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Review Article

# Implementation of Halal Assurance Systems in Hospital Kitchens: A Systematic Literature Review

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**Abstract**

The halal assurance of food provided to hospitalized patients is an increasingly important dimension of healthcare quality in Muslim majority countries such as Indonesia, and hospital kitchens are a critical control point for halal compliance because they manage the entire food-service chain from procurement to patient distribution. This study aimed to synthesize the regulatory basis, benefits, hospital-level implementation, and market response associated with the Halal Assurance System (HAS) in hospital kitchens. A systematic literature review was conducted following PRISMA reporting principles, searching Scopus, Emerald Insight, MDPI, DOAJ, PubMed/PMC, Google Scholar, and Garuda/Sinta for publications from 2013-2025, supplemented by a hand search of Indonesian statutory and institutional documents. After screening and eligibility assessment, the qualitative synthesis included ten peer-reviewed empirical studies and one scholarly book, along with five statutory/regulatory documents and four institutional publications. The results show that Indonesia's halal assurance framework is layered across a national law, implementing government regulations, a sharia fatwa, and a ministerial technical guideline, culminating in mandatory halal certification for medium and large food business actors, including hospital kitchens, since 18 October 2024. Across the included studies, halal/sharia-based service attributes were consistently associated with patient satisfaction and word-of-mouth recommendation in cross-sectional surveys from Indonesia and Malaysia. However, evidence on food-safety outcomes and hospital competitiveness remains limited, indirect, and largely correlational. Several Indonesian hospitals, both faith-based and public, have obtained halal kitchen certification, although verifiable evidence varies by hospital. These findings suggest that HAS implementation is best understood as a regulatory-driven, market-relevant practice whose clinical and economic effects still require more rigorous, prospective research.

**Keywords** halal assurance system; halal policy; hospital; hospital kitchen; patient satisfaction

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## INTRODUCTION

As the country with the largest Muslim population in the world, Indonesia places halal assurance as one of the basic consumer needs, including in the context of healthcare services. Patients admitted to hospitals depend entirely on the food provided by the hospital kitchen, so halal assurance of food products becomes an integral part of holistic service quality, involving not only clinical aspects but also patients' spiritual and psychological needs (Kusuma et al., 2022). Hospital kitchens play a strategic role because they manage the entire food service chain, from raw material procurement, storage, and processing to distributing meals to patients three times a day, making them a potential critical point for halal non-compliance risk if not managed through a standardized system.

Attention to halal management in hospitals has increased along with the enforcement of the national mandatory halal certification requirement. After the end of the five-year transition period on 17 October 2024, all medium and large business actors producing or serving food and beverage products in Indonesia, including hospital kitchens, must hold halal certification (Badan Penyelenggara Jaminan Produk Halal [BPJPH], 2024). This policy positions the hospital kitchen no longer as a unit that voluntarily adopts a halal system, but as a unit bound by the same legal obligation as commercial food business actors.

On the other hand, implementing the Halal Assurance System (HAS) has also been shown to add value for hospitals in service quality, patient satisfaction, and competitiveness in an increasingly competitive healthcare market (Rahman et al., 2023; Windasari et al., 2023). Based on this background, this systematic literature review was compiled to answer four main questions: (1) how do government policies regulate the implementation of HAS in hospitals, particularly in hospital kitchen; (2) what are the benefits of implementing a halal management system in hospitals; (3) which hospitals have implemented such a system; and (4) how does the market respond to the existence of halal hospitals.

Despite this growing attention, most existing studies on halal-related hospital services examine patient satisfaction, loyalty, or consumer preference toward sharia-based hospitals as a whole. At the same time, empirical evidence that isolates the specific contribution of hospital kitchen HAS implementation, as distinct from broader sharia-hospital branding, remains scarce and dispersed across disciplinary silos health services, food science, and Islamic marketing that rarely cite one another. No prior review has systematically synthesized the Indonesian regulatory basis for HAS in hospital kitchens alongside the empirical evidence on its benefits, its documented adoption by named hospitals, and market response, nor has any prior review made explicit how strong the underlying evidence is for each of these claims. This review addresses that gap by systematically mapping and critically appraising the available scientific, regulatory, and institutional evidence on HAS implementation in hospital kitchens, and by explicitly distinguishing what is empirically well-supported from what remains asserted but not yet rigorously tested.

## MATERIALS AND METHODS

**Materials.** This review used three source categories, each with a distinct search and appraisal procedure. The first category comprised peer-reviewed scientific literature indexed in Scopus, Emerald Insight, MDPI, DOAJ, PubMed/PMC, Google Scholar, and Garuda/Sinta. The second category comprised Indonesian statutory and regulatory documents, laws, government regulations, and National Sharia Board (DSN-MUI) fatwa related to halal product assurance,

identified through the official websites of relevant government and religious authorities. The third category comprised institutional and official web-based publications documenting hospital-level implementation of the Halal Assurance System (HAS) in hospital kitchens, retrieved from halal certification/inspection bodies and hospital websites. This review reports and appraises these three categories separately (Table 1; Table 2), so it does not conflate peer-reviewed empirical evidence with regulatory text or institutional self-reporting. The publication period was limited to 2013-2025 for the peer-reviewed literature, prioritizing 2016-2025, except for statutory and regulatory documents that constitute the primary legal basis and are cited regardless of date.

**Methods.** The peer-reviewed literature search used six keyword combinations: “hospital halal assurance system”, “halal kitchen”, “halal management hospital”, “sharia hospital food service”, “halal healthcare”, and “Muslim-friendly hospital”, applied to titles, abstracts, and keywords. This review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) reporting framework. Figure 1 shows the flow of records through identification, screening, eligibility, and inclusion. The search identified 42 unique records after removing 8 duplicates. Titles and abstracts of the 34 remaining records were screened against the inclusion criteria: (1) empirical peer-reviewed articles addressing halal management, halal certification, or sharia-based services in a hospital or healthcare setting; (2) laws, regulations, and official fatwas related to halal product assurance; and (3) official institutional publications documenting HAS implementation in hospital kitchens. Records were excluded when they addressed halal-industry topics unrelated to hospitals or healthcare (e.g., general halal food-chain, tourism, or MSME certification studies), were opinion pieces or conceptual models without empirical or official supporting data, or were duplicate sources; 19 records were excluded at this stage. The full texts of the remaining 15 records were assessed for eligibility, of which 5 were further excluded (3 because the full text could not be retrieved for verification within the review period, 1 because it substantially duplicated the sample and findings of an already, included study, and 1 because the source journal's peer-review status could not be confirmed), leaving 10 peer-reviewed empirical studies for the qualitative synthesis. Because a single reviewer conducted this review, all screening decisions were rechecked in a second pass after a two-week interval against the predefined criteria above to reduce inconsistency; this single-reviewer limitation is acknowledged in the Conclusions.

**Quality Assessment.** The methodological quality of the ten included empirical studies, all of which used cross-sectional survey or case-study designs, was appraised using the Mixed Methods Appraisal Tool (MMAT) criteria for quantitative descriptive/correlational studies (clear research question, appropriate measurement, adequate sample, and appropriate statistical analysis relative to the study design). Institutional and web-based sources were appraised using the AACODS checklist for grey literature (Authority, Accuracy, Coverage, Objectivity, Date, Significance). Overall, the included empirical studies were judged to be of moderate quality: all used validated or adapted survey instruments and reported inferential statistics, but all relied on cross-sectional, self-reported data from a single country or a small number of hospitals, so causal inference is not warranted. This appraisal is summarized in Table 1.

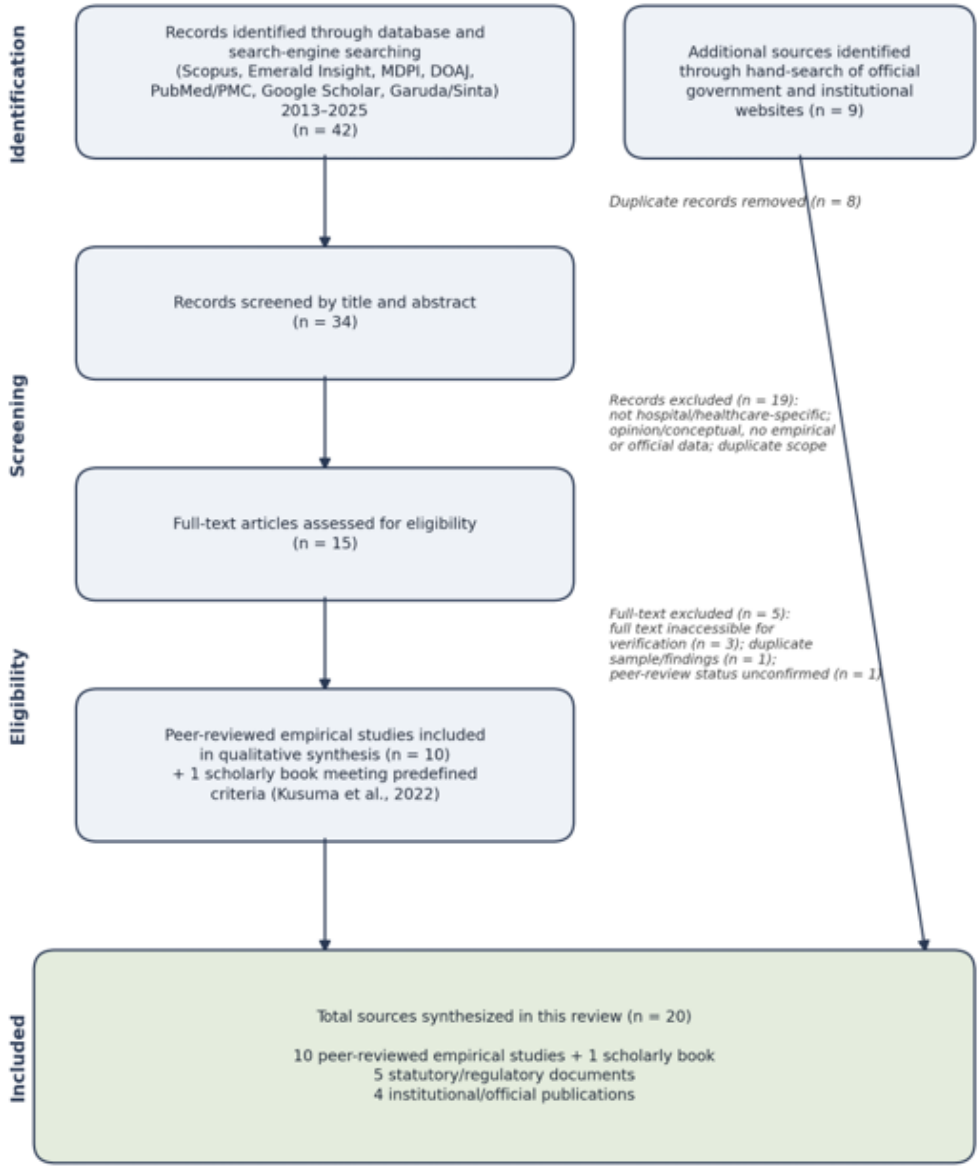


**Figure 1.** PRISMA flow diagram of the literature search and study selection process.

**Table 1.** Characteristics and quality appraisal of studies included in the qualitative synthesis.

| Author (Year) | Country | Study Design | Population / Context | Key Findings Relevant to HAS/Halal Assurance | Quality Appraisal | Key Limitations |
|---|---|---|---|---|---|---|
| Kusuma et al. (2022) | Indonesia | Book (practice-based, non-empirical) | Hospital kitchen halal management | Describes the components of a halal product assurance management system (SJPH/HAS) for hospital kitchens, consistent with BPJPH's HAS 23000 standard. | Not appraised with MMAT/AACODS (definitional/framework source) | Not a primary empirical study; used only for definitional/framework context |

| Author (Year) | Country | Study Design | Population / Context | Key Findings Relevant to HAS/Halal Assurance | Quality Appraisal | Key Limitations |
|---|---|---|---|---|---|---|
| Zailani et al. (2016) | Malaysia | Cross-sectional survey, SEM | International Muslim medical tourists at Malaysian hospitals | Halal-friendly service attributes significantly predicted medical tourists' satisfaction with Islamic-friendly hospitals. | Moderate (MMAT) | International medical-tourist sample; may not generalize to domestic inpatients or to foodservice specific HAS certification |
| Rahman et al. (2021) | Malaysia | Cross-sectional survey | Patients of Islamic-friendly hospitals | Reports patient satisfaction and loyalty outcomes associated with Islamic-friendly hospital service attributes. | Not fully appraised (full text not retrieved; indexing/abstract-level information only) | Verification against full text still required before firm conclusions are drawn |
| Rahman et al. (2023) | Malaysia | Cross-sectional survey, SEM (n = 309) | Muslim patients across 4 hospitals | Halal healthcare attributes and intrinsic/extrinsic value significantly associated with satisfaction ($p < .01$); satisfaction significantly associated with word-of-mouth ($\beta = 0.692$, $p < .01$). | Moderate-high (MMAT) | Cross-sectional and self-reported; cannot establish causality; single-country |
| Alqurashi & Al-Humud (2025) | Saudi Arabia | Cross-sectional case study | Hospital nutrition/food services, Al-Ahsa | Assessed food-safety practices in hospital nutrition services; relevant to the food-safety dimension of HAS but did not directly measure halal-certification status. | Moderate (MMAT) | Single-region case study; food-safety findings are not a direct measure of HAS/halal-certification effect |
| Windasari et al. (2023) | Indonesia | Consumer preference survey | Muslim consumers, prospective sharia-hospital patients | Muslim consumer preference for sharia hospitals as an alternative, with halal assurance as a differentiating factor; identifies potential medical-tourism market. | Moderate (MMAT) | Measures stated preference/intention, not actual choice, clinical outcome, or hospital revenue. |
| Alfarizi & Arifian (2023) | Indonesia | Cross-sectional survey | Patients of certified sharia hospitals | Patient satisfaction with sharia hospital services associated with loyalty and positive word-of-mouth. | Moderate (MMAT) | Single-country; does not isolate the food/kitchen-specific HAS component from the broader sharia-service bundle |

| Author (Year) | Country | Study Design | Population / Context | Key Findings Relevant to HAS/Halal Assurance | Quality Appraisal | Key Limitations |
|---|---|---|---|---|---|---|
| Ngatindriatun et al. (2024) | Indonesia | Cross-sectional survey | Patients of certified sharia hospitals | Sharia hospital service standards and patients' religiosity commitment associated with attitude and satisfaction. | Moderate (MMAT) | Sample limited to hospitals already certified/branded as sharia hospitals; self-selection likely. |
| Harun et al. (2024) | Multi-country (review) | Systematic literature review (secondary study) | Muslim-friendly hospital practices, general | Identified 8 main components and 53 sub-components as determinants of a Muslim-friendly hospital practices framework. | Not appraised with MMAT (secondary/review study); used as a methodological benchmark. | Broader scope than food/nutrition-specific HAS; overlapping evidence base with the present review |
| Fajrini et al. (2025) | Indonesia | Quantitative survey, SEM-PLS (n = 195) | Patients of 2 certified sharia hospitals (Tangerang City Hospital; RSI Sari Asih Serang) | All five sharia-hospital-standard domains were bivariately associated with satisfaction; only the facilities domain remained significant in multivariate analysis. | Moderate-high (MMAT) | Two hospitals only; purposive sampling limits generalizability |
| Hossain et al. (2026) | Not confirmed (medical-tourist setting) | Cross-sectional survey | Muslim medical tourists | Gender-sensitive care, halal-medication awareness, staff professionalism, and price sensitivity associated with patient attitudes and well-being. | Not fully appraised (full text not retrieved; indexing/abstract-level information only) | Verification against the full text is still required; the medical-tourist population differs from general inpatients. |

Beyond the ten peer-reviewed empirical studies and the book by Kusuma et al. (2022), we included five statutory/regulatory documents and four institutional/official publications, identified through the hand-search described above rather than the database search, to inform the discussion of government policy and hospital-level implementation. These sources are identified explicitly by type throughout the review (see reference list) and are not treated as equivalent in evidentiary weight to the peer-reviewed studies. The selected peer-reviewed literature was analyzed thematically using a qualitative synthesis approach, comparing findings across studies for consistency, and grouped into four discussion themes: government policy, benefits of implementation, implementation practices, and market response.

## RESULT AND DISCUSSION

Before presenting the synthesis, this review defines three related terms and uses them consistently throughout to avoid conflation, a concern raised repeatedly in the appraised literature. Jaminan Produk Halal (JPH, halal product assurance) is the overarching Indonesian

legal concept, established by Law Number 33 of 2014, that all products circulating in Indonesia be halal-assured. Sistem Jaminan Produk Halal (SJPH, the halal product assurance system) refers to the internal management system, encompassing halal policy, a halal management team, training, and internal audit, that a business actor, including a hospital kitchen, must establish and operate to fulfill the JPH obligation. The Halal Assurance System (HAS) is used in this review, consistent with most of the English-language literature cited and with BPJPH's own technical standard document (known as HAS 23000), as the English equivalent of SJPH at the level of an individual business unit such as a hospital kitchen; it is not synonymous with halal certification (the formal certificate issued upon successful HAS/SJPH audit), nor with the broader adoption of sharia-based hospital services under DSN-MUI Fatwa No. 107/DSN-MUI/X/2016, which additionally covers contracts, medication management, and patient-privacy provisions beyond food. Throughout this review, "halal certification of the hospital kitchen" refers specifically to the food-service scope, and is distinguished from a hospital's broader self-identification as a "sharia hospital."

**Government Policy on Halal Product Assurance in Hospitals**

Indonesia's regulatory framework for halal product assurance is layered, starting with a law as the legal umbrella, a government regulation as the implementing rule, a fatwa as the religious-technical guideline, and a ministerial regulation as the operational guideline for nutrition services. The primary legal basis is Law Number 33 of 2014 on Halal Product Assurance (Jaminan Produk Halal, JPH), which requires products circulated and traded within Indonesian territory, including processed food products, to be halal certified (Republic of Indonesia, 2014).

The implementing provisions of this law are regulated through Government Regulation Number 39 of 2021 on the Administration of Halal Product Assurance, which governs, among other things, the certification of a business actor's Sistem Jaminan Produk Halal (SJPH), and which was subsequently updated by Government Regulation Number 42 of 2024 (Republic of Indonesia, 2021, 2024). Both regulations govern the certification mechanism, the transition period for the obligation, the self-declaration scheme for micro and small enterprises, and administrative sanctions ranging from written warnings to the withdrawal of products from circulation for business actors who fail to comply. The five-year transition period, which began on 17 October 2019, ended on 17 October 2024, so that since 18 October 2024, three product categories : food and beverages, raw materials and food additives, and products resulting from slaughter produced by medium and large business actors are required to be halal certified (BPJPH, 2024). Hospital kitchens that process and serve food to patients fall within the scope of this obligation, as evidenced by the wave of halal certifications obtained by hospital kitchens ahead of the deadline (LPH-KHT Muhammadiyah, 2024).

In addition to the national legal framework, hospitals that adopt a sharia concept are also subject to Fatwa No. 107/DSN-MUI/X/2016 of the National Sharia Board of the Indonesian Ulema Council on Guidelines for Hospital Administration Based on Sharia Principles. This fatwa regulates various aspects of sharia-based hospital services, from contracts between the hospital and patients and suppliers, medication management, and the protection of patient privacy and dignity, to the obligation to guarantee the halal status of all food served (Majelis Ulama Indonesia, 2023). At the operational level, Regulation of the Minister of Health Number 78 of 2013 on Guidelines for Hospital Nutrition Services serves as the basic reference for the administration of nutrition services, providing the framework within which halal assurance criteria, including the

BPJPH's HAS 23000 standard, are applied across the entire food service chain, from halal policy, the halal management team, and training, to raw materials, internal audits, and management review (Ministry of Health of the Republic of Indonesia, 2013; Kusuma et al., 2022).

The synchronization among these four policy instruments shows that implementing HAS in hospital kitchens is not merely an internal hospital initiative, but the result of a national regulatory framework that mutually reinforces legal, religious, and technical health aspects.

**Benefits of Implementing a Halal Management System in Hospitals**

Across the ten empirical studies included in this review (Table 1), the reported benefits of HAS/sharia-based service implementation cluster into four dimensions, but the strength of evidence differs substantially across them.

First, the clinical spiritual dimension is the least directly tested empirically in the included literature. Kusuma et al. (2022) argue conceptually that halal assurance supports patients' therapeutic process by providing peace of mind that may contribute to dietary compliance, but none of the ten empirical studies in this review directly measured clinical or dietary compliance outcomes; this claim should therefore be read as a plausible mechanism rather than an established empirical finding, and is a clear direction for future research.

Second, the evidence on food quality and safety is indirect. HAS criteria overlap substantially with Hazard Analysis Critical Control Point (HACCP) principles, and Alqurashi and Al-Humud (2025) documented food-safety practices in hospital nutrition services in Al-Ahsa, Saudi Arabia; however, that study assessed general food-safety compliance rather than HAS/halal-certification status specifically, so its findings support a plausible association between halal-management practices and food safety rather than a direct, measured effect of HAS certification on food-safety outcomes.

Third, the patient satisfaction and loyalty dimension has the strongest empirical support, though it comes entirely from cross-sectional surveys. In Malaysia, halal healthcare attributes and intrinsic/extrinsic value were significantly associated with patient satisfaction ($p < 0.01$), which in turn was associated with word-of-mouth recommendation ($\beta = 0.692$, $p < 0.01$) among 309 Muslim patients across four hospitals (Rahman et al., 2023), a pattern consistent with two earlier Malaysian studies on Islamic-friendly hospitals (Rahman et al., 2021; Zailani et al., 2016). In the Indonesian context, sharia hospital service standards and patients' religiosity commitment were associated with attitude and satisfaction (Ngatindriatun et al., 2024), and satisfaction with sharia hospital services was associated with loyalty and positive recommendation (Alfarizi & Arifian, 2023). A more recent Indonesian study, however, offers a more qualified picture: across two certified sharia hospitals, all five sharia-service-standard domains were bivariately associated with satisfaction, but only the facilities domain remained significant once the domains were considered jointly (Fajrini et al., 2025), suggesting that tangible, food and facility related elements, rather than sharia service standards in general, may carry most of the explanatory weight. Consistent with this, halal-friendly service quality, including halal-medication awareness alongside staff professionalism and price sensitivity, was recently associated with patient attitudes and well-being among medical tourists (Hossain et al., 2026). However, this finding still requires independent replication. Because every one of these studies is cross-sectional and relies on self-reported satisfaction, the consistent association across several countries' samples strengthens confidence that the association is real, but none of them permit a causal claim that implementing HAS increases satisfaction; unmeasured confounders such as overall hospital service quality or a hospital's general reputation cannot be ruled out.

Fourth, for competitiveness and regulatory compliance, the evidence is largely about consumer preference rather than realized market or financial outcomes. Halal certification of the hospital kitchen is associated with more favorable Muslim consumer perceptions and a stated preference for sharia hospitals, including as a potential medical-tourism market (Windasari et al., 2023), and a broader review of Muslim-friendly hospital practices identified an extensive set of determinants relevant to this preference (Harun et al., 2024). However, none of the included studies measured actual market share, patient volume, revenue, or hospital ranking before and after HAS certification, so claims that HAS implementation improves hospital competitiveness remain inferences from stated preference rather than demonstrated commercial outcomes. Separately, and independent of any competitive benefit, compliance with the mandatory national halal-certification requirement itself reduces a hospital's exposure to administrative sanctions ranging from written warnings to product withdrawal (BPJPH, 2024), a legal-compliance benefit that does not depend on the satisfaction or market-preference evidence above.

Overall, the reviewed evidence is most consistent for the association between halal/sharia-based service attributes and self reported patient satisfaction and word of mouth, moderately consistent but less direct for food safety and consumer preference, and largely untested for clinical outcomes and realized competitive gain. This qualification matters because HAS implementation is sometimes credited with “improving” food safety, satisfaction, loyalty, and competitiveness as though these were uniformly demonstrated causal effects; the synthesis above shows that only the satisfaction loyalty association is supported by multiple, reasonably consistent studies, while the other claims rest on a single indirect study (food safety), stated preference rather than revealed behavior (competitiveness), or conceptual argument alone (clinical spiritual benefit).

**Hospitals that Have Implemented a Halal Management System**

For this review, a hospital was classified as having implemented HAS in its kitchen only where a named certifying or inspecting body (BPJPH or an accredited Halal Inspection Agency/LPH) or the hospital's own institutional publication explicitly reported that its hospital kitchen had received a halal certificate or undergone a formal HAS audit; hospitals that merely self-identify as “sharia hospitals” without a specific, dated reference to kitchen/nutrition-installation certification were not included in this list. Applying this criterion, evidence from institutional and official sources (Table 2) indicates that several hospitals in Indonesia, both faith-based and regional public hospitals, have obtained halal certification or completed HAS audits for their kitchens. The Hospital kitchen of Universitas Muhammadiyah Malang Hospital (RS UMM) obtained halal certification from BPJPH-RI in 2024, as reported by the certifying inspection body (LPH-KHT Muhammadiyah, 2024). Sultan Agung Islamic Hospital in Semarang has undergone a third HAS recertification for its hospital kitchen, according to the hospital's own institutional publication, indicating a longer certification history than a single, one-time certification (RSI Sultan Agung, 2023). Siti Khodijah Muhammadiyah Hospital and Ahmad Dahlan Muhammadiyah Hospital in Kediri obtained halal certificates for their kitchens ahead of the October 2024 national deadline, both reported by the same certifying body, LPH-KHT Muhammadiyah (2024); because this source both facilitated and reported these certifications, it is treated in this review as institutional self-reporting rather than independent verification. PKU Muhammadiyah Hospital Surakarta is also reported to have an officially halal-certified kitchen, based on the same category of institutional source. Evidence of adoption by regional government owned public hospitals is comparatively thinner in the sources retrieved for this review: Dr. Soedirman Regional General

Hospital's kitchen is reported to hold halal certification, but this review located only a secondary/institutional mention rather than a certifying body's own announcement for this hospital, so this example should be treated as indicative rather than independently confirmed.

Two limitations follow from this evidence base. First, all of the hospital examples above were identified through institutional and official web publications rather than a systematic query of BPJPH's national halal-certificate registry, so this list is illustrative of the pattern of adoption rather than an exhaustive or representative count of certified hospital kitchens in Indonesia; a full audit of the BPJPH registry is recommended for future work that seeks to quantify the extent of sectoral compliance. Second, the certifying bodies that reported several of these cases (notably LPH-KHT Muhammadiyah) also facilitated the certification itself, a routine feature of Indonesia's halal-inspection-agency system, so these reports should not be read as independent, third-party audits of implementation.

With these caveats, the pattern across the cases identified indicates that HAS adoption in hospital kitchens is not confined to hospitals that explicitly brand themselves under a sharia concept, but has extended to general public hospitals as well, consistent with the cross-sectoral scope of the national mandatory halal-certification requirement in effect since October 2024 (BPJPH, 2024).

**Table 2.** Hospitals reported implementing HAS/halal certification in their kitchens, by source type.

| Hospital | Hospital Type | Reported Status | Year | Reporting Source | Source Type |
|---|---|---|---|---|---|
| RS UMM (Universitas Muhammadiyah Malang Hospital) | Faith-based (Muhammadiyah) | Halal certified by BPJPH-RI | 2024 | LPH-KHT Muhammadiyah (2024) | Certifying/inspection body announcement |
| RSI Sultan Agung, Semarang | Faith-based (Islamic) | Third HAS recertification | 2023 | RSI Sultan Agung (2023) | Hospital's own institutional publication |
| Siti Khodijah Muhammadiyah Hospital | Faith-based (Muhammadiyah) | Halal certified (kitchen), ahead of Oct 2024 deadline | 2024 | LPH-KHT Muhammadiyah (2024) | Certifying/inspection body announcement |
| Ahmad Dahlan Muhammadiyah Hospital, Kediri | Faith-based (Muhammadiyah) | Halal certified (kitchen), ahead of Oct 2024 deadline | 2024 | LPH-KHT Muhammadiyah (2024) | Certifying/inspection body announcement |
| PKU Muhammadiyah Hospital Surakarta | Faith-based (Muhammadiyah) | Reported halal-certified kitchen officially | Not dated in source | LPH-KHT Muhammadiyah (2024) | Certifying/inspection body announcement |
| Dr. Soedirman Regional General Hospital | Regional public hospital | Reported halal-certified hospital kitchen | Not dated in source | Secondary/institutional mention (not a certifying-body announcement) | Institutional/indicative, not independently confirmed |

## Market Response to Halal Hospitals

The market-response evidence available in this review is consumer-perception and stated-preference evidence rather than revealed market behavior. Muslim consumer preference for sharia hospitals as an alternative healthcare option is reported to be growing, with halal assurance identified as a differentiating factor amid increasingly competitive healthcare services (Windasari et al., 2023); Harun et al.'s (2024) review similarly catalogues an extensive set of factors, spanning facilities, staff conduct, and food service, that shape Muslim patients' hospital

preferences, reinforcing that halal/sharia attributes are one differentiator among several rather than a single dominant driver.

On satisfaction specifically, a Malaysian study found that the intrinsic value of halal healthcare services was more strongly associated with patient satisfaction than extrinsic value. That satisfaction was consistently associated with word-of-mouth recommendation to prospective patients (Rahman et al., 2023), a pattern broadly consistent with earlier Malaysian evidence on Islamic-friendly hospitals (Rahman et al., 2021; Zailani et al., 2016). In Indonesia, patient satisfaction with certified sharia hospital services has been associated with longer term loyalty and positive recommendation (Alfarizi & Arifian, 2023), and patients' religiosity commitment has been shown to strengthen the association between sharia service standards and attitude/satisfaction (Ngatindriatun et al., 2024); however, more recent multivariate evidence indicates that, once several sharia-standard domains are considered together, tangible facility related attributes may carry more explanatory weight than the sharia framing itself (Fajrini et al., 2025). Halal-friendly service quality effects on well-being have so far been tested mainly in medical tourists rather than general inpatient samples (Hossain et al., 2026).

Taken together, these findings support a more precise, and more limited, claim than a general “positive market trend”: religiosity-based market segmentation is a plausible strategy for hospitals seeking to build loyalty among self-selected, already religiously committed patients, based on consistent cross-sectional associations across Indonesia and Malaysia, but the available studies cannot establish whether HAS/sharia branding expands a hospital's overall patient base, market share, or revenue, since none measured these outcomes directly or compared certified against non-certified hospitals over time. The acceleration of halal certification of hospital kitchens since the national mandatory requirement took effect is therefore better understood as a dual response to regulatory obligation and to a plausible, but not yet directly measured, market opportunity (BPJPH, 2024; Majelis Ulama Indonesia, 2023).

## CONCLUSIONS

Based on the ten peer-reviewed empirical studies, one scholarly book, five statutory/regulatory documents, and four institutional publications synthesized in this review, the implementation of the Halal Assurance System in hospital kitchens in Indonesia rests on a clearly documented, layered regulatory framework, comprising Law Number 33 of 2014, Government Regulation Number 39 of 2021 as amended by Number 42 of 2024, Fatwa DSN-MUI Number 107/DSN-MUI/X/2016, and Regulation of the Minister of Health Number 78 of 2013, which together mandate and technically govern halal assurance in hospital nutrition services, particularly since the national mandatory halal-certification requirement took effect on 18 October 2024.

The empirical evidence for the benefits of this implementation is uneven across dimensions. The association between halal/sharia-based service attributes and patient satisfaction and word-of-mouth recommendation is the most consistently supported finding, replicated across cross-sectional surveys in Indonesia and Malaysia, though it remains correlational. Evidence for effects on food safety and hospital competitiveness is indirect and based on stated preference rather than measured outcomes, and no included study directly tested effects on clinical outcomes. Institutional and official sources indicate that several Indonesian hospitals, both faith-based (e.g., RS UMM, RSI Sultan Agung, PKU Muhammadiyah Surakarta) and regional public hospitals (e.g., Dr. Soedirman Regional General Hospital), have

reported halal certification or HAS audits for their kitchens. However, this list was compiled from institutional self-reporting rather than an exhaustive registry audit and should be read accordingly.

Thus, implementing HAS in hospital kitchens is best characterized as a legally mandated practice that is also plausibly, though not yet conclusively, associated with improved patient experience and market positioning. This review is limited by its reliance on a single reviewer for screening and eligibility decisions (mitigated by a second, delayed screening pass), by the small and geographically concentrated evidence base (predominantly Indonesia and Malaysia), by two included sources for which full-text verification could not be completed, and by the descriptive/institutional nature of the hospital-implementation evidence. Future research should prioritize prospective or comparative designs, certified versus non-certified hospitals, or pre-/post-certification, to test whether HAS implementation causally affects clinical outcomes, food-safety performance, patient volume, and hospital revenue, and should draw on BPJPH's certification registry directly to quantify the extent of sectoral compliance across Indonesian hospitals.

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