

Narrative Review

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Patient Experience in Malaysian Dual Practice Hospitals: A Narrative Review of Expectations, Service Quality, Satisfaction, and Revisit Intention

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ABSTRACT

Introduction: Dual practice is the concurrent provision of both public and private healthcare services within a public hospital, aiming to enhance specialist retention and generate revenue. Despite its global implementation, there is limited evidence on how patients perceive service quality, their satisfaction, and their intention to revisit within dual practice settings. This narrative review explored the literature on patients' experiences of hospital care, particularly in dual practice hospital settings. **Methodology:** A literature search was conducted across three online databases: PubMed, Web of Science, and Scopus, employing a comprehensive search strategy combining MeSH terms and text words that are related to "expectations", "hospital service quality", "patient satisfaction", and "revisit intention". Relevant English articles published from 2000 to 2025 were included in this review. **Results:** There was limited literature found for a specific dual practice hospital context, the scope of included studies was expanded to include general hospital care settings. This narrative review examines how patients' expectations, perceptions of service quality, satisfaction, and revisit intention interact to shape their overall experience, with a focus on the Malaysian dual practice context. Patients' expectations, often influenced by prior experiences, communication, and the healthcare environment, play a crucial role in determining satisfaction and loyalty. The paper also examines relevant measurement tools. **Discussion:** There are limitations in the available measurement tools in their local validation and adaptation. It is crucial to implement culturally grounded, person-centred instruments for capturing patient perspectives within Malaysia's evolving hybrid healthcare system. **Conclusion:** Strengthening how these constructs are measured can improve quality monitoring that balances fairness between public and private patients while supporting the sustainability of dual practice.

Keywords: Dual practice, Rakan KKM, service quality, patient expectations, satisfaction, revisit intention, Full Paying Patient

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1. Introduction

Dual practice is the concurrent provision of public and private healthcare services within public hospitals (Fadzil et al., 2022; Mueller & Socha-Dietrich, 2020). Practically, this refers to public hospitals with systems that allow their healthcare workers, typically medical specialists, to engage in private practice within their facilities. Globally, this concept is implemented in many countries, including those with health systems similar to Malaysia's, such as Australia, the United Kingdom, France, and Ireland (Mueller & Socha-Dietrich, 2020) with the main objectives generally to retain medical specialists through opportunities for private practice within familiar settings and to increase revenue for hospitals (Mueller & Socha-Dietrich, 2020).

In Malaysia, the dual practice has been implemented by the Ministry of Health (MOH) since 2007 when Hospital Putrajaya and Hospital Selayang were the pilot hospitals to offer private health service via the "Full Paying Patient (FPP)" service (Fadzil et al., 2023). The FPP service was part of a specialist retention package. It was hoped that senior specialists would be more inclined to stay within the public service through private practice opportunities in familiar settings (Fadzil et al., 2023). Through the FPP service, patients can be treated by a specialist of their choice and be admitted to first-class facilities where available. Patients would be charged fully, without subsidy, for the FPP service (Rassip et al., 2023). The FPP service was expanded in 2015 to include eight more hospitals throughout Malaysia: Hospital Ampang, Hospital Serdang, Hospital Pulau Pinang, Hospital Queen Elizabeth II, Pusat Jantung Sarawak, Hospital Sungai Buloh, Hospital Sultanah Aminah, and Hospital Sultan Ismail (Rassip et al., 2023). Currently, there are 10 dual practice MOH hospitals.

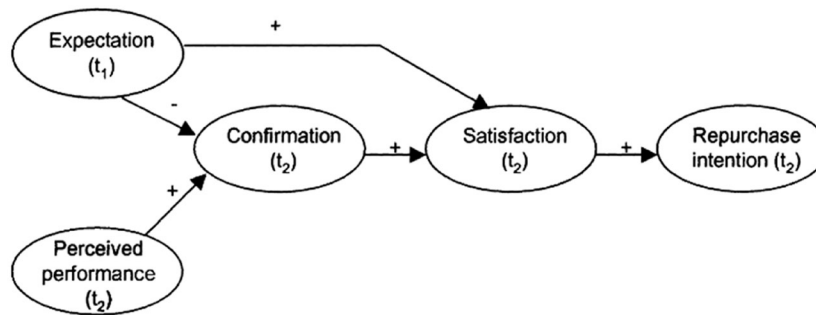
The health minister recently announced "Rakan KKM", the new brand of dual practice hospitals in Malaysia. Rakan KKM is designed to enhance the current FPP service in terms of implementation, governance system, and financial flow. It aims to strengthen the administrative shortcomings of the FPP service (Ahmad, 2024), focusing beyond merely retaining specialists to also generating MOH revenue to face the challenge of increasing healthcare costs (Ahmad, 2024). From the patient's point of view, the benefits remain the same: the ability to choose a specialist and be treated in private facilities, where available. For this, they would pay higher prices than the heavily subsidised rates in public hospitals. This announcement signals the likely permanence of dual practice in select MOH hospitals.

Malaysia provides an important context for examining patient experience of dual practice hospital care due to

the coexistence of heavily subsidised and private care provision within the same institutions. Compared to systems that are either fully subsidised or fully private, dual practice necessitates hospitals to balance revenue generation, specialist retention, and equitable access to care simultaneously. This creates unique challenges for the MOH to maintain trust and patient satisfaction while providing high-quality care to both patient groups within shared facilities.

While designed to retain specialists and generate revenue, dual practice hospitals must also ensure patient-centred care to maintain trust and sustainability. Evidence shows that patients' expectations, perceptions of hospital service quality, satisfaction, and revisit intentions are interrelated factors influencing not only individual health outcomes but also hospital reputation and financial viability. However, research in Malaysia and similar middle-income countries remains fragmented. Existing studies tend to examine patient satisfaction, service quality, or revisit intention as separate constructs, with limited exploration of how these domains interact within the unique environment of dual practice hospitals, where subsidised and private patients receive care concurrently. The Expectation–Confirmation Theory proposed by Oliver in 1980 (Oliver, 1980) explains that satisfaction is formed through the comparison between prior expectations and perceived performance, which subsequently influences future behaviour and intentions such as repurchase or revisit intention. It's application in healthcare was explored (See Figure 1 below) by Bhattacharjee, who linked expectation confirmation with satisfaction and healthcare facility revisit intention (Bhattacharjee, 2001). Although the Expectation Confirmation Theory was initially designed for the marketing field, its application in the healthcare setting has been widely explored in previous literature across various contexts (Almutairi et al., 2021; Hossain et al., 2023; Lu et al., 2023; Zhu et al., 2023). Therefore, its use in the dual practice hospital context is inferred here on the basis that behavioural processes underlying expectations, satisfaction, and continuance intentions remain conceptually similar despite differing contextual environments. For a holistic view of patients' experience of hospital care, whether in dual practice or not, it is imperative to consider these constructs as interlinked within the context of hospital service delivery, particularly in dual practice settings, where revisit intention can contribute to sustainability.

Existing measurement tools have limitations in their availability and validity, and have been developed for general healthcare settings. They may not adequately capture issues specific to the dual practice context.. There is a risk that differences in expectations and perceptions of care between patient groups may lead to



Note: t_1 = pre-consumption variable; t_2 = post-consumption variable

Figure 1: Expectation Confirmation Theory

Note. This theoretical framework visualises the interrelation between expectations, perception of performance, satisfaction and how this leads to the behavioural outcome of revisit intention. (Bhattacharjee, 2001)

dissatisfaction, inequities, and erosion of trust in public healthcare, as experienced by some European countries with dual practice hospitals (Mueller & Socha-Dietrich, 2020). This disparity may not be highlighted if no validated measurement tool is available.

Given the global trend of integrating private practice into public hospitals (Mueller & Socha-Dietrich, 2020), there is an urgent need to synthesise existing evidence on patient expectations, satisfaction, and revisit intention to inform hospital managers and policymakers. A review is timely for providing a consolidated understanding of patient experience with hospital care, particularly in dual practice hospitals, and for identifying gaps in measurement and practice. This will support hospital managers and policymakers in understanding patient experience, guiding decisions that ensure the implementation of private services within public hospitals does not compromise public confidence in the healthcare system. Therefore, this review aims to explore the domains of patients' experiences of healthcare in dual practice hospitals and how these shape their perceptions of care, including satisfaction and revisit intention. This review also aims to review existing measurement tools in terms of their validity and applicability in the Malaysian dual practice hospital setting.

2. Materials and Methods

This narrative review employed a literature search across three online databases: PubMed, Web of Science, and Scopus, to identify studies examining patients' expectations, perceptions of hospital care services, revisit intention, satisfaction, and the available questionnaires used to measure domains relevant to these perceptions. The search strategy utilised Medical Subject Headings (MeSH) and text word terms to enhance the search sensitivity and specificity. The search strategy combined keywords and Boolean operators adapted to the syntax

of each database (PubMed, Scopus, and Web of Science). The main search terms included variations of the following concepts: (1) Patient expectations: ("patient expectation*" OR "expectation of care" OR "healthcare expectation*" OR "service expectation*"); (2) Service quality: ("service quality" OR "hospital service quality" OR "healthcare quality" OR "perceived quality" OR "SERVQUAL"); (3) Patient satisfaction: ("patient satisfaction" OR "consumer satisfaction" OR "hospital satisfaction" OR "healthcare satisfaction"); (4) Revisit intention: ("revisit intention*" OR "intention to return" OR "patient loyalty" OR "intention to reuse"); and (5) Dual practice hospital setting: ("dual practice" OR "public-private mix" OR "private practice in public hospital*" OR "Full Paying Patient" OR "FPP"). To fit the inclusion criteria, filters were applied to restrict the results to publications in the English language, published after 2000, available online, and focusing on hospital care services and adult patients. Further title and abstract screening were conducted to refine the search findings. Studies that were not relevant to the healthcare setting were excluded. Findings from the retrieved literature were narratively synthesised to identify common themes and conceptual relationships relevant to patient experience in dual practice hospitals.

3. Results

3.1 Patients' Perspectives in Healthcare

The initial scope of the literature search, specifically focused on patient experience in dual practice hospitals, yielded limited published evidence. Therefore, the review context was expanded to include hospital care settings to allow a broader exploration of related concepts. Nevertheless, guided by the underlying Expectation-Confirmation Theory discussed above, the findings of this review remain conceptually relevant and applicable to the dual practice hospital setting. The main themes identified were: (1) patients' expectations of

healthcare services, (2) patients' perception of hospital service quality, (3) patient satisfaction, (4) revisit intention, and (5) available measurement tools used to evaluate these constructs. These themes were closely interrelated and collectively contributed to the overall understanding of patient experience within hospital care settings.

Patients' Expectations of Healthcare Service

People's expectations of a care encounter are shaped by their social locations at particular points in time, at the intersection of multiple social structures, relations, and experiences of past and current care encounters, framed by intersecting social structures and relations (Lakin & Kane, 2022). The analytical framework proposed by Lakin and Kane in Figure 1 below suggests that patient expectations of healthcare are shaped by a complex interplay of factors surrounding the patient's life journey. Some studies have shown that important aspects of healthcare and consultation can influence expectations, which in turn can impact overall patient satisfaction with hospital services (Lakin & Kane, 2022).

Qualitative studies have explored the main domains of patients' expectations. Eh Haddad et al. found three main domains of patient expectations in healthcare. They were expectations of (1) health outcomes, (2) individual clinicians, and (3) the healthcare system (El-Haddad et al., 2020). This aligns with findings from an earlier qualitative study conducted in General Practitioner (GP) clinics and hospital outpatient departments across various departments in London, United Kingdom (UK), by Bowling et al. They interviewed adult patients to

explore the main domains of patients' expectations of healthcare. They found three main domains: (1) structure and process of healthcare, (2) doctor-patient communication style and (3) doctor's approach to giving information (Bowling et al., 2012). This study highlights the importance of healthcare workers having good communication skills as a main domain of forming patients' expectations.

Freilich et al. found a difference between healthcare professionals' and patients' perceptions of expectations of healthcare in their cross-sectional study among GP and hospital outpatient department patients in Stockholm, Sweden (Freilich et al., 2019). Patients anticipated a personalised experience, starting with easy access to a healthcare provider, followed by a consultation with the doctor, administering medical procedures, discussing the results, and creating a follow-up plan for ongoing care. While patients viewed their long-term expectations as more personal and relational, physicians approached them from a professional and organisational perspective (Freilich et al., 2019). This study suggests that healthcare providers should not form assumptions about what influences patients' expectations when seeking to understand them.

Across the reviewed studies, patients' expectations consistently emerged as an important determinant influencing overall satisfaction with hospital care. A cross-sectional study by Marimon et al., conducted between 2014 and 2016 among adult inpatients in hospitals in Catalonia, found that fulfilling expectations is a mediator between hospital quality and satisfaction (Marimon et al., 2019). This aligns with earlier studies that highlight the

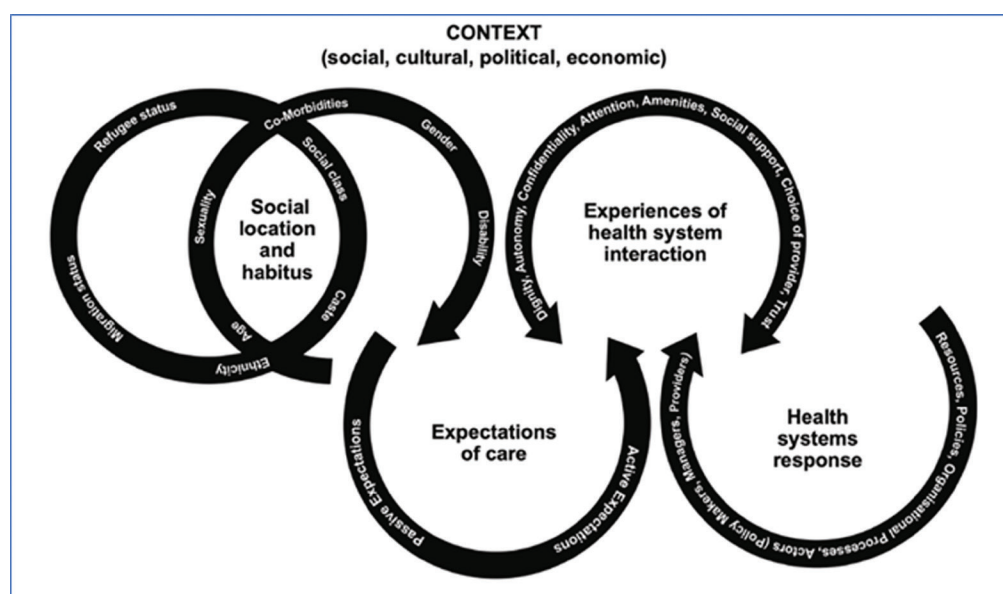


Figure 2: Lakin & Kane's Healthcare Expectations Framework

Note. An intersectional, translocational, and relational analytical framework for understanding peoples' healthcare expectations (Lakin & Kane, 2022)

importance of fulfilling patients' expectations to improve patient satisfaction with hospital services (Berhane & Enquselassie, 2016; Özer et al., 2007).

Patients' Perception of Hospital Service Quality

Along with expectations, the patient's perception of hospital care service quality, based on their lived experience with hospital care, is equally important for evaluating patients' perspectives of care. The Expectations Disconfirmation Theory framework by Richard Oliver (Oliver & Burke, 1999) explains how patient satisfaction arises from the extent to which actual service performance matches or exceeds prior expectations. Positive disconfirmation, where performance surpasses expectations, generally correlates with higher satisfaction, whereas negative disconfirmation tends to detract from the overall satisfaction level (Roberts & Griffith, 2019). Therefore, the domains that contribute to hospital service quality and how patients perceive them are essential to consider.

What forms patients' perspective of hospital care may differ from the point of view of health managers. A hospital's reliability in providing consistent care and keeping its advertised commitments has been shown to be an important component of forming its perception of service quality (Swain & Kar, 2018; T'ing et al., 2019). The same authors also added that a hospital's responsiveness, demonstrated by how a hospital responds to the patients' needs, their efforts to minimise delays, and their willingness to help and provide prompt attention, contributes significantly to the overall perception of service quality (Swain & Kar, 2018; T'ing et al., 2019). Similarly, the communication between healthcare workers and patients plays a crucial role in shaping their perception of care. Empathetic communication by healthcare workers that demonstrates caring attitudes, individualised attention, understanding of patient needs, and emotional support, is crucial for a positive perception of hospital service (Rahim et al., 2021; Swain & Kar, 2018). Healthcare workers' competence and courtesy in practice, demonstrated by their skills, knowledge, trustworthiness, professionalism, how safe patients feel in their care, and their manners, can have a significant impact on how patients perceive the hospital service quality (T'ing et al., 2019; Xu et al., 2022). Aligning with competence, how healthcare workers deliver information that is comprehensible to the patients also adds to what forms this perception of hospital service quality (Swain & Kar, 2018).

The reviewed literature identified multiple recurring factors influencing patients' perceptions of hospital service quality. The hospital environment such as cleanliness,

facilities, equipment, waiting areas, and ambience (Rahim et al., 2021; T'ing et al., 2019; Xu et al., 2022), ease of access to services including follow-up arrangements, distance, and road accessibility, and the efficiency of administration such as admission and discharge processes, waiting times, and other administrative processes (Abbasi-Moghaddam et al., 2019; Swain & Kar, 2018), are all interconnected. Additionally, perceptions of cost, billing transparency, and fairness shape how patients perceive the value of care (Abbasi-Moghaddam et al., 2019; Swain & Kar, 2018). Clinical outcomes, such as treatment effectiveness and patient safety, together with the hospital's public reputation, also add to the overall perceptions of service quality (Swain & Kar, 2018; Xu et al., 2022).

Patients' Revisit Intention

Patients' revisit intentions emerged as a common behavioural outcome related to their perceptions of hospital service quality and satisfaction. Patients' revisit intention is the willingness of a patient to return to a healthcare provider after receiving services (S. Park et al., 2021). It is a concept associated with patients' perception of healthcare service quality and satisfaction. A cross-sectional study conducted among outpatient adults of selected public health centres in Jambi Province, Indonesia, by Guspianto et al. found that high service quality positively impacts patients' satisfaction, which influences the intention to revisit healthcare facilities (Guspianto et al., 2022). Similar findings were reported by a study in suburban hospitals in Indonesia, which found that the quality of both medical and non-medical services positively and significantly affects satisfaction. Meanwhile, patient satisfaction positively and significantly affects trust and revisit intention (Yuniarti & Hidayat, 2021). Another study from Indonesia concurred with the significance of hospital service quality in influencing revisit intention (Irdan et al., 2024). Irdan et al. also found that brand image had a positive influence on word of mouth and the intention to revisit the hospital in their cross-sectional study, which involved 175 hospital patients in Tangerang, Indonesia. Studies have shown that satisfied patients are more likely to recommend health facilities to others and intend to revisit the hospital themselves (Damayanthi et al., 2024; Irdan et al., 2024). Damayanthi et al. highlight in their study that patient satisfaction is essential in influencing revisit intention, emphasising the importance of hospital managers paying close attention to patients' experiences (Damayanthi et al., 2024). Sun et al. reported a similar emphasis on patients' experience, reporting significant determinants of revisit intention were related to interactions and communication skills

of healthcare workers in those departments (Sun et al., 2000).

In these studies, the dependent variable, “revisit intention,” was measured as a dichotomous outcome; patients responded whether they had intentions to return to the hospital in the future as “Yes/No”. Because of this, all the studies above used simple logistics and multiple logistics regressions for data analysis (Damayanthie et al., 2024; Guspianto et al., 2022; Irdan et al., 2024; S. Park et al., 2021; Yuniarti & Hidayat, 2021). There are limited questionnaires with items related to revisiting intention that produce a continuous outcome variable. Measuring this in a continuous outcome could better reflect the nature of “intention” as a spectrum rather than absolutes of mutually exclusive categories of Yes/No (Cai, 2012).

Patient Satisfaction

Satisfaction is the most commonly measured and studied aspect of patients’ healthcare perspective. A cross-sectional study using hospital management data in American hospitals found that hospital size was most strongly associated with less patient satisfaction on the following items: “receiving help as soon as needed”, “room and bathroom cleanliness”, and doctor communication”, whereas nurse communication was the one modifiable variable that was associated with more favourable satisfaction scores in larger hospitals (McFarland et al., 2017). Another cross-sectional study conducted in Lahore, Pakistan, among public hospital outpatients found that laboratory and pharmacy services had significant positive effects on patient satisfaction, while doctor-patient communication and physical facilities, which had been significant in other studies, did not show a significant relationship with patient satisfaction (Hussain et al., 2019).

Overall, Ng and Luk explained the concept of patient satisfaction in their conceptual review. The attributes of patient satisfaction in the healthcare context identified were provider attitude, technical competence, accessibility of healthcare services, and treatment efficacy. Prerequisites of patient satisfaction include perception of expectation, patient demographics and personality, and market competition. Consequences of patient satisfaction identified in this analysis were patient compliance, loyalty, clinical outcomes, and referrals (Ng & Luk, 2019). The multidimensional nature of patient satisfaction was later highlighted in a narrative review of hospital patients’ satisfaction, which found various reasons contributing to satisfaction. Many aspects of treatment influence participant satisfaction at different stages of the intervention process (Afrashtehfar et al., 2020).

Overall, the reviewed literature suggests that expectations, perceived service quality, satisfaction, and revisit intention are closely interconnected constructs that collectively shape patients’ overall experience of hospital care.

3.2 Measurement Tools and Validation

Various tools exist in practice in Malaysia for patient satisfaction; SERVQUAL and Patient Satisfaction Questionnaire Short Form (PSQ-18) are among the more commonly adopted. The available validated tools demonstrate that patient experience in healthcare has traditionally been measured as separate constructs rather than as an integrated framework encompassing expectations, perceived service quality, satisfaction, and revisit intention. Most existing instruments validated in Malaysia were developed either for general healthcare settings or for specific clinical services such as emergency care, pharmacy services, cancer treatment, stroke care, or rehabilitation services (Abdul Aziz et al., 2020; Arora et al., 2010; Hashim et al., 2024; Lai et al., 2018; Rasudin et al., 2019). While these instruments provide valuable insight into selected domains of patient experience, they may not adequately capture the complexities unique to dual practice hospitals, where subsidised and private patients coexist within the same healthcare environment.

Another important limitation identified is the variability in the extent of psychometric validation across the available tools. Some instruments demonstrate evidence of translation validity and internal consistency but have limited published evidence regarding content validity, construct validity, or contextual adaptation within Malaysian healthcare settings (Ganasegeran et al., 2015; Rosdy et al., 2023; Thayaparan & Mahdi, 2013). In addition, a commonly used questionnaire in MOH hospitals, the PSQ-18, was originally developed outside the Malaysian context and may not fully reflect local cultural expectations, perceptions of fairness, healthcare financing concerns, or issues related to differential service access between public and private patients. The SERVQUALKMM questionnaire, though adapted to fit the local MOH context, has been validated for use. However, it focuses on expectations and perceptions of service quality and does not measure any behavioural outcomes, such as revisit intention (Delina et al., 2017; Jonkisz et al., 2021).

Importantly, none of the identified tools was specifically developed to evaluate patient experience in Malaysia’s dual practice public hospitals. Existing instruments also rarely incorporate revisit intention as a measurable behavioural outcome despite its importance in reflecting patient trust, loyalty, and willingness to

continue utilising healthcare services (Damayanthie et al., 2024; Guspiano et al., 2022; S. Park et al., 2021). This highlights the need for a culturally grounded, context-specific instrument capable of integrating these interrelated constructs to better support quality monitoring and sustainability assessment in dual practice hospitals. A summary of available tools is provided in the table below.

4. Discussion

The interplay between expectations, perception, satisfaction, and revisit intention forms the core of patient experience in dual practice hospitals. Expectations influence perceptions by acting as cognitive filters that shape the interpretation of both objective service features and subjective experiences. Prior beliefs and anticipations, often grounded in cultural, socio-political, and individual experiences, set a mental benchmark against which the performance of healthcare systems is evaluated (Schneider & Popić, 2018). From this, perceptions then shape satisfaction, where patients are more likely to report higher satisfaction with hospital services when the overall perception of service quality received is positive (Mini et al., 2025; Shan et al., 2016). Although patient behaviour is nuanced, literature has shown that higher satisfaction is highly associated with patients' revisit intention for future health needs (Rauf et al., 2024; Woo et al., 2021). Park et al highlighted the

mediating role of patient satisfaction on their revisit intention and willingness to recommend the hospital to others in their cross-sectional study at Seoul National University Hospital (H. N. Park et al., 2022). For Malaysia, where dual practice is expanding under Rakan KKM, these dynamics are pivotal for financial sustainability and equitable service delivery.

One of the main challenges highlighted in the literature includes managing differences in expectations between subsidised and private patients. There are inherent differences between the service models offered to private and public patients in dual practice hospitals. Private patients, who pay additional fees, are typically offered options such as executive wards and preferential scheduling, which align with their higher expectations of convenience and individualised care (Fadzil et al., 2022). Conversely, subsidised patients, whose access to care is primarily defined by need rather than demand, prioritise timely, reliable, and safe services. The resulting expectation gap can lead to perceived inequities, where public patients may perceive the quality of care as inferior due to longer waiting times or less personalised interactions relative to private patients (Barnea et al., 2022). Moreover, meeting higher expectations from private paying patients in dual practice hospitals may lead to additional strain on healthcare workers, particularly in resource-constrained public hospitals. Organisational environment and workforce wellbeing factors have

Table 1: Summary of available tools validated in Malaysia

Questionnaire	Purpose	Malay version	Remarks	Reference
SERVQUALKKM	Expectations Perception of Hospital Quality-Satisfaction	Yes	Adapted from SERVQUAL and validated for use in KKM facilities. It doesn't include domains for private patients.	(Delina et al., 2017; Jonkisz et al., 2021)
Patient Satisfaction Questionnaire Short Form (PSQ-18)	Satisfaction with hospital care in 7 domains	Yes	Evidence of construct validity up to Exploratory Factor Analysis for the English version. The Malay version lacks sufficient content and construct validity evidence	(Ganasegeran et al., 2015; Rosdy et al., 2023; Thayaparan & Mahdi, 2013)
IN-PATSAT32	Satisfaction	No	Measure patient satisfaction with cancer treatment	(Arora et al., 2010)
Patient Expectations Questionnaire (PEQ)	Expectations	No	Not validated in Malaysia	(Bowling et al., 2012)
Client Satisfaction with Device and Services (CSDS)	Satisfaction	Yes	Translated into Malay and validated in Malaysia, but specific for prosthetics and orthotics service	(Hashim et al., 2024)
Ambulatory Care Patient Satisfaction Questionnaire	Satisfaction	Yes	Developed in Malaysia, but specific to the pharmacy service	(Lai et al., 2018)
Satisfaction with stroke care questionnaire (Hoesat) (SASC10-My)	Satisfaction	Yes	Specific for post-stroke care treated at home	(Abdul Aziz et al., 2020)
The Press Ganey Questionnaire	Satisfaction	Yes	Validated in Malaysia for patient satisfaction with emergency department service. It does not cover expectations and revisit the intention.	(Rasudin et al., 2019)

been shown to influence staff motivation, work performance, and ultimately service quality (Andrade et al., 2017; Duarte et al., 2020; Hall et al., 2016). Therefore, maintaining patient-centred care within dual practice hospitals may also require attention to supportive working environments and workforce welfare, which adds another layer of complexity. Inequities, both real or perceived, in access, waiting times, quality of interpersonal care, or resources may foster perceptions of unfairness among patients, particularly when patients receiving private and subsidised care are treated in the same facility. Such perceptions have been shown to influence satisfaction, willingness to comply, and loyalty; when patients believe that others are receiving preferential treatment or that their own care is being compromised, their trust declines (Oppelt et al., 2023). Intentional control mechanisms are needed to enable continuous monitoring and mitigate inequities that may arise in both objective service delivery (such as waiting times, facility quality, and staffing) and subjective experiences (like perceived fairness and respect) for dual practice hospitals to be sustainable (Mueller & Socha-Dietrich, 2020). Transparent policies, equitable resource allocation, and efforts to visibly ensure that private and public patients receive high and consistent quality of service are essential to safeguarding trust in both individual hospitals and the larger public health system.

Another major challenge for dual practice hospitals lies in developing validated, culturally relevant tools that integrate all these constructs and yield meaningful data for managers and stakeholders to maintain the balance between generating income and meeting the nation's health needs. A developed questionnaire must be methodically evaluated for its validity and reliability to ensure its accuracy and applicability within the intended context. The validation process involves assessing the psychometric properties of a questionnaire: a) validity (accuracy in measuring what it is intended to measure), b) reliability (consistency of results), and c) responsiveness (ability to detect changes over time) (Hardcastle et al., 2021; Rasudin et al., 2019). The specific context of healthcare delivery in dual practice hospitals requires a culturally specific, validated tool to ensure the meaningful interpretation of information generated in practice. Learning from international experience, Malaysian hospitals must align dual practice service delivery with patient-centred care principles while maintaining trust, satisfaction, and loyalty among patients, and generating revenue.

5. Conclusion

This review has several limitations. Firstly, due to limited literature that fit the specific dual practice

context, studies within broader hospital care settings were included to allow for an exploration of the relevant constructs. This may prevent a direct generalisability of the findings to the dual practice context. Secondly, as a narrative review, this review lacks a formal systematic review process, such as risk of bias assessment and meta-analysis. Nevertheless, this review provides a useful conceptual understanding of key constructs and highlights gaps in the literature for dual practice hospitals.

Patient expectations, perception of service quality, satisfaction, and revisit intentions are interdependent domains of patients' experience of care and is central to the sustainability of dual practice hospitals. Current tools inadequately capture these domains in Malaysia's context, highlighting the urgent need for validated instruments developed within the context of dual practice environments. There is a wide range of opportunities for research within this context, beyond patient experience measurement tool development and validation. Specific studies investigating equity, longitudinal studies on the sustainability of this system, or mixed-method studies focusing on healthcare workers' experiences with the system would be valuable for future research. For policymakers and hospital managers, prioritising patient-centred care would not only improve service quality but also enhance the financial and reputational strength of dual practice hospitals.

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During the preparation of this manuscript, the author (s) did not employ any of the Generative AI and/or AI-Assisted technologies for Language refinement,

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