[HP#111]

## Perception of Halal Pharmaceuticals among State Hospital Outpatients in Perlis, Malaysia

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#### ABSTRACT

Halal pharmaceuticals is an essential element in *Shari'ah* compliance hospitals. With the emergence of COVID-19 vaccines, Halal status has become a debate. The study aimed to explore the perception of halal pharmaceuticals among hospital outpatients. A qualitative in-depth interviews were conducted among adult Muslim outpatients collecting their medications. A Malay semi-structured interview guide was prepared and underwent content trustworthiness by experts. Subjects were recruited in the waiting area of outpatient pharmacy. Interview sessions were audio-recorded and transcribed verbatim. The transcripts were back translated in English and analysed using thematic content analysis. Ten outpatients were interviewed in which data saturation was reached. Overall, the patients were proactive in observing the label to ensure they received the correct medications. However, all patients were unfamiliar and not curious on the concepts of 'halal pharmaceuticals' and '*Shari'ah*-compliant hospital'. The patients also trusted that the government would provide only the safest and halal medicines. Most patients did not prioritise halal status while choosing their medicines. However, if options were available, most would choose halal medication regardless of its price and effectiveness. They still would consent to receive non-halal treatments for life-saving conditions. There was a good perception despite non-familiarity with halal pharmaceuticals.

Keywords: Islam; Exploratory behaviour; Trust; Pharmaceutical preparations; Halal

#### 1 Introduction

Halal pharmaceuticals have been expanded globally. This is especially true for Malaysia as a Muslim-majority country and a leading global Halal Hub. Halal comprises both safety and trustworthy elements, especially in *Shari'ah*-compliant hospitals.

Patients have consumer rights, especially the right to information despite not everyone having the same knowledge and awareness of halal pharmaceuticals. There is a limited study on this aspect in Malaysia. There is only one study on the knowledge, attitude and practice of general public towards halal pharmaceuticals in Penang, Malaysia [1].

Halal pharmaceuticals also raised many doubts, especially recently on the COVID-19 vaccines. For example, a general practitioner spread false news that the CoronaVac vaccine contains pig's blood in the state of Perlis, Malaysia [2]. Hence, our study aims to explore



perception of halal pharmaceuticals among outpatients of Hospital Tuanku Fauziah, the state hospital of Perlis, Malaysia.

#### 2 Materials and Methods

A qualitative study was conducted through face-to-face in-depth interviews from August 2021 to April 2022 among adult Muslim patients who collected their medications in the outpatient pharmacy. Outpatients taking medicines using express pharmacy value-added services such as call-and-collect, park-and-take and those unable to communicate in Malay or English were excluded. A semi-structured interview guide was prepared and underwent content trustworthiness with the State Mufti, a Malaysian pharmacy professor, two pharmacists with a special interest in halal pharmaceuticals and Islamic Affairs Officers from the Ministry of Health Malaysia and the hospital. Potential candidates were recruited by purposive sampling through information-rich cases concerning the phenomenon of interest. In this case, patients of various sociodemographics and medical conditions. Potential subjects were screened based on the prescriptions collected and were approached in the waiting area to collect their medications. Those interested were invited to a pharmacy counselling room. Interview sessions were audio-recorded and transcribed verbatim. The transcripts underwent member-checking by emailing participants to check for accuracy and resonance with their experiences. All transcripts were back-translated into English. The transcripts were analysed by thematic content analysis independently by all investigators [3]. All the discrepancies were resolved by consensus.

#### 3 Results

Data saturation was achieved at the tenth interview. The interview lasted 30-60 minutes for each session. Most were elderly, male, having secondary education, retiree or self-employed, and under medical clinic follow-up for about 10 years (Table 1). Four themes emerged.

Patient	Age	Gender	Education level	Occupation	Clinic: No. of medicine prescribed	Treatment duration (year)
P1	72	М	Diploma	Teaching assistant	Medical:11	20
P2	38	М	Secondary	Operation assistant	Medical: 7	4
P3	51	Μ	Secondary	Self-employed	Medical:7	6
P4	66	F	Primary	Housewife	Medical:9; Ortho.:7; Skin:6	11
P5	55	Μ	Secondary	Police officer	Medical:7	3
P6	60	F	Degree	Ex-teacher	Medical:8; Psy:1	19
P7	76	М	Primary	Self-employed	Medical:7	5
P8	65	М	Secondary	Retired clerk	Medical:8; Surgical:1; Ortho:4; ENT:3; Skin:6	6
P9	52	F	Degree	Teacher	ENT:3	3
P10	52	F	Degree	Nurse	Medical:9; Derma:6; ENT:1	25

**Table 1:** Sociodemographics and conditions of patients

#### **3.1** Experience with Medicines

Most respondents were well-versed in their medication.

*"First is I look at the name of the medicines and expiry date ..... I will look in the internet any effects from that medicines." (P1)* 

Some were particular about the expiry date due to bad experiences.

"When buying from the pharmacy, there are some incidents that they mistakenly sell expired medicines....." (P5)

Respondents had the confidence to self-purchase after doctors' recommendations besides prescribed medicines.

"The two medications that I bought from a pharmacy are suggested by the doctors...."(P6)

#### 3.2 Concept of Halal Pharmaceuticals and Shari'ah Compliant Hospital

Most had not heard of 'halal pharmaceutical' and 'Shari'ah compliant hospital'.

"I never know about these terms." (P10)

Those who have heard based their understanding on the word halal itself.

*"From the process of making to finish, it needs to follow Islamic procedures, halal." (P1) "Similar to halal food. Since both of them go inside our body." (P10)* 

#### 3.3 Confidence in Halal Medicines

Most respondents were confident about the halal status of their medicines, as long as they are provided by the government

"For that, we assume it's under government because they are the ones that supply it...." (P1)

"If MOH wants to bring the drugs into use, they must have referred to any religious department...." (P3)

"If the medicines from public hospital, I thought of it as halal." (P6)

"Never thought about safety. I believe in the public hospital...." (P8)

## 3.4 Acceptance of Halal Medicines and Vaccines

Only one respondent (P3) did not accept any non-halal treatment while others agreed with life-saving conditions.

"If it was not for life-saving and other options are available, I would reconsider." (P2)

"I agree since it falls under an emergency state ." (P5)

Patients chose halal medicines over affordability and effectiveness provided it is nonemergency.

"It will depend on our condition, if we are in critical condition, I will choose the more effective one. If we can still tolerate the disease, I will choose the halal one." (P10)

"Would choose haram but more effective." (P2)

All patients had taken the second and third doses of the COVID-19 vaccine regardless of halal status. A patient will not take it if the vaccine is not halal. Only a fraction would like to receive the fourth dose of the COVID-19 vaccine.

"I never thought about the halal status of the vaccine. If it is mandatory in my working place, then I have no choice." (P2)

## 4 Discussion

Patients expressed concern about taking medications if they had bad experiences in the past [4]. In contrast, a study in Penang, Malaysia [1] found about 91.2% were aware of the term 'halal medicine'. All patients trust the authority or government to only choose the safest and halal medicine. Patients said that it was the doctors' responsibility to provide information to them [5]. Government initiatives are essential to increase access to halal products including pharmaceuticals [6].

Vaccines produced from porcine origin are not permissible in Malaysia unless an urgent need. Patients preferred being informed regarding the halal status of the treatment [6]. Healthcare professionals need to acknowledge that patients make independent assessments regarding adherence to medicines [7].

## 5 Conclusions

There was a good perception of halal pharmaceuticals among outpatients in HTF although not a priority. Most let the doctors or pharmacists decide the medicines. Most accept any treatment regardless of halal status under life-saving conditions.

## **Author Contributions**

Conceptualization, WCA., A.H.B.; methodology, W.C.A.; validation, W.C.A., N.A.K., N.A.S.L.; formal analysis, W.C.A., N.A.K., N.A.S.L., A.H.B.; investigation, W.C.A.; data curation, W.C.A.; writing—original draft preparation, W.C.A, N.A.K., N.A.S.L.; writing—review and editing, W.C.A.; visualization, W.C.A.; supervision, A.H.B.; project administration, W.C.A. All authors have read and agreed to the published version of the manuscript.

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## **Institutional Review Board Statement**

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Medical Research & Ethics Committee, Ministry of Health Malaysia (NMRR-21-1548-6089 on 03 September 2021).

## **Informed Consent Statement**

Informed consent was obtained from all subjects involved in the study.

#### Data Availability Statement

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy and confidentiality concerns.

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#### References

- 1. Saleha, S.; Azmi, S.; Imran, M.; Fahad, S.; Muhammad, A. Knowledge, attitude and perception regarding halal pharmaceuticals among general public in malaysia. *Int. J Public Health* **2013**, 143-150.
- Sharif, A. Berita palsu, doktor kena denda RM5,000 [Fake news, doctor fined RM5,000]. *Berita Harian* 2021, June 23. Available online: https://www.bharian.com.my/berita/kes/2021/06/831253/berita-palsu-doktor-kena-denda-rm5000 (accessed on 1 January 2023).
- 3. Braun, V.; Clarke, V. Using thematic analysis in psychology. Qual Res J 2006, 77-101. doi:10.1191/1478088706qp0630a
- Moen, J.; Bohma, A.; Tillenius, T.; Antonov, K.; Nilsson, L.; Ring, L. "I don't know how many of these [medicines] are necessary." – A focus group. *Patient Educ Couns* 2009, 135–141.
- 5. Lorimer, S.; Cox, A.; Langford, N. A patient's perspective: the impact of adverse drug reactions on patients and their views on reporting. *Clin Pharm Therap* **2012**, 148–152.
- 6. Soraji, A. J.; Awang, M. D.; Yusoff, A. N. M. Malaysia halal trust: between reality and challenges. *International E-Journal of Advances in Social Sciences* **2017**, 3(7), 197-204.
- 7. Gordon, K.; Smith, F.; Dhillon, S. Effective chronic disease management: Patients' perspectives on medication-related problems. *Patient Educ Couns* **2007**, 407–415.