# Halal Medicine Selection Process in Sharia-Certified Hospital

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Abstract: A drug formulary free of haram substances is one of the standards in medicine service. The purpose of this study is to analyze the implementation of the halal medicine selection process in Nur Hidayah Hospital Yogyakarta. It is qualitative research using a case study method. Data were collected using interviews, observation, and documentation techniques. The study reveals four themes in the selection process for halal medicine implementation at Nur Hidayah Hospital. The themes are sharia-based medicine screening, halal label limitations, haram medicine use based on doctor-patient agreement using sharia informed consent, and halal statements from drug manufacturers. The research concluded that sharia principles had been implemented in the medicine selection process at Nur Hidayah Hospital, but the number of halal-labeled medications remains limited. The use of non-halal substances in medicine through a doctor-patient agreement based on sharia informed consent. Halal statements from pharmaceutical companies support implementing the halal lifestyle in hospitals.

Keywords: drugs, halal medicine, pharmaceutical, selection process, sharia-certified hospital

# 1. Introduction

The command to use only the halal and avoid prohibited goods is clearly stated in the Holy Quran and the *hadith* of the Prophet (Abdullah & Azam, 2020; Nafis, 2019; Rahim et al., 2021; Rashid et al., 2018). As the Word of Allah Almighty in the Quran at Surah Al-Baqarah, verse 168, "O mankind, eat from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy". Therefore, applying Islamic values and sharia law in services is directly proportional to the quality of services provided and the obligation of a Muslim to comply with Islamic sharia in every aspect of his life (Islam & Ahmad, 2020). Sharia products and services then expanded into other public services, such as health services (Rachmadi & Muslim, 2016; Tan et al., 2022).

Sharia Hospital certification improves the service quality as a means of Islamic *da'wah* in hospitals by ensuring that hospital operations follow the sharia principles, both for management and patient services, and by providing guidelines for hospital founders (owners) and managers in management (Halim et al., 2020; Mat et al., 2021; Sulistiadi & Rahayu, 2017). In the sharia hospital certification standards compiled by the National Sharia Council of Indonesian Ulema Council and Indonesian Islamic Health Effort Council, there are three points of hospital sharia standards in medical service. Those are a drug formulary that does not contain haram substances, supporting documents that contain Islamic values, and administration of medicines accompanied by the delivery of religious messages to patients (Ismail et al., 2018).

In addition, the number of medicines with the halal label is still limited in Indonesia (Rahmah & Barizah, 2020; Rusmita et al., 2020), yet law no. 33 of 2014 requires a halal certification for all products, including medicines. The pharmaceutical industry has not fully supported this issue, and many obstacles still exist to overcome it (Herdiana & Rusdiana, 2022). Researchers are curious about implementing the halal medicine selection process in sharia-certified hospitals due to the limited number of medicines with halal labels in Indonesia and the medical services standard in sharia hospitals that require medicines with zero haram substances.

## 2. Materials and Methods

This case study uses triangulation sources and techniques to validate the data obtained through interviews, observation, and document analysis (Campbell et al., 2020; Natow, 2020). In-depth interviews with semistructured and open-ended questions were conducted with informants chosen using subjective sampling methods (Minowa & Belk, 2020). The criteria of informants are parties working in hospital pharmacy installations and parties who have authority in the decision-making of the halal medicines selection process in hospitals. The tracked document was hospital formulary, letters of recommendation, informed consent, and related documents. The primary document source was the Nur Hidayah Hospital Formulary in 2019. In addition, the medicine written on 20 randomized medical records is used to determine its validity. The 28 diagnoses were obtained from the 20 medical records reviewed, and the use of a medication that follows the formulary list is 90.1%. Thematic analysis is used in the analysis process with category codes and themes as the basic analysis, including the quotes of the informant statement.

# 3. Results and Discussion

Researchers categorize medicines in hospital formulary into 29 categories based on the national formulary (NF) category. The categories that do not appear on the NF are classified as others. Medicines included in more than one category, such as methylprednisolone, are included in the multi-categorical category so that they are not counted twice and can determine the final percentage of each medicine category. The 29 categories are shown in Table 1.

N.	Catagoria	Code			T ( 1
INO	Category	Green	White	Red	- I otal
1	Analgesics, Antipyretics, Non-Steroid Anti-	0	36	0	36
	Inflammations				
2	Anesthetic	0	12	0	12
3	Antiallergics and Drugs for Anaphylaxis	0	9	0	9
4	Antidotes and Other Drugs for Poisoning	0	3	0	3
5	Antiepileptics - Anticonvulsant	0	2	0	2
6	Anti-infective	0	57	0	57
7	Antimigraine and Antivertigo	0	5	0	5
8	Antiparkinsonian	0	1	0	1
9	Drugs that Affect Blood	0	12	0	12
10	Blood Products and Plasma Substitutes	0	1	0	1
11	Diagnostics	0	4	0	4
12	Antiseptics and Disinfectants	0	2	0	2
13	Diuretic	0	5	0	5
14	Hormones, Other Endocrine Drugs, and Contraceptives	1	20	0	21
15	Cardiovascular Drugs	2	34	0	36
16	Topical Drugs for Skin	9	19	0	28
17	Peritoneal Dialysis Solution	0	2	0	2
18	Electrolyte Solutions, Nutrients, and More	0	9	0	9
19	Medicine for Eyes	0	45	0	45
20	Oxytocic	0	2	0	2
21	Psychopharmaceuticals	0	7	0	7
22	Peripheral Muscle Relaxants and Cholinesterase	0	1	0	1
	Inhibitors				
23	Gastrointestinal Medicine	1	33	0	34
24	Drugs for Airway	0	20	0	20
25	Drugs that Affect the Immune System	2	23	0	25
26	Medicine for Ears. Nose. and Throat	0	5	0	5
27	Vitamins and Minerals	1	11	0	12
28	Other	13	2	0	15
29	Multi-categorical	0	35	0	35
	Total	29	417	0	446

Table	1.	Medicines	Category
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Informants of this study are four informants who are policymakers and organizers related to implementing the halal medicine selection process in Nur Hidayah Hospital. The characteristics of the informant are shown in Table 2.

Table 2. Informant's Characteristic					
Name	Age	Last Education	Position	Working Period	
dr. Arrus Ferry, MPH.	38 years old	Master of Hospital Management	Director of Hospital	10 years	
Kurniawati, S.Farm., Apt.	34 years old	Bachelor of Pharmacy	The Head of Hospital Pharmaceutical Installation, Secretary of Hospital's Pharmacy and Therapy Committee	6 years	
Lacua Nugroho, AMK.	42 years old	Bachelor of Nursing	The Head of the Hospital Sharia Committee	2 years	
Tri Puji Rahayu, S.Far.	40 years old	Bachelor of Pharmacy	The Head of Medical Support, Member of the Hospital's Pharmacy and Therapy Committee	4 years	

As a result, four main themes are obtained, which are shown in Table 3: sharia screening, limited halal label medicine, use of illicit substances, and pharmaceutical companies' statement as the middle ground.

Table 3. Categories and Themes			
Category	Theme		
National Formulary as reference			
Formulary preparation procedure			
Commitment to sharia	Sharia Screening		
Ingredients screening			
"Maintained at sharia boundaries"			
A scant amount of halal medicine			
Halal medicine mostly are herbs	Limited halal label medicine		
Without a certificate is not necessarily haram			
Hospital restricts haram medicines			
Doctor-patient agreement	Use of illicit substances		
Sharia informed consent for illicit medicine			
"Hospital as end-user"			
Difficulty in pharmaceutical certification	middle ground		
Pharmaceutical companies' statement			

#### 3.1. Sharia Screening

The medicine selection process at Nur Hidayah Hospital is carried out through screening with sharia principle considerations.

1) National Formulary as a reference

In making the formulary, the hospital uses the reference of the National Formulary as conveyed through the excerpted interview as follows:

"The formulary should refer to the NF because our patients are 80% of BPJS members. Yes, so as long as the medicine is in the NF, it should also be automatically included in the hospital formulary." (Tri Puji Rahayu, Personal Communication, November, 2021).

The Nur Hidayah Hospital Formulary in 2019 was discovered from 446 existing medicines; 16 (3.6%) are not on the list of national formularies, and the remaining 96.4% are medicines from the NF, as shown in Table 4.

Table 4. Percentage of National Formulary Medicines in Nur Hidayah Hospital Formulary			
National Formulary Medicine	Non-National Formulary Medicine	Total	
430	16	446	
96.4%	3.6%	100%	

Compliance with formulary usage is critical for ensuring rational and cost-effective drug use and improving healthcare quality (Krisnadewi, 2014). As a result, the 3.6% absence of Non-National Formulary drugs in the Hospital Formulary is a modification made by Nur Hidayah Hospital for the following reasons:

# a. New Drug Recommendations

- Medical personnel, particularly doctors, stated that some drugs are of higher quality to improve the patient's condition and should be included in the hospital formulary (Religioni & Pakulska, 2020). In the recommendation letter of sharia committee No. 02/RSNH/S.REK/I/2017, Mecobalamin medicine is proposed to be included in the hospital formulary. Mecobalamin is not included in the NF and does not yet have a halal certificate of Indonesian Ulema Council (Indonesian Ulema Council, 2021; Ministry of Health of the Republic of Indonesia, 2019). However, Mecobalamin has better effectiveness in lowering painful diabetic neuropathy when combined with Gabapentin compared to administering Gabapentin alone (Hasan et al., 2020).
- b. Drugs in National Formulary Contain Illicit Ingredients The drug in the formulary is not entirely free of illicit substances. For example, one of the drugs in NF that contains haram elements is a brand L drug containing Enoxaparin Sodium, where on the packaging it is written as porcine origin, meaning that it is made from pork (Ministry of Health of the Republic of Indonesia, 2019). In addition, some brands of cough syrup contain alcohol (Rahem, 2019).

# 2) Formulary Preparation Procedure

The hospital pharmacy and therapy team will review the medicines in the Nur Hidayah Hospital Formulary, then request some recommendations to the Sharia Committee until they finally get the director's approval, as stated in the following interview excerpts:

"It will be discussed later in the pharmaceutical therapy team, which is responsible for selecting and stating whether it is a drug and is necessary. Then we will ask for a recommendation from the sharia committee, and finally, ask for the director's approval." (Arrus Ferry, Personal Communication, December, 2021).

# 3) Commitment to Sharia

Nur Hidayah Hospital is an Islamic hospital that prioritizes sharia principles in its services. The following interview excerpts show the reasons for choosing Nur Hidayah Hospital as a pilot project for a sharia-certified hospital in Indonesia and the consideration of halal as a differentiator from other hospitals:

"Nur Hidayah Hospital is one of the hospitals in the pilot project of a sharia-certified hospital for classes C and D together with Sultan Agung Islamic Hospital Semarang for class B." (Arrus Ferry, Personal Communication, December, 2021).

"At Nur Hidayah, we refer to the sharia which covers pharmaceutical installations, one of which is the use of drugs. So the drugs we give to patients are strived to have a halal certificate, even though other hospitals do not require halal as a significant consideration." (Kurniawati, Personal Communication, December, 2021)

It is also reflected in the vision and mission of Nur Hidayah Hospital. The hospital's vision is "to be a professional, leading Islamic holistic hospital in Yogyakarta and its surroundings, "One of its missions is to provide health services following sharia accreditation and certification standards by prioritizing customer satisfaction."

# 4) Drug Content Screening

Nur Hidayah Hospital conducts screening on medicines by looking at Indonesian Ulema Council halal label on the packaging and looking at the composition of the drug on the brochure/leaflet. Pork and alcohol are two elements used as a benchmark for the halal drug. Therefore, the drug is not included in the formulary if the composition or packaging found alcohol and pigs. Finally, the hospital grouped the drugs according to their halal status, as stated in the following interview excerpts:

"We see on the label that there must be a halal logo. Indonesian Ulema Council halal-certified drugs in the formulary have several color codes. Green is for halal drugs, and white is for drugs that do not have a halal certificate but do not contain haram elements. There is also a red label for illegal drugs, but we do not provide such drugs." (Kurniawati, Personal Communication, December, 2021).

"We try to keep halal free from pork and alcohol. Therefore, pork and alcohol are our benchmarks in determining halal drugs. This element can be seen from the content in the information on the drug packaging." (Lacua Nugroho, Personal Communication, November, 2021).

In 2019, Nur Hidayah Hospital classified drug formularies based on halal status, which is symbolized by the color codes below:

- a. Green for medicines with halal certification from Indonesian Ulema Council, marked by the presence of halal labels on drug packaging.
- b. Red for drugs containing banned substances, i.e., alcohol and pork.
- c. White for medicines without a halal certificate from Indonesian Ulema Council, but no ingredients are forbidden in the composition.
- 5) Maintained at Sharia Boundaries

Nur Hidayah Hospital organizes sharia-certified hospitals following the guidelines of the National Sharia Council of the Indonesian Ulema Council and Indonesian Islamic Health Effort Council (MUKISI). The hospital established a Sharia Committee that maintains hospital activities following sharia restrictions through the policies. Sharia restrictions in the implementation of drug management include studying the content of drugs and providing recommendations by the sharia committee. Therefore, they do not stock the haram medicines in the formulary and replace drugs containing alcohol with alcohol-free ones, as stated in the following interview excerpts:

"The sharia committee, in general, has the task of fostering and supervising sick care services and all systems so that hospitals are maintained within sharia boundaries." (Lacua Nugroho, Personal Communication, November, 2021).

"However, if according to the sharia committee a drug contains illegal elements, it will not be recommended to be included in the formulary." (Tri Puji Rahayu, Personal Communication, November, 2021).

"But if there are two drugs that are the same and one of them contains alcohol while the other does not, we still choose the one that does not contain alcohol." (Arrus Ferry, Personal Communication, December 2021).

The hospital replaced alcohol-containing drugs with alcohol-free ones under sharia committee recommendations Number: 05/RSNH/S.REK/III/2018 on Replacement of Cough Medicines Containing Alcohol.

Sharia Committee is tasked with ensuring that every activity in the hospital is carried out in sharia principles (Samsudin et al., 2015). In addition, applying sharia principles in hospitals affects patient satisfaction (Abdurrokhman & Sulistiadi, 2019).

Nur Hidayah screens medicines by looking at the halal label on the packaging and the medicine's composition on the brochure/leaflet. The drugs registered and obtained halal certification will display labels on the medicine packaging. The halal label on the medicine ensures that it is free of the haram element (Khan & Haleem, 2016). Brochures or leaflets containing medicine information can be accounted for because the preparation is controlled by the Ministry of Health of the Republic of Indonesia and includes all data components (Ministry of Health of the Republic of Indonesia, 2016).

Nur Hidayah Hospital simplifies illicit medicines as a medicine containing two elements, alcohol and pork. The Fatwa of the Indonesian Ulema Council No. 30 of 2013 on medicine does not explicitly explain what ingredients on medicines are considered unclean and haram (Indonesian Ulema Council, 2013). Although, some illicit components exist in the pharmaceutical industry, such as pigs, alcohol, gelatin from prohibited animals, and active ingredients from human organs such as human hair keratin and human placenta (Putriana, 2016). Alcohol derived from non-*khamr* industrial products is acceptable in medicinal products if it is not harmful medically. However, the use of alcohol derived from the *khamr* industry is prohibited (Indonesian Ulema Council, 2009). Alcoholic beverages classified as *khamr* contain at least 0.5% ethanol ( $C_2H_5OH$ ). Alcoholic beverages classified as *khamr* are unclean and haram (Hani, 2020). Nur Hidayah Hospital chose to avoid using drugs that contain alcohol, even in small amounts, because there are similar drugs that do not contain alcohol.

The provision of halal color codes in the formulary follows the operational standards of sharia hospitals compiled by DSN-MUI No. 107/DSN-MUI/X/2016. One of the requirements for operating a hospital based on sharia principles is to have a formulary document accompanied by a drug code containing prohibited substances from the National Sharia Council of Indonesian Ulema Council and Indonesian Islamic Health Effort Council (Dewan Syariah Nasional, 2017).

#### 3.2. Halal Label Medicine Limited

Halal medicines have not been widely available. Therefore, this theme is formed from three categories:

1) A Scant Amount of Halal Medicine

Medicine that already has a halal certificate is still few, as stated in the following interview excerpts:

"Indeed, until now, there are not too many halal certificates for drugs." (Kurniawati, Personal Communication, December 2021)

"So not many drugs have been labeled halal by Institute for the Study of Food, Drugs, and Cosmetics Indonesian Ulema Council. This hospital of the many hundred, clearly labeled halal, seems only about tens. The thirties, it seems." (Tri Puji Rahayu, Personal Communication, November, 2021).

Green code medicines account for 29 (6.5%) of the total number of medicines in the Nur Hidayah Hospital Formulary. It is summarized in Figure 1.



Figure 1. Percentage of Green, White, and Red Code Medicines in Nur Hidayah Hospital Formulary

#### 2) Halal Medicine Mostly are Herbs

Halal-certified drugs widely sold are herbal medicines not commonly used for treatment in hospitals, such as eucalyptus oil. There are 91 products with a halal certificate on the Halal product list issued by LPPOM MUI No.147/2021, of which 34 (37.3%) are herbal medicines in the form of scrub oil that is rarely used for hospital treatment (Indonesian Ulema Council, 2021).

# 3) Without Certificate is not Necessarily Haram

Medicines without halal certificates do not necessarily contain haram ingredients or elements, as stated in the following interview excerpts:

"Medicines that are not Indonesian Ulema Council certified are not necessarily illegal. Moreover, there are still many choices." (Arrus Ferry, Personal Communication, December, 2021).

The use of medicines with halal certification in Nur Hidayah Hospital is still rare. The Hospital Formulary contains 29 halal-certified drugs, of which 22 are used topically on the skin. As stated in the Indonesian Ulema Council Fatwa No. 30 of 2013, "The use of drugs that are unclean or haram for external treatment can be used on condition that they are clean." In contrast to drugs consumed and entering the body, they must be free from haram elements except in an emergency.

Medicines with a halal label are still not widely used because the number of drugs with halal certification in Indonesia is still not much (Rahmah & Barizah, 2020). The halal certification for pharmaceutical products in Indonesia is still difficult to realize. Pharmaceutical companies experience many obstacles in implementing halal products, especially after the following law 33 of 2014 regarding the guarantee of halal products. There are several challenges in implementing halal pharmaceutical products in Indonesia, such as; (1) The reluctance of pharmaceutical manufacturers to carry out halal certification, (2) There is a stipulation regarding the implementation of Halal Product Guarantee law and Halal Product Guarantee Agency has not yet operated, (3) Differences in halal certification between the Indonesian Ulema Council and Halal Product Guarantee Agency, (4) Raw materials for drugs are imported from abroad, (5) Transfer of authority for halal certification from Indonesian Ulema Council to Halal Product Guarantee Agency and the existence of a Halal Supervisor certification obligation. (6) Difficulty choosing production, storage, and supply chain facilities free from haram products (Herdiana & Rusdiana, 2022).

Furthermore, manufacturers must consider numerous critical halal points in drug production. The preparation, processing, handling, packaging, storage, and distribution of Halal products are all critical points. Drug raw materials must be free from prohibited products. The most common medicinal haram ingredients are pork and its derivatives. Besides pork, alcohol is also widely used in the manufacture of medicine. Halal medicines must be kept separately from pharmaceutical products that have not been proven to be halal (Rahmah & Barizah, 2020). All materials must come from approved materials and suppliers. The facilities used for production must also be from approved facilities that are guaranteed not to be made from unclean or haram materials. All manufacturing materials must be accompanied by adequate and valid documentation (Maonah & Saroso, 2018). The number of halal critical points and supporting documents needed in the drug manufacturing process must be met and paid attention to by manufacturers is also one of the factors for the small number of drugs with halal certification.

In the list of halal products issued by Institute for the Study of Food, Drugs, and Cosmetics Indonesian Ulema Council in the medicines category, there are 91 products with a halal certificate. However, 34 (37,4%) products are herbal medicines in scrub oil, rarely used for hospital treatment (Indonesian Ulema Council, 2021). The medicines that do not have a halal certificate do not necessarily contain haram elements. Therefore, Nur Hidayah Hospital continues to use medicines without halal certification if there are no prohibited or haram elements.

#### *3.3. The Use of Haram Medicines*

Drugs containing haram elements are used in an emergency or when no other drugs are available. The decision to administer medications with haram elements in Nur Hidayah Hospital is determined by an agreement between the doctor and the patient. Medicines with this haram element are given using sharia informed consent. This theme is formed into three categories:

1) Hospitals Restrict Haram Medicines

Hospitals make several efforts to limit the use of haram medicines, including the prohibition of haram drugs and the prohibition of stockpiling haram drugs, as stated in the following interview excerpts:

"Hospital efforts by not providing (illicit element drugs). The way out is for us to get away from it." (Arrus Ferry, Personal Communication, December, 2021).

"... for example, if in the packaging is written made of pork, that we do not put it into the formulary." (Lacua Nugroho, Personal Communication, November, 2021).

Drugs with a red code in the Nur Hidayah Hospital Formulary in 2019 are 0%, indicating that the formulary does not contain haram elements. In 2019, the hospital formulary did not use non-halal drugs.

2) Doctor-Patient Agreement

Drugs containing haram elements are administered only with the patient's and doctor's consent. The hospital opposes its use but will provide it if the doctor and patient agree, as stated in the following interview excerpts:

"Because doctors have clinical freedom that we can not manage, the doctor has his clinical considerations for the patient. There is an L drug that, according to the doctor, is safer for kidney failure patients. It contains elements of pigs." (Tri Puji Rahayu, Personal Communication, November, 2021).

*"It (the use of haram medicines) becomes the personal responsibility of the doctor and his patients."* (Arrus Ferry, Personal Communication, December, 2021).

Nur Hidayah Hospital has obtained sharia informed consent for L drugs containing pig elements. The sharia informed consent includes information on the medicine's name and component; there is also a statement from the informant and the information recipient and drug administration approval. In addition, there is a patient's signature as the information recipient, the hospital as an informant, and a witness.

3) Sharia Informed Consent for Haram Medicines

Hospital once gave drugs with haram elements at Nur Hidayah Hospital. The use of medicines with this haram element is done using sharia informed consent. Sharia informed consent at Nur Hidayah Hospital was used three times in the period 2016–2019, as stated in the following interview excerpts:

"Well, if the doctor still wants to use it (the drug), we use sharia informed consent" (Tri Puji Rahayu, Personal Communication, December, 2021).

"Ever existed and used. Lovenox drug contains pigs. If it should be given, we use informed consent. It has been used several times, not often. Last time two patients in 2016 and one patient in 2019." (Kurniawati, Personal Communication, December, 2021).

The use of sharia informed consent in the provision of drugs containing haram elements is one of the instruments in the Sharia Standard of Drug Services of sharia hospital certification.

Nur Hidayah Hospital's halal medicine organizers once used drugs containing prohibited ingredients. The drug is L-branded and contains Enoxaparin Sodium, an anticoagulant that dilutes and prevents blood clots. The drug is used in cases of cardiovascular disease. Enoxaparin Sodium is one of the drugs listed in the national formulary drug list. On the packaging of the drug L, there is a porcine origin writing that has the meaning of the essential ingredients of the drug made from pork (Ministry of Health of the Republic of Indonesia, 2019).

The administration of the drug to the patient is the clinical authority of the doctor. The responsibility of doctors as a profession in the implementation of professional duties in health is based on the burden of doctors' ethical norms and legal obligations based on the provisions of civil, criminal, and administrative law. It includes doctors' responsibility and authority according to their profession's knowledge to choose the most appropriate medicine for patients (Fadhli & Anisah, 2016). Doctors at Nur Hidayah Hospital several times prescribed L drugs because they believed it was the best drug for the patient's condition. The hospital disowned the decision to use the haram drug and handed the decision to the doctor and the patient.

Islam recognizes every difficulty its followers face by providing alternative solutions (*rukhshah*) to difficult sharia implementation. *Al-masyaqqatu-tajlibu-attaisir* is one of the rules that explain this. The rule is an important foundation that explains why there is leniency in implementing sharia law when certain situations and conditions make it difficult (Sahari, 2020). For example, according to that rule, it is permissible to consume the haram substance in a life-threatening situation where failure to do so will result in death. As a result, haram drugs are permitted in emergency or life-saving situations. However, clear guidelines are still required in these emergency and life-saving situations (Herdiana & Rusdiana, 2022). Meanwhile, at Nur Hidayah Hospital, a doctor's opinion is used to determine whether or not a condition is life-threatening.

Sharia informed consent must be used when administering medicines containing haram elements, following drug service sharia standards. Informed consent is the patient's or immediate family's approval of medical actions after receiving a full explanation of the medical action performed by health workers (Moein, 2018). In informed consent, the patient receives information and agrees that the administered drug contains haram elements. Sharia informed consent includes information on the name and components of the medicine, a statement from the informant and the information recipient, and drug administration approval. As the information recipient, there is a patient's signature, the hospital as an informant, and a witness. In addition, the informed consent information contains the hospital's commitment to providing halal medicine, the law in the form of an emergency that requires the use of drugs with illicit content, and the absence of other preferred drugs for patient therapy.

In the last four years (2016-2019), Nur Hidayah Hospital has obtained informed consent three times for administering L drugs. However, the limited use of this drug indicates that administering medicines containing haram elements is not done regularly at Nur Hidayah Hospital and is only given in certain emergencies under the doctor's supervision.

# 3.4. Compromise Results in a Middle Ground

Due to the limitations of hospitals as end-users, the Indonesian Ulema Council certification process for hospital pharmacy in Nur Hidayah Hospital is a constraint. As a result, the hospital cannot guarantee drug-making operations whether haram elements are used, and Indonesian Ulema Council cannot issue pharmaceutical certification. The Indonesian Ulema Council then provides a middle ground to provide pharmaceutical certification. Manufacturers are asked to make a commitment or a statement that they will not use banned elements in the manufacturing process.

1) Hospital as an end-user

As stated in the following interview excerpts, the hospital, as an end-user, cannot ensure the drugmaking process:

"We, as end users, have no idea how a drug is manufactured." (Arrus Ferry, Personal Communication, December, 2021).

"Because we, as users, do not know how the process of making it, tangent with pigs or other illicit goods, the machine, works." (Lacua Nugroho, Personal Communication, November, 2021).

# 2) Difficulty in Pharmaceutical Certification

Halal Pharmaceutical Certification remains difficult to obtain in hospitals because of the limitations of hospitals as users. However, unlike nutrition installations, hospitals can track the production of nutritional products such as food and ensure halal status in the materials and tools used, as stated in the following interview excerpts:

"The drug is more difficult to obtain. It differs from the nutrition installation because we are the only ones who use it. We make nutrition installations so that getting a halal certificate is easier." (Lacua Nugroho, Personal Communication, November, 2021).

"Then we present this problem to Institute for the Study of Food, Drugs, and Cosmetics Indonesian Ulema Council. We cannot determine whether or not medicines that do not bear a halal label are halal. Indonesian Ulema Council requests a chart of the manufacturer's production process demonstrating that the haram element is not used in the manufacturing process. We are attempting to contact the principal, but no one is responding." (Tri Puji Rahayu, Personal Communication, November, 2021).

#### 3) Pharmaceutical Companies Statement

Due to hospitals' inability to create flow charts of drug manufacture, which is the manufacturer's authority, there is a middle ground in the form of statements or commitments from manufacturers stating that the manufacture of drugs does not use haram elements. However, pharmaceutical companies are still finding it difficult to provide this halal production commitment, as stated in the following interview excerpts:

"The agreement is not required until the drug manufacturers provide a production flow chart; however, they are required to provide a halal commitment that the drugs they sell properly do not contain haram elements. That sort of thing, however, is still difficult to give until now." (Tri Puji Rahayu, Personal Communication, November, 2021).

"Their company's secret is the drug's production. It is acceptable if it is reviewed by halal-certified manufacturers so that their drug will have halal certification. They would have objected if they had given it to the other party. The attachment requested by Indonesian Ulema Council was a promise not to provide medicines containing prohibited ingredients. That is what we cannot do. As a result, we expect pharmaceutical companies to be aware of the importance of Indonesian Ulema Council." (Arrus Ferry, Personal Communication, December, 2021).

Halal status in the manufacturing process is entirely up to drug manufacturers. However, the halal product guarantee requires halal certification of products in Indonesia under Halal Law No. 33 of 2014. The law requires that all products sold in Indonesia and the machinery and equipment used in product processing have halal certificates. To obtain halal certification, pharmaceutical companies must ensure that the final products, equipment, and raw materials (processed materials, additives, and processing aids) used in production adhere to sharia law (Faridah, 2019).

In addition, Law No. 33 of 2014 regulated that if the company produces non-halal drugs, it must have two separate factories in different locations. Furthermore, pharmaceutical companies must only register 'foreign' to the Halal Assurance Regulatory Agency before marketing and distributing halal-certified imported products from other countries (Rahmah & Barizah, 2020).

The halal label on drug packaging and halal certification on medicine are the only guarantees that the drug used has been inspected and verified by an authorized body to be halal in raw materials and manufacturing processes. However, halal certification on pharmaceutical products, such as medicines, is still scarce and complicated, particularly in the drug manufacturing and marketing industries (Rahmah & Barizah, 2020).

Article four of Law No. 33 of 2014 states that "all products entered, distributed, and traded in Indonesia must be halal certified." In Indonesia, all products, including pharmaceuticals, must have a halal certificate. At the same time, most pharmaceutical products are therapeutic drugs used in hospitals without a halal certificate. The percentage of medicines with halal certificates in the Nur Hidayah Hospital Formulary is 6.5% of the total number of drugs in the formulary.

Pharmaceutical companies in Indonesia do not fully support halal certification. Due to the drugs currently on the market being made from halal materials, the Pharmaceutical Companies Association has called for the revocation of halal certification on medicines, as stated in Law No. 33 of 2014. In addition, some are made with illegal substances. As a result, if halal drug certification is required, manufacturers will face difficulties producing the drug (Salama, 2017). Pharmaceutical industry groups are also concerned about the rising cost of necessities due to the halal certification requirement.

For example, reprinting packaging with halal labels and a halal certificate that must be updated regularly incur costs (Rahmah & Barizah, 2020).

The halal certification process for a hospital's halal pharmacy is constrained by the hospital's role as an end-user or consumer. The hospital does not know the process of making the drug and cannot ensure no haram substances are involved. To obtain halal certification, the companies must ensure that haram materials are not contaminated in all aspects of the manufacturing process, such as materials, equipment, and everything that meets the product (Faridah, 2019). As a result, obtaining halal certification in hospital pharmacies is difficult.

As a result, the manufacturer commits or makes a statement that the drug product does not contain the prohibited ingredients. The halal commitment guarantees that pharmaceutical manufacturers will not use haram substances or tools to manufacture their products. However, publishing this halal commitment remains difficult. The difficulty in obtaining a halal commitment from pharmaceutical manufacturers is an obstacle that Nur Hidayah hospital faces in obtaining halal pharmaceutical certification.

## 4. Conclusion

The medicine selection process in Nur Hidayah Hospital has implemented sharia principles, but the number of medicines with halal labels is still limited. Haram ingredients have been used in medicine with doctor-patient agreements based on sharia informed consent. Due to hospital limitations as an end-user who cannot ensure how the medicine manufacturing process is carried out, halal statements from drug manufacturers are required. The halal statement will help the hospital implement a halal lifestyle.

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