment are guided by *Thibun Nabawi* where halal production processes and medicines are mandatory. Therefore, the value of halal herbal medicines based on Islamic production systems and technology has great potential to be developed in Muslim-majority countries such as Malaysia and Indonesia. Other Muslim countries in Asia and around the globe which demands quality halal medicines can also create a demand. As such, there is a great potential for expanding the halal herbal medicine business in Malaysia and Indonesia from production to marketing, to expanding the halal herbal medicine market in Asia and the world, because many Muslim-majority countries require halal herbal medicine products. Based on the argument above, this paper aims to analyze the potentials for developing halal herbal medicinal products in fulfilling the basic needs of the Muslim market in Asia and the world. In addition, it attempts to identify future trends and challenges related to halal herbal medicine production.

LITERATURE REVIEW

Halal Labeling

A *halal* label is a writing or a stamp that is affixed on the packaging of a product to indicate that the product is identified as *halal* product (Kamilah, 2017). Whether products consumed is *halal*, it is a very important aspect and must be paid attention by Muslims. The *halal* label is important because it functions to provide certainty and legal protection to consumers, especially Muslims. *Halal* medicines and food consumed in Islam will enter and flow into the human body and blood and affect the overall blessing of a Muslim's physical condition. Paramita and Dwikoco (2022) said that halal labels also have the potential to increase the competitiveness of products when offered to the public. The authors highlighted four indicators regarding halal labels: images, halal writing, attachment to packaging, combination of images and writing.

Medicine is any substance, whether chemical, vegetable or animal, taken in doses that can be useful for curing, alleviating and preventing disease and its symptoms. Wulandari et.al., (2017) defines herbal medicine as medicine that comes from plants that are processed or extracted to become powder, pills or liquids which do not use chemicals in the process. Meanwhile, according to the Food and Drug Supervisory Agency (BPOM) of the Republic of Indonesia, herbal medicine is a concoction or mixture of ingredients in the form of plant, animal, or mineral ingredients, extract preparations (galenic) or a mixture of these ingredients which is used empirically (from generation to generation) for treatment based on experience. *Halal* food is all food that is free from ingredients that are prohibited for consumption by Muslims (Halim, 2014). Based on the definition above, halal herbal medicine is a medicine made from ingredients or mixtures of plants, animals, mineral ingredients, extract preparations (galenic) or mixtures of these ingredients (galenic) or mixtures of these ingredients which are used empirically to treat diseases, which have efficacy, good quality, safe, and also free from ingredients that are prohibited for consumption by Muslims.

Halal Herbal Medicine Market

The *halal* herbal medicine market comprises number of buyers and sellers who interact to carry out halal herbal business transactions throughout the world. Azam and Abdullah (2020) stated that the global Halal Industry is one of the fastest growing markets and estimated to be around USD\$ 2.3 trillion (excluding Islamic finance) per year. At the same time, global market growth is estimated at an annual rate of 20 percent per year. The potential for a halal herbal medicine industry on a global scale is not only because the global halal market of around 2.2 billion Muslims but the consumption is no longer limited to Muslims alone, but also attractive to non-Muslims. Currently, the halal industry is no longer limited to food and food-related products alone, but it covers all sectors, and medicines are one of the most important ones. The authors also highlighted that Muslim spending on food, drink and lifestyle reached USD\$2 trillion and travel reaching USD\$169 billion in 2016, and this is expected to grow yearly. Meanwhile, spending by Muslim countries in the tourism sector reached USD\$2 trillion in 2016. The average per capita income (GDP) of Muslims has also increased from USD\$1763 to USD\$6530 from 1993 to 2010 indicating a rise in their purchasing power.

There are three main factors that drive the rapid growth of the global halal market. First, the Muslim population is quite large and it grows by 1.8 percent per year. Second, increasing economic development will increase purchasing power among Muslims. Third, the emergence of halal market potential in non-Muslim countries and halal industry players contributed to this. However, halal industry players face many challenges. Those include policies and health regulations, halal standardization, lack of data, lack of human resources and medical personnel with educational backgrounds in herbal medicine and certification, and the absence of *halal* requirements in many Muslim countries. As a way forward, industry players need to deepen their knowledge and understanding of the Muslim markets patterns and behavior, update data regularly, and exploit untapped market niches and do product sales and promotions.

In Indonesia, Afifah and Irianto (2021) stated that only 13.41% drugs that have been certified halal by BPOM. Umah and Herianingrum (2018) stated that no more than 1 percent of medicines have *halal* certification in Indonesia, out of around 18,401 types of medicines registered and circulating in her economy. This number is indeed very disproportionate to the number of Muslim consumers in Indonesia, where the Muslim population is recorded as 207,176,162 (BPS, 2010). The Muslim population represents 87.18 percent of the total

population of Indonesia. The number of Yogyakarta's Muslim population is 91.4% of 3,594,290 total population, making Yogyakarta as potential place to become a halal market (Fatkurrohman, 2017). This proves that the market for *halal* products as medicine should have become a necessity for Indonesian, especially among the population of Yogyakarta, which is predominantly Muslim. The authors further added that that the halal label, promotion and price variables have a significant influence on drug purchasing decisions, or 94.2% of drug purchasing decisions are influenced by the halal label, promotion and price variables as well as other factors.

RESEARCH METHODOLOGY

This research is a qualitative inquiry. The main aim of qualitative research is to understand social phenomena or symptoms with greater emphasis on a complete picture of the phenomenon being studied. Qualitative study also aims to obtain an in-depth understanding of a phenomenon to produce a new theory, policy, or understanding of a phenomenon.

This research uses a case study approach. A case study is in-depth research about an individual, a group, citizens, an organization, an activity program, region and country at a certain time period. The goal is to obtain a complete and in-depth description of an entity. Case studies produce data that is then analyzed to produce theories or policies. The case study method is used in this research to examine the growth of the halal herbal medicine market in Indonesia and Malaysia in order to understand further global growth trends. The data collection techniques used in this research include observation approach and documentation study.

The observation used in this research involve observing the characteristics of the consumers in two countries studied, namely Malaysia and Indonesia. The main purpose of observation is to understand the behavior and culture of a person or group of people or citizens in certain situations. For example, how Indonesian and Malaysian make decisions in choosing food products or medicines, given a Muslim majority population, and how researchers directly observe the subjects being studied. We observed a group of people in an area or in a hospital about how they react to treatment systems and drugs. We also observed a number of hospitals and pharmacies in both countries providing services and prescribing drugs, and also how medical students at universities learn to prescribe drugs to prospective patients. Documentation study in this research focuses on the analysis or interpretation of written material based on its context. Data was obtained through a literature review from various journals, books, online media and other supporting sources as well as regulations and policies for Indonesia and Malaysia. We also analyzed various government policies in a number of Muslim-majority countries regarding the use of halal herbal medicines.

RESULTS AND DISCUSSION

The potentials to develop halal herbal medicinal products

Halal market

The increasing awareness of Muslims to use and consume *halal* and Islamic herbal medicinal products containing *thayyib* indirectly illustrates that religious understanding has a big influence on consumers in making decisions when purchasing medicinal products. Table 1 shows the potentials for developing halal herbal medicinal products to meet the basic needs of Muslim countries. The prosperity level of Organisation of Islamic Countries (OIC) is based on

12 assessment indicators including investment climate, economic quality, quality of life, and education.

No	Country	Average Index		
1	United Arab Emirates	67.31		
2	Malaysia	67.25		
3	Qatar	66.33		
4	Bahrain	61.31		
5	Kuwait	61.15		
6	Indonesia	60.61		
7	Oman	59.91		
8	Saudi Arabia	58.59		
9	Jordan	57.24		
10	Azerbaijan	56.60		
11	Morocco	55.97		
12	Turkiye	55.68		

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Source: https://goodstats.id/

The OIC is a cooperative organization of Muslim-majority countries in Asia and Africa, formed in 1969 and has 57 member countries, of which 56 are United Nations member countries. This organization was formed with the aim of increasing Islamic solidarity between member countries, coordinating cooperation between member countries, supporting international peace and security, and protecting Islamic holy places. OIC members, who have a majority Muslim population in 57 countries, also have great potentials for selling and distributing *halal* herbal medicines. These countries are a untapped market for the distribution of *halal* herbal medicines. As Muslims, they need medicines that are based on the Prophet's sunnah and have a halal guarantee. In contrast to Indonesia and Malaysia, which have tropical climates, the majority of countries on the list above are countries in hot weather and desert areas, so they are not endowed with plants for raw materials extraction to produce halal herbal medicines. So, this advantage creates great potentials for Indonesia and Malaysia to meet the market needs of Muslim countries.

The market for *halal* herbal medicine is not just confined to OIC, but globally. Table 2 shows the exports of medicinal, aromatic and spice plants to main destination Countries, from Indonesia to various countries in the world, 2018-2022. The data reveals that a number of non-OIC countries are also interested in buying medicinal, aromatic and spice plants. This could be a basis for calculating business expansion and distribution of *halal* herbal medicine in the future.

Main destination countries	2018	2019	2020	2021	2022
Pakistan	2.379,1	1.653,0	1.057,3	5.416,5	4.465,9
Thailand	101.664,0	162.812,3	64.560,9	117.489,3	22.585,5
USA	12.619,8	7.182,0	12.918,3	14.389,3	14.793,5
India	33.572,0	31.939,9	33.995,1	28.252,8	37.843,9
Vietnam	29.977,8	11.480,8	9.349,5	6.617,1	4.504,5
Singapore	10.170,5	5.007,0	4.276,3	5.922,6	6.786,4
Netherlands	2.672,2	2.235,9	2.666,1	2.223,5	2.344,7
China	4.413,2	10.297,8	18.950,5	37.067,8	47.708,6
Bangladesh	6.278,0	10.899,1	7.407,9	17.284,3	11.028,9
Germany	1.357,1	1.341,3	1.515,3	1.653,6	1.434,5
Others	130.989,5	73.291,2	118.597,9	58.371,3	125.810,5
Total	336.093,2	318.140,3	275.295,1	294.688,1	279.306,9

 Table 2: Exports of Medicinal, Aromatic and Spice Plants from Indonesia to Main

 Destination Countries, 2012 - 2022

Source: Central Statistics Agency/BPS, Indonesia

The development of the *halal* industry and sharia finance is growing rapidly in a number of Islamic countries in Southeast Asia such as Malaysia and Indonesia, showing that there is an increase in understanding and awareness of Muslim community regarding the importance of the *halal* product industry and sharia finance. Aulia and Kussudyarsana (2018) for example found that knowledge about *halal* standards has a positive and significant effect on the decision of Muslims in Solo, Indonesia, to buy *halal* labeled food products. Refmasita et al., (2020) also highlighted that student at Hamka Muhammadiyah University, Indonesia consider *halal* label and product quality as two important indicators in deciding to purchase medicine. In general, *halal* labeling, product quality and purchase intention greatly influence consumers' decision to buy a product, for example price, brand image, and celebrity endorse (Paramita & Dwikoco, 2022).

The results of tourists' assessments of sharia tourism products in Bima City, Indonesia also highlighted that the city has the readiness to become a sharia tourism destination with various potentials such as natural tourist attractions, cultural tourism, tourism facilities and infrastructure, as well as support from the local government, and the local community of Bima City. The city has various potentials to become a strategic sharia tourist destination because of its very strong Islamic history, customs that adhere strictly to Islam, as well as natural, cultural, religious and special interest tourist attractions. It also has various facilities to support the development of *sharia*-based tourism such as *sharia* hotels, *sharia* banks, *sharia* pawnshops and supported by typical Muslim culture and community acceptance (Santoso & Argubi, 2018). Like other successful and prosperous *sharia* businesses developed in Bima City, halal herbal medicine too has the potential to be developed and marketed in Bima City, Indonesia.

Islamic standard halal herbal medicine production system

Halal Herbal Medicine Market In Malaysia And Indonesia: Challenges And Its Global Significance

The basic principles of Halal Certification are *halal* (permissible) and *thoyyiban* (healthy). These are stated in the Koran as follows:

Surah Al-Baqarah (168):

"O people! Eat of the halal and good (food) found on earth, and do not follow the steps of Satan. Indeed, Satan is a real enemy for you".

Surah Al Maidah (4) :

"They ask you, [O Muhammad], what has been made lawful for them. Say, "Lawful for you are [all] good foods and [game caught by] what you have trained of hunting animals which you train as Allah has taught you. So, eat of what they catch for you, and mention the name of Allah upon it, and fear Allah." Indeed, Allah is swift in account".

Based on those two verses in Al-Quran, Allah SWT commands a Muslim to eat *halal* and good food found on earth, and as Muslims they are strictly prohibited from eating non*halal* food, as it is *haram* (not good) and likened to following the footsteps of Satan as Satan is the real enemy for mankind. Allah SWT also explained what is meant by halal food according to Surah Al Maidah verse 4: Halal food is good food and is the result of caught animals that humans have trained, hunted animals that have been trained as Allah has taught humans, and the name of Allah is mentioned on them. This verse closes with the obligation of humans to be devoted to Allah SWT to follow this command, because Allah SWT is quick in keeping record so it is very easy for Allah SWT to calculate human sins, whether he eats *halal* food or not.

Halal Standard in Malaysia

Malaysian Halal Certification Procedures (JAKIM, 2014) and Malaysian Halal Standards MS1500:2009 and MS2200 Part 1:2008 are *halal* standards continually used in Malaysia because they have received wide recognition in maintaining excellence in the field of *halal* compliance (see Zainuddin, et al., 2019). Based on this, the Malaysian halal logo is recognized and well received worldwide. The Malaysian government provides full support in promoting the *Halal* Certification Process on products and services. *Halal* Certification in other regions in Malaysia are developed by each Malaysian state, supported by their non-governmental organizations (NGOs). In Malaysia, *halal* certificates and labels (logos) are issued by a body authorized by the Malaysian government called Jabatan Kemajuan Islam Malaysia (JAKIM) or Department of Islamic Development Malaysia. This organization has played an important role in Halal Certification since 1994. Halal Development Corporation (HDC) in Malaysia strongly advises all *Halal* Certification applicants to comply with Good Manufacturing Practice (GMP), *Halal* Critical Control Point (HCCP) and Hazard Analysis Critical Control Point (HACCP) requirements. Thus, products that are certified as *halal* by JAKIM are also safe for consumption or use, nutritious and with quality (HDC, 2008, in Zainuddin, et al., 2019).

Halal Standard in Indonesia

Initially, the process of setting standards for *halal* products in Indonesia was only carried out by the Majelis Ulama Indonesian (MUI) or Indonesian Ulema Council. The standardization of halal products in Indonesia is explained in Law (Act of the Republic of Indonesia) No. 33 of 2014 concerning halal product guarantees, which mandates that micro and small business actors must have a *halal* certificate from MUI. Since 2022, there has been a shift in the

standardization of *halal* products in Indonesia, which was initially only carried out by MUI but eventually managed by an agency under the Indonesian Government, namely the *Halal* Product Guarantee Organizing Agency (BPJPH) under the purview of the Ministry of Religion, Republic of Indonesia. BPJPH has the authority to determine the *halal* label with the title "Halal Indonesia" which applies nationally. The determination of the *halal* label is stated in the Decree of the Head of BPJPH Number 40 of 2022 concerning the Determination of Halal Labels. The Decree was issued in Jakarta on February 10 2022 and signed by the Head of BPJPH Muhammad Aqil Irham, effective from March 1, 2022.

LPPOM MUI

Halal MUI logos

Halal Indonesia logos



Source : https://halalmui.org/, 2024

Source : : https://bpjph.halal.go.id/detail/tentang-bpjph, 2024

The change in institution managing Halal Certification in Indonesia from MUI to BPJPH initially gave rise to a number of issues. This include the accuracy of the *halal* guarantee issued by BPJPH as it is one of the bodies under the Indonesian government which is based on secular law and not purely Islamic. Before the policy change in 2022, Indonesian Muslims entrusted the certification of halal products to MUI, which represents the ulama in Indonesia. Even though BPJPH involves MUI in the certification process, there has been no study as to the extent of the portion and role of MUI involvement in the certification stage. This is crucial and studies on this need to be carried out by Muslim scholars to ensure guaranteed *halal* flow according to Islamic rules and monitor the distribution of *halal* product guarantee among Indonesians.

Trends and challenges in halal herbal medicine production in Malaysia and Indonesia

Herbal Medicine Curriculum at Universities and Scientific Evidence

Hidayat (2006) highlighted that tropical countries like Indonesia have a variety of plants that can be used as herbal medicine. The problem that arises is how to teach herbal medicine to medical and pharmacy students in universities or medical schools in Indonesia. To practice using herbal medicine, at least students need to be equipped with regulatory aspects of monographs, dosage forms and interactions of herbal medicines with different emphases. Currently the process of transferring knowledge to medical and pharmacy students in Indonesia regarding herbal medicines remain a challenge. There is no official policy in Indonesia that provides a medical education curriculum based on herbal medicine system at medical colleges in Indonesia.

Although there are quite a significant number of traditional medicines used by the community in their own medical initiatives (self-medication), the health professionals-doctors in Indonesia are generally reluctant to prescribe it to patients. The main reason for their reluctance to prescribe or use traditional medicine is caused by scientific evidence regarding the efficacy and safety of traditional medicine in humans is still lacking. Not only that, in Indonesia, a person's religiosity and knowledge about *halal* herbal medicine and its benefits will influence attitudes, perceptions and intentions of Muslim doctors from using conventional pharmacies to *halal* herbal pharmacies. High level of knowledge will not be able to change the behavior of Muslim doctors in choosing *halal* herbal medicines, but the increase in their religiosity level, may encourage Muslim doctors to change their habits from using conventional pharmaceutical products to halal herbal medicines in Indonesia which are in accordance with the *Sunnah* of Prophet Muhammad SAW.

Challenges in Halal Herbal Medicine Certification

One of the challenges for producing and distributing halal herbal medicines is the certification procedure and its accuracy. Afifah and Irianto (2021) research results stated that products that are still in critical list regarding their halal guarantee in Indonesia are pharmaceutical products and medicines. Data shows that only 13.41% of drugs that have been certified by BPOM have *halal* certification. Meanwhile, the Indonesian government's target is that all *halal* products circulating in Indonesia must be certified halal, therefore a standard is needed which consists of a Halal Guarantee System (SJH) and Good Medicine Manufacturing Practices (CPOB). They developed a standard that integrates the SJH and CPOB to assist the pharmaceutical industry in implementing these two systems, reduce document redundancy and streamlines the interaction of all relevant departments.

Integration process between SJH and CPOB involves a process of analyzing the structure of both systems, then analyzing each clause and sub-clause to look for similarities that can be integrated to make an integrated system, namely Good and Halal Medicine Manufacturing Practices (CPOBH). Eleven clauses which establish the SJH and 12 clauses for CPOB are re-classified according to their structure. After the integration process, they produced 15 clauses in CPOBH. Some additional or replacement clauses in the integrated system do not change the meaning or purpose of the two systems being implemented. It implies that not only medicinal products must meet the requirements for halal certification but factories and manufacturing processes are also involved.

Halal certification in Malaysia is handled by the Department of Islamic Development Malaysia (JAKIM). Yusuf et.al (2016) explained that apart from Halal Certification, Malaysia also uses other Halal standards to ensure the Halal implementation of its industries. Those are Malaysian Standard MS1500, General Guidelines on the Production, Preparation, Handling and Storage of Halal Foods, which includes compliance with Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) by the Department of Standards Malaysia (SIRIM). Latif (2020) pointed out that there are methods or criteria to determine whether pharmaceutical products are halal in a comprehensive manner including the principles of halal pharmaceutical products from ingredients, the *Maslahah* principle, the *Ihtiyath* principle, and the *Istihalah Tammah* principle. However, for the challenges, Yusuf et.al., (2016) stated that there is a significant lack of interest shown by business owners and those involved in the food industry in Malaysia who continue to apply for *halal* certification despite their awareness and knowledge of *halal* certification.

Meanwhile, Indonesia's halal medicine industry is currently placed in the ninth position globally. The State of Global Islamic Economy 2022 report highlighted that based on the pharmaceutical sector score indicators, Indonesia's halal medicine industry is trailing behind Singapore, Malaysia, the Netherlands, Belgium, France, Egypt, Turkey and the United Arab Emirates (Dinar Standard, 2022). The main reason why Indonesia lags behind these countries is due to the slowness in the halal certification process for the drug industry as 95% of the raw material sources for making these drugs are still imported from abroad, including China, India, America and Europe. However, The Indonesian Ministry of Health is also optimistic that it can set a target to reduce the amount of imported raw materials to 70%. For Indonesia, the challenges in its implementation include the large use of imported raw materials whose halal quality is not guaranteed, the complexity of the halal certification process in the pharmaceutical industry and human resources factors.

Business Capital for Halal Herbal Medicine Business

Problem to access capital in halal herbal medicine business, development of medicinal plants as raw materials for herbal medicine, and efficiency in processing as well as regulations and procedures for laboratory testing are some of the obstacles encountered in developing halal herbal medicine businesses in Indonesia. Wijayanti and Setyowati (2022) stated that herbal medicines include herbal drinks are part of the cultural heritage of the Indonesian people. The majority of traditional herbal medicine businesses are carried out by SMEs (small and medium enterprises) or home business groups.

The business of making herbal medicine from spices is an effort to improve the family economy and mentoring is provided periodically to increase the knowledge and skills of SME members. The growth of production and sales will increase the income of the SMEs members being coached. This points to the fact that the halal herbal medicine business in Indonesia in future can create business potentials for entrepreneurs to improve their family livelihood and economy. The challenge is that, SMEs require regular mentoring and monitoring especially for entrepreneurs involved so that SMEs can thrive and the herbal medicines can be produced in a larger scale in the future.

CONCLUSION

There is great potential for expanding the halal herbal medicine business in Malaysia and Indonesia, from production to marketing, to expanding the halal herbal medicine market in Asia and the world. This is mainly driven by demand from many Muslim-majority countries which require halal herbal medicine products. The halal herbal medicine business in Indonesia and Malaysia in the future has unlimited potentials such as opening up of new business opportunities for entrepreneurs and subsequently its potential to improve family economy. One of the main challenges is that, regular mentoring needs to be provided to entrepreneurs so that SMEs can continue to thrive and the production of herbal medicines can be continued and increased as the global market for this product remains untapped.

There must also be an effective monitoring of the halal certification process in Indonesia after it is managed by BPJPH Indonesia, because they have only been operating since 2022 taking over the role of the Majelis Ulama Indonesian or Indonesian Ulema Council (MUI). Association of doctors, health practitioners, and health experts both in Indonesia and Malaysia must also be introduced to the benefits of herbal medicine and how to put it into practice when giving prescriptions to sick patients. It is necessary to build a learning curriculum about halal herbal medicine specifically in medical schools for the development of herbal medicine in the future. International Medical University (IMU) Malaysia for example through its School of Alternative and Complementary Medicine offers Bachelor of Science (Hons) in Chinese Medicine which can be used as guideline. There is also a need to collaborate among Muslim-majority countries in the Southeast Asian region as well as globally to build businesses and professionally manage halal herbal medicine administration.

REFERENCES

- Ab. Halim, M. A. ., Salleh, M. Kashim, M. I. A. M. ., Ahmad, A. A. ., & Nordin, N. . (2014). Halal Pharmaceuticals: Legal, Shari'ah Issues and Fatwa of Drug, Gelatine and Alcohol. *International Journal of Asian Social Science*, 4(12), 1176–1190. Retrieved from: https://archive.aessweb.com/index.php/5007/article/view/2709
- Afifah, A. U., & Irianto, D. (2021). Perancangan Standar Integrasi Sistem Jaminan Halal Dan Cara Pembuatan Obat Yang Baik. *Journal of Industrial & Quality Engineering p-ISSN*, 2303, 2715.
- Aulia, A.N & Kussudyarsana S.E., M.Si., Ph.D (2018) Pengaruh Pengetahuan Produk Halal, Religiusitas, dan Halal Awareness terhadap Keputusan Pembelian Produk Pangan Kemasan Berlabel Halal. Thesis Script, Universitas Muhammadiyah Surakarta. Retrieved from: https://eprints.ums.ac.id/60067/
- Azam, M. S. E., & Abdullah, M. A. (2020). Global halal industry: realities and opportunities. *International Journal of Islamic Business Ethics*, 5(1), 47-59.
- BPS (Biro Pusat Statistik). (2010). Populasi Berdasarkan Area dan Agama. April. BPS Jawa Timur, Surabaya.
- Fatkurrohman (2017). Developing Yogyakarta's Halal Tourism Potential for Strengthening Islamic Economy in Indonesia. Jurnal AFKARUNA, 13(1), DOI 10.18196/AIIJIS.2017.0065.1-16
- HDC (2008). Halal certification. Government Why Malaysia? Retrieved from: http://www.hdcglobal.com/publisher/gwm_halal_certification
- Hidayat, M. A. (2006). Herbal Medicine: What Should Be Told to Pharmacy Students and Medical Students? *Journal of Educational Development*, 3(1), 210308.
- Indonesia (2022). Perkuat Upaya Keberlanjutan Anda. Retrieved from: Greennetwork.id.
- Kamilah, G. (2017). Pengaruh Labelisasi Halal Dan Brand Image Terhadap Keputusan Pembelian Melalui Minat Beli. *Jurnal Ilmu dan Riset Manajemen*, 6 (2), 1-18.
- Malaysia (2014). Ministry of Natural Resources and Environment. Fifth National Report to the Convention on Biological Diversity. Retrieved from: https://www.cbd.int/doc/world/my/my-nr-05-en.pdf
- Paramita, A., Ali, H., & Dwikoco, F. (2022). The Influence of Halal Labeling, Product Quality, and Purchase Intentions on Purchasing Decisions *Journal of Educational Management* and Social Sciences, 3(2), 660-669.
- Parle, M., & Bansal, N. (2006). Herbal medicines: are they safe?. Retrieved from: https://nopr.niscpr.res.in/handle/123456789/7991 (accessed on 20 Nov 2023)
- Refmasita, A. N., Amar, F., & Larasati, M. (2020). Halal Labels and Medicinal Product Quality on Interest in Buying Medicine among Feb Uhamka Students. *Al-Urban*, 4(2), 168-179.
- Santoso, H., & Argubi, A. H. (2018). Potential for Sharia-Based Tourism Development (Halal Tourism) in Bima City. In Proceedings of the National Seminar on Research and Education Institute (LPP) Mandala (pp. 229-245).
- Umah, K.A. & Herianingrum, S. (2018). The Influence of Halal Label, Promotion and Price Toward Purchasing Decision on Over the Counter Medicine (February 12, 2018). Retrieved from:

https://ssrn.com/abstract=3122192 or http://dx.doi.org/10.2139/ssrn.3122192

- Wijayanti, F. N., & Setyowati, T. (2022). Increasing the Competitiveness of Mak Nyak Herbal Home Drink SMEs in Jember Regency. *Archive: Journal of Community Service*, 1(2), 129-136.
- Zainuddin, N., Adam Mohd Saifudin, Norita Deraman & Norlila Mahidin (2019). Effect of Halal Certification and Labelling Process on Halal Supply Chain *Performance. Int. J Sup. Chain. Mgt*, 8(4).

¹School of Social Sciences, Universiti Sains Malaysia, Malaysia

²National Research and Innovation Agency, Indonesia.

^{*}Correspondence email: ayurisyadominata@student.my.usm,