

BMJ Open Exploratory analysis of factors influencing hospital preferences among the Lebanese population: a cross-sectional study

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To cite: El Zouki C-J, Chahine A, Ghadban E, *et al.* Exploratory analysis of factors influencing hospital preferences among the Lebanese population: a cross-sectional study. *BMJ Open* 2024;**14**:e085727. doi:10.1136/bmjopen-2024-085727

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2024-085727>).

Received 26 February 2024
Accepted 24 October 2024



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ABSTRACT

Objectives The primary aim of this research is to uncover the underlying factors that shape hospital selection criteria among individuals in Lebanon.

Design Cross-sectional study.

Setting A survey was circulated across social media platforms and messaging applications in Lebanon from February to May 2023. This questionnaire aimed to gauge participants' opinions on the importance of various factors in their hospital selection process.

Participants A total of 746 participants filled out the survey. We targeted Lebanese adults who were not hospitalised at the time of survey submission.

Main outcome measures We performed an exploratory factor analysis to examine the underlying structure of our 70-question survey. Reliability analysis was conducted using Cronbach's alpha and McDonald's omega. Factor scores were derived by aggregating raw scores and computing the mean.

Results The survey results identified eight key factors that accounted for 58.02% of the total variance, with excellent sampling adequacy (Kaiser-Meyer-Olkin=0.921, Bartlett's $p < 0.001$). These factors exhibited good internal consistency, as indicated by Cronbach's alpha values for each factor. Ranked by importance for hospital selection, the factors are: staff qualities ($\alpha=0.773$), administrative services ($\alpha=0.801$), reputation ($\alpha=0.773$), ease of access ($\alpha=0.704$), room attributes ($\alpha=0.796$), architectural and physical surroundings ($\alpha=0.828$), luxury amenities ($\alpha=0.849$) and affiliation and ownership ($\alpha=0.661$).

Conclusion This paper highlights the hospital characteristics that people may value before selecting a hospital. This insight provides an opportunity for hospital managers to refine their services, ensuring better resonance with people's anticipations. Beyond this, it sheds light on areas where hospitals could strategically invest to elevate their competitive edge in the healthcare market.

INTRODUCTION

In an era of rapid healthcare transformation and expanding medical options, hospital selection remains fundamental to individuals' well-being. This choice is significant because it not only establishes the cornerstone of

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The sample size is sufficiently large relative to the population of Lebanon and meets the requirements of our factor analysis.
- ⇒ The study employed robust statistical methods, which likely supported reliable factor identification.
- ⇒ The use of a convenient sampling method may introduce bias.
- ⇒ Confirmatory analysis is necessary to further validate our findings.

a person's health but also holds considerable implications for hospitals, shaping the healthcare landscape and driving its evolution.¹ Patients are becoming more proactive, taking control of their healthcare decisions and treatment plans.^{2,3} Empowering individuals to choose their healthcare providers, particularly hospitals, is a key consideration in shaping global health policies.^{1,3-8} This approach fosters competition, improving both the quality and cost-effectiveness of care.^{1,6,9} It underscores the importance of preserving patient autonomy by allowing them to select professionals they trust. Engaged patients are more likely to follow their treatment plans and receive personalised care.¹⁰

Except in emergencies, patients typically assume responsibility for choosing their hospital.^{8,11-13} Research offers valuable insights into how they navigate this process. A 1988 study by Lane and Lundquist¹⁴ found that 22% of patients actively chose their hospital before falling ill, while 52% relied on physician recommendations. Smith and Clark¹⁵ further highlighted that 62.5% of decisions were influenced by professionals, while 32.7% of patients participated in shared decision-making and 21.1% made fully independent choices. In contrast, a 2017 German study¹⁶ reported that 63% of patients acted

as the primary decision-makers. As patients increasingly become key stakeholders, hospitals must tailor their marketing strategies to meet their evolving expectations.

Conventional theories of hospital competition suggest that hospitals mainly compete based on 'clinical quality'. However, in crowded hospital markets, the fight for market share is intensifying, making the concept of 'hospital shopping' a tangible reality. Consumer behaviour around hospital selection varies widely, driven by a complex mix of factors.^{17 18} Numerous studies have uncovered common themes that influence hospital preferences.

Patient satisfaction is a fundamental metric for assessing the quality of care. It plays a crucial role in delivering prompt, effective and patient-centred healthcare. Evidence suggests that hospital demand is significantly influenced by the quality of care,^{19 20} with clinical quality being the primary pillar shaping perceptions of hospital performance.²¹ Consequently, hospitals that invest in innovation are more likely to attract patients who seek high-quality healthcare services.²²

The competence and interpersonal skills of healthcare professionals leave lasting impressions on patients.^{23–26} Compassionate, trustworthy and attentive staff contribute to both patient loyalty and satisfaction.²⁷ Additionally, the quality of administrative and general services is a crucial dimension, shaped by various elements²⁸ such as accessibility, cost-effectiveness and speed of service.^{29 30} Recently, accessibility has become a major concern, with factors such as insurance options, transportation, geographical location and parking playing an important role in patients' hospital choices.^{16 26 31 32} Conversely, many patients are willing to travel longer distances to access a highly regarded treatment facility.³² In cases where comparable options are available, a hospital's reputation and brand image may hold substantial sway over patient perceptions.³³ A strong brand is often linked to high-quality care,³⁴ with a reputation built through various channels, including word of mouth, online reviews and media coverage.²³

Hospital amenities and comfort services have become an area of growing interest.^{17 18} A 2008 US study³⁵ found that a 1 SD increase in hospital amenities led to a 38.4% rise in demand, compared with just a 12.7% increase with improved clinical quality standards. Additionally, a hospital's physical appearance, architecture and size play a significant role in shaping patient experience and perceptions of the industry.^{32 36–38} The importance of hospital size has long been debated, especially since a 2012 meta-analysis showed that patient mortality was significantly lower in larger hospitals,³⁹ while patient satisfaction was lower in these hospitals.⁴⁰

Lebanon, once regarded as the healthcare hub of the Middle East,^{41 42} offers an intriguing case for studying healthcare dynamics. Over the past few decades, the Lebanese Ministry of Public Health has implemented several initiatives to improve the quality and accessibility of healthcare.^{43 44} Indeed, Lebanon ranked 33rd globally in the Healthcare Access and Quality Index,⁴⁵

and life expectancy has risen by 1.83 years over the past two decades, reaching 76.4 years, above the global average of 73.3 years.⁴⁶ The healthcare industry in Lebanon is controlled by financiers, political agendas and various regulations, and it is diversified with both public and private hospitals. While Lebanese hospitals emphasise specialised and advanced medical services, basic preventive care in primary settings is often overlooked. Lebanon has 146 hospitals, with the largest facility located in the capital, Beirut, accommodating around 540 beds. Since 2000, hospitals have diligently pursued national and international accreditations, promoting a culture centred on patient care, rights and professional practice evaluations. However, the quality of hospital services varies widely depending on factors such as public or private ownership, university affiliation, funding and location. Some hospitals are considered world-class, while others are dangerously ill-equipped, making it challenging to assess a uniform standard of hospital care in Lebanon.^{43 45 47} Additionally, Lebanon faces high healthcare expenditure, with one of the highest spending among Arab nations relative to its Gross Domestic Product (GDP).^{48 49}

The Lebanese healthcare system is currently facing a severe crisis that threatens its existence and the health of many people in the country.⁵⁰ Despite this, the range of hospital options underscores the need to understand individuals' preferences when selecting a facility. In times of crisis, people's priorities and decision-making often shift,^{51 52} making it crucial for policymakers and hospital managers to gain more profound insights. These insights are vital for adapting services and allocating resources effectively to ensure the sector's survival. While several studies have analysed the factors influencing patients' choice of hospital,^{14 31 32 36 53} this study is, to our knowledge, the first to explore this topic in Lebanon's unique context. Moreover, it is among the first globally to examine hospital preferences in the general population rather than focusing solely on patients who have already chosen a hospital (e.g., inpatients or recently discharged). By targeting the broader population, we aimed to capture unbiased perceptions of hospital factors, free from the influence of recent hospitalisation experiences. Many factors may affect hospital selection in Lebanon, given its distinct socio-demographic setting and history,^{54 55} making it essential to clarify the real motives behind these choices.

The primary objective of this research is to uncover the underlying determinants that shape individuals' preferences when selecting a hospital in Lebanon. Our study sets out with the hypothesis that a comprehensive factor analysis will reveal critical aspects such as the quality of medical services, ease of accessibility, efficiency of administrative services, the hospital's reputation, the overall environment and the availability of comforting amenities.

METHODS

Consent to participate

All participants were required to review an introduction containing information about the study and to provide electronic informed consent before starting the survey. Respondents were assured of their information's confidentiality, anonymity and data security on Google Forms. They were given the option to withdraw from the survey at any time.

Study design

This cross-sectional study was conducted from February to May 2023, enrolling Lebanese adults from various regions across Lebanon. We included Lebanese citizens over 18 years old who were residing in Lebanon and not hospitalised at the time of the survey. Participants were invited to take the 10-min Google Forms survey through a link shared via social media and messaging applications, using convenience sampling techniques such as snowball and respondent-driven methods. An online survey was chosen to efficiently reach a diverse and geographically dispersed sample across Lebanon, given the country's constraints at the time. To address potential bias, we diversified our data collection by sharing the survey link with participants from various backgrounds, online communities and platforms. No credit was offered for participation.

Minimal sample size calculation

To ensure the accuracy and reliability of our exploratory factor analysis (EFA), we followed the guidelines provided by Comrey and Lee,⁵⁶ who recommend having 5–10 cases per variable for a robust factor analysis. Based on this rule of thumb and given that our questionnaire included 70 items related to hospital factors, we determined that a minimum sample size of 350–700 would be necessary. To enhance the strength of our analysis and ensure adequate factor stability, we aimed for the upper end of this range, ultimately recruiting more than 700 participants.

Questionnaire

The survey was developed in Arabic and divided into several sections. The first section included an introduction to the study, an electronic consent form confirming participants' voluntary participation and information on ethical considerations such as confidentiality and anonymity. The next section collected participants' socio-demographic and general data, including age, sex, district of residence, financial situation, employment status, education level and hospitalisation history. The final section consisted of 70 questions assessing the perceived importance of various hospital-related factors. Each question was rated on a 5-point Likert scale, ranging from 'Not important' to 'Very important'. These questions were inspired by the 7Ps of marketing,⁵⁷ a widely recognised framework for analysing and improving marketing strategies. The 7Ps—Product, Price, Place, Promotion, People, Process and Physical evidence—provided a structured approach to developing questions related to factors that

could influence patient perceptions in hospital selection. For example, 'Product' informed questions about hospital services and amenities, while 'Physical evidence' guided questions about the hospital's environment and facilities. We also conducted an extensive literature review,^{16 26 30–32 53 58} and held brainstorming sessions with a team of experts, including hospital quality and accreditation officers, healthcare professionals and marketing specialists, to develop the questionnaire. The questions covered several themes, such as hospital administrative services (e.g., How important is it to you that the hospital has a deal with your insurance?), reputation and communication (e.g., How important is the presence of famous doctors in the hospital?), general environment (e.g., How important is it to have outdoor areas and gardens?), accessibility (e.g., How important is having a big parking space at the hospital?) and hotel-like amenities (e.g., How important is having access to Wi-Fi?) (online supplemental material).

Patient and public involvement

Respondents played a key role in two main stages of the study design. Initially, the survey was pilot tested with 20 participants to gather feedback on the clarity of the questions, timing and overall experience. This feedback was used to make necessary adjustments and enhance the survey's readability. Participants in the pilot phase were not included in the final analysis. Additionally, participants in the post-pilot phase were also encouraged to distribute the survey link through social media and messaging applications to help expand the sample size.

Statistical analysis

The data were analysed using the Statistical Package for the Social Sciences V.26. All survey questions were mandatory on the Google Forms platform, ensuring that respondents provided complete data with no missing information. We began with a descriptive analysis to gain a more in-depth understanding of our population. Given that the goal of our study was to explore the underlying latent factors contributing to the observed variables, we found that an EFA was most appropriate for this purpose.⁵⁹

We employed the principal axis factoring (PFA) extraction method with the Promax rotation, as our factors were highly correlated and Mardia's skewness and kurtosis scores were significantly elevated ($S=321.782$, $K=2244.387$ ($p<0.001$)).

Factors were retained based on an eigenvalue greater than one and by visual inspection of the scree plot. We chose not to conduct a parallel analysis, given its tendency to underestimate the number of factors to retain, particularly when the first eigenvalue is large, which can occur in the context of oblique rotations and PFA extraction methods.⁶⁰ Item retention was based on a loading threshold of ≥ 0.4 , as these items are considered the most stable. Items with severe cross-loadings or those that did not load into a factor were excluded.^{61 62} This decision was guided by theoretical considerations and a desire to

Table 1 Distribution of demographic characteristics of the participants. (N=746)

Variable	N (%)
Sex	
Male	231 (31)
Female	515 (69)
Governorate of residence	
Beirut	102 (13.7)
Mount Lebanon	458 (61.4)
North	86 (11.5)
South	55 (7.4)
Beqaa valley	45 (6)
Education level	
Primary school	5 (0.7)
Complementary school	25 (3.4)
Secondary school	91 (12.2)
University (bachelor/masters)	592 (79.4)
Doctorate	33 (4.4)
Employment status	
Employed	357 (47.9)
Student	145 (19.4)
Unemployed	119 (16)
Freelance	109 (14.6)
Retired	16 (2.1)
	Mean±SD
Age (years)	34.24±12.24
Financial satisfaction	4.78±2.55

maintain coherence and interpretability within the factor model. Excluded items appeared to lack a strong association with the underlying constructs being measured, making their removal necessary to ensure a more robust and meaningful factor structure.

We also computed the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and performed Bartlett's test of sphericity to further validate the EFA. Moreover, Cronbach's alpha and McDonald's omega were recorded for reliability analysis. Factor scores were generated by summing raw scores and calculating the mean, a recommended practice for scales that are untested and exploratory.⁶³ No data was missing, since Google Forms requires all questions to be answered.

RESULTS

Socio-demographic and general data

We received 746 survey responses. The mean age of the participants was 34.24±12.24 years. The majority were female (69%), and 61.4% of the sample resided in Mount Lebanon. Additional details about the respondents can be found in [table 1](#).

Table 2 Hospitalisation history of the sample. (n=746)

Variable	N (%)
Previous admission to a hospital	
Yes	518 (69.4)
No	228 (30.6)
	Mean±SD
Number of previous admissions	6.31±52.59

[Table 2](#) presents the hospitalisation history of the sample. A substantial majority (69.4%) reported having been admitted to a hospital at some point. On average, participants had 6.31 previous hospital admissions, with a large SD of 52.59, indicating significant variability in this regard.

Factor analysis

Our analysis identified eight factors, with 39 questions included in the final model. These factors collectively explained 58.020% of the common variance. The KMO measure of sampling adequacy was 0.921, indicating an excellent level of adequacy, and Bartlett's test was highly significant ($p<0.001$). The factors were named following an extensive literature review and discussions within the research team. Details of the results of the EFA can be found in the Promax rotated matrix in [table 3](#). [Table 4](#) summarises the mean and SD for the factor scores, highlighting that all factors showed acceptable levels of internal consistency.

DISCUSSION

In the ever-evolving healthcare landscape, understanding what influences individuals' inclinations toward a hospital is crucial. To our knowledge, this study is the first to explore this theme within the context of Lebanon. Our EFA revealed a spectrum of considerations shaping hospital preferences, showing that priorities go beyond conventional medical services. In this discussion, we examine the intricacies of these factors and their significance for hospitals in Lebanon.

Hospitals are generally considered stressful, anxiety-inducing environments for both patients and staff. This perception may seem paradoxical, given that the word 'hospital' shares its root with 'hospitality', both derived from the Latin root meaning 'guest accommodation'.⁶⁴

The importance of the medical staff

Our results indicate that the factor with the highest score among our population relates to medical staff. This finding aligns with previous studies suggesting that patients tend to prioritise hospitals where medical professionals are both skilled and empathetic.^{23 25} Competence is viewed as a critical safety indicator, assuring patients that their condition will be accurately diagnosed and effectively treated.²⁴ Empathy is equally important, as patients seek comfort and understanding during stressful times.⁶⁵⁻⁶⁷

Table 3 Exploratory factor analysis of hospital attributes considered before selecting a hospital

Item	Item loading
Factor 1 – Staff	
Competent staff	0.701
Be informed about my case	0.689
Empathetic staff	0.625
Factor 2 – Administrative services	
Speed of services	0.675
The latest technology is available	0.656
Availability of social services	0.623
Wide range of specialties	0.583
Prevention measures are in place	0.557
Hospital fees are acceptable	0.534
Paperwork is done smoothly	0.476
Waiting time to get a bed	0.452
Factor 3 – Reputation	
Ranking	0.739
Famous doctors work in the hospital	0.648
Positive word of mouth	0.627
Good media reputation	0.559
Good online reviews	0.460
Accreditation	0.417
Factor 4 – Accessibility	
The hospital is near my home	0.737
Easy access to the hospital	0.683
Family/friends live near the hospital	0.545
Big parking spaces	0.429
Factor 5 – Room attributes	
Single room	0.698
Wide room	0.599
Sunny room	0.551
Good views from the room	0.455
Factor 6 – Building and physical appearance	
General appearance	0.842
Green spaces	0.784
Size	0.616
Art forms	0.509
Cafeterias and food hubs	0.480
Factor 7 – Luxury and accessory amenities	
Childcare services	0.869
Mindfulness rooms and services	0.756
Entertainment activities	0.706
Hotel-like services	0.645
Gift shop	0.625
Flat television in room	0.516
Factor 8 – Affiliation and ownership	
Religious affiliation of the hospital	0.692
Sociocultural atmosphere	0.623
The hospital is privately owned	0.450

It not only improves satisfaction but also contributes to better outcomes, fewer malpractice claims and a better reputation.⁶⁸ Nurses' skills are also crucial, significantly reducing hospital readmission rates.⁶⁹ Indeed, empathy and competence are intertwined, with empathy being part of effective medical care and interpersonal competence.⁷⁰

These skills heavily influence hospital preferences and expectations.⁷¹ Similar studies prove that the quality of nurses and physicians is often the dealbreaker in hospital selection.⁵³ An Iranian study also emphasised that patients prioritise experienced and responsive staff with good behaviour.³⁶

Another crucial aspect is shared decision-making, where patients' autonomy is respected, allowing them to make informed choices.^{2 10 65} Clinicians may underestimate patients' desire for information, and insufficient details can lead to distress, uncertainty and dissatisfaction with the care provided.^{72–74} This is problematic, as patient satisfaction plays a critical role in influencing their choice of healthcare provider.⁷⁵

Patients seek environments where they feel safe, valued and confident in receiving optimal care. Thus, maintaining a well-trained, empathetic staff and fostering effective communication are essential for hospitals aiming to stand out.⁷⁶

Reputation matters

In line with the tendency to seek optimal care, a hospital's reputation serves as an important pillar in patient choice.^{32 36 37} Reputation is shaped by high rankings, word of mouth, reviews, accreditations and affiliations with renowned doctors; all reflecting an institution's ability to provide quality care that meets global standards and ensures overall patient satisfaction.^{23 77}

Hospitals with high rankings are often viewed as reliable providers of quality healthcare,³⁴ and patients tend to choose them in pursuit of excellent services and outcomes.⁷⁸ Research has demonstrated that reputation largely impacts patient loyalty and intentions to revisit the facility.⁷⁹ Additionally, positive media coverage, online reviews and accreditations highlight the commitment to high standards of care and safety.^{21 80 81}

Affiliations with renowned doctors, known for their exceptional skills, knowledge and success in the medical field, ultimately contribute to building trust among patients, boosting their confidence in the institution. This was evident in a study conducted in northern India, where famous doctors play a major role in shaping a hospital's image.³⁰ This is particularly true in Lebanon, where hospitals often promote their association with 'big names' to attract a large influx of patients.

However, reputation is a double-edged sword. While it can boost a hospital's performance, it also makes it vulnerable to negative perceptions. Patients are more likely to share their opinions about poor experiences, and these impressions can linger in public memory for years.²¹ Hence, former patients can even shape the views of those with no direct experience with a hospital.

**Table 4** Mean, SD and reliability metrics (Cronbach's α and McDonald's ω) of factor scores

Factors	Mean \pm SD	α	ω
Factor 1 – Staff	4.82 \pm 0.40	0.773	0.774
Factor 2 – Administrative services	4.75 \pm 0.35	0.801	0.802
Factor 3 – Reputation	4.17 \pm 0.62	0.773	0.776
Factor 4 – Accessibility	4.07 \pm 0.68	0.704	0.713
Factor 5 – Room attributes	4.04 \pm 0.74	0.796	0.799
Factor 6 – Building and physical appearance	3.66 \pm 0.80	0.828	0.831
Factor 7 – Luxury and accessory amenities	3.33 \pm 0.89	0.849	0.850
Factor 8 – Affiliation and ownership	3.28 \pm 0.97	0.661	0.674

Ease of access

Accessibility, particularly geographical ease of access, is a key factor in healthcare. Studies show that patients often prioritise a hospital's proximity over cutting-edge equipment and infection control records.¹⁶ Another example is a study in Saudi Arabia that highlighted the importance of having close relatives nearby, easy access to the hospital premises and parking availability.⁵³

In a Nigerian study, 15% of patients chose hospitals based on having relatives in the same town as the facility, valuing emotional support and assistance during hospital stays.²⁶ This is especially relevant in Lebanon, where family ties and dynamics are considered central to society.

Research in England found distance to be the main predictor of hospital selection, with two-thirds of people choosing the nearest hospital, while others travelled on average an additional 3.5 km to their chosen facility.⁸² This suggests a potential trade-off between proximity and other determinants, such as perceived quality, income or waiting time.^{83–85}

Parking availability also plays a determining role,⁸⁶ particularly for frail patients who require extra support to reach the hospital. For instance, a study on patients with haematological malignancies identified parking costs as a noteworthy expense in their treatment process.⁸⁷

Given Lebanon's poor infrastructure and transportation,^{88 89} an accessible hospital is not just convenient but essential for many patients and visitors.

Spatial comfort, building and amenities

Traditional hospitals are often known for the scent of medicine that pervades lobbies and rooms, with accommodations that lack cosiness and interactions with healthcare staff can sometimes fall short of courteous. Our findings indicate that individuals value room quality and overall architectural design—including appearance, size and green spaces—when choosing a hospital. While comfort amenities ranked low in priority according to our results, they still contribute to a hospital's overall performance and reputation.

The rise of medical tourism has led scholars to coin terms like 'hospital hotels', 'medical hotels' and 'hospital' to describe the blend of hospitality and healthcare.^{90–92}

A well-designed hospital environment with thoughtful layouts and corridor designs can improve outcomes and reduce stress.^{93–95} Amenities like gaming centres, lounges and other positive distractions can have a good impact on patients' perceptions.⁹⁶ A 2022 study underscored the importance of childcare within hospitals, especially given that a quarter of cancer patients have young children, and on-site childcare could alleviate family distress that disproportionately affects this patient population.⁹⁷

Ulrich's theory of supportive design posits that a hospital's environment reduces stress if it promotes perceptions of control, social support and positive distraction.⁹⁸ A 2015 study⁹⁹ applied this theory, finding that environmental elements in patients' rooms aid in stress management and healing. This is not mere speculation but is supported by neuroscience and environmental psychology, contributing to an evidence-based approach to design.⁹⁶ Another study¹⁰⁰ indicated that both nurses and doctors favoured wood interiors, indicating that the design appeals to staff as well.

Features like nature views, personalised lighting, music and temperature control improve the patient experience.^{96 101 102} Being in a setting akin to a hotel, characterised by abundant sunlight, pleasant scents, beautiful furniture, vibrant walls and top-notch materials, can provide positive distractions that can alleviate stress and pain.¹⁰³ Rooms with better views and increased natural light are known to decrease anxiety and delirium, as well as increase general well-being.¹⁰⁴ Incorporating natural elements, art forms and even multisensory biophilic virtual reality experiences has been shown to have therapeutic effects.¹⁰⁵ Single rooms also reduce infection rates,¹⁰⁶ improve privacy and comfort, allowing patients to maintain a sense of dignity and autonomy.¹⁰⁷ Psychological counselling and related services further contribute to promoting a holistic approach to recovery.¹⁰⁸

Hospital managers believe that patients often conflate their positive experiences in a comfortable healthcare setting with the quality of care they receive.¹⁰⁹ This notion supports the 'halo effect' theory,¹¹⁰ where patients surrounded by various amenities might tend to overestimate the hospital's performance levels without necessarily assessing its actual clinical quality.

Administrative efficiency, cost and specialised care

Another important factor in hospital selection, as identified by our EFA, is the quality of administrative services. Previous studies support this, highlighting the importance of service speed, efficient procedures and reduced waiting time.³⁰ Lee¹¹¹ also observed that service speed influences hospital choice, particularly in small to medium-sized hospitals.

Additionally, healthcare costs are a significant financial burden for individuals and families, specifically in Lebanon, where out-of-pocket expenditures are extremely high, placing families at substantial financial risk.¹¹²⁻¹¹⁴ International studies also emphasise the impact of cost on hospital choice.^{26 30 53}

Moreover, patients often come to a hospital with specific comorbidities, making them more likely to seek facilities with high-quality specialist doctors and cutting-edge technology.^{30 53 115}

Aligning interests with affiliations and ownership

Hospital affiliation and ownership emerge as meaningful considerations when seeking medical care. Although this factor is not as solid as the others, it reflects a very real aspect of the Lebanese ethos. In Lebanon, the healthcare market is dominated by private institutions owned by doctors, religious organisations, charities and universities.⁴⁷ The landscape is shaped by dominant sectarian and communal powers, with prominent religious groups running university hospitals. As a result, each establishment possesses a unique identity, with unique procedures and physicians from varied backgrounds, shaped by their training in different countries.¹¹⁶ Moreover, a Lebanese study revealed that people involved in political activism tend to have better healthcare access, as many hospitals have ties to religious sects and political entities.¹¹⁷

A German research¹¹⁸ strongly suggests that hospitals affiliated with religious institutions that openly convey their ownership status may have a competitive edge over those with different ownership types. While the quality of care, reputation and staff competence are crucial, people often prefer hospitals that align with their religious background, regardless of location.¹¹⁹ Schneider posited that ‘people make the place’, suggesting that people are drawn to organisations that uphold values similar to their own.¹²⁰ The sociocultural environment in a hospital influences preferences, as people tend to gravitate towards like-minded individuals.¹²¹ However, this factor may vary across cultures. For example, a 2019 USA study found that most individuals did not prioritise an institution’s religious affiliation.¹²² It is also worth considering the fact that our participants might have been hesitant to openly discuss the importance of religious affiliation and the sociocultural atmosphere of a hospital, potentially leading them to withhold their true sentiments and select more socially acceptable responses.

Furthermore, ownership status also matters. Patients who value ‘trust’ tend to lean toward private hospitals,¹²³ where they have more control of their journey.¹²⁴ In

contrast, patients who place a higher value on ‘affordability’ may opt for public hospitals, where costs are more accessible.¹²⁵

Implications

This study identifies the characteristics that individuals prioritise or expect when selecting a hospital for a planned admission in Lebanon. This information is valuable for hospitals aiming to improve their services and facilities, to better align with patient needs and expectations. It can be used to tailor marketing and outreach efforts to specific demographic groups and develop programmes and services that address the unique needs of different populations. Additionally, the findings may inform healthcare policy decisions, such as hospital funding and resource allocation, based on patient preferences and needs. They also highlight areas where hospitals can invest to enhance their competitive advantage in the healthcare market.

Understanding how crisis conditions impact healthcare decision-making can contribute to the development of more resilient and adaptable healthcare systems in the future. These findings not only provide potential guidance for hospitals seeking to enhance their services but also serve as a valuable reference for future research exploring hospital selection criteria in similar settings.

Limitations

Like any other research, the present study has several limitations that should be acknowledged when interpreting the results. Online convenience sampling might lead to a non-representative sample, as individuals who were not reachable or chose not to participate could differ significantly from those who did. Furthermore, bots were filtered using CAPTCHA, duplicates were identified and removed in Excel, but multiple participations could not be confirmed due to survey anonymity. Moreover, the uneven distribution of socio-demographic characteristics, such as sex, might not accurately reflect different subgroups. This is consistent with the trend that women are more likely to participate in surveys compared with men.^{126 127} It is also important to note that our sample comprises ‘potential’ patients, meaning their opinions may differ from those actually experiencing hospitalisation. Despite this, our findings align with existing literature, suggesting that the factors influencing hospital choice identified in our study are remarkably consistent with patterns observed in real-world decision-making scenarios. In addition, sensitive survey questions, particularly those related to religion or sociocultural aspects, may have led to biased responses or non-participation. Another limitation is the reliance on self-reported data, which may result in information bias. The absence of qualitative data limits our ability to gain deeper insights into participants’ perceptions. Future research should consider integrating qualitative methods to enrich our understanding and provide a more comprehensive view of



the factors influencing hospital choice. Although our EFA revealed key factors in hospital selection, confirmatory factor analysis may be necessary for further validation. Therefore, the exploratory nature of our study should be considered when interpreting the results.

CONCLUSION

This study sheds light on the factors affecting hospital choice among Lebanese individuals, underscoring the complexity of their decision-making process. The identified factors—staff qualities, administrative services, reputation, ease of access, room attributes, architectural and physical surroundings, luxury amenities and affiliation/ownership—collectively shape the perceived value and trustworthiness of a hospital for potential Lebanese patients. These findings are crucial for healthcare providers, administrators and policymakers. Understanding what drives patient preferences allows hospitals to tailor their services more effectively to meet patient needs and expectations. This research also contributes to the broader discourse on healthcare consumerism, by highlighting the importance of patient-centred care and the creation of positive hospital experiences. Ultimately, by consistently refining our understanding of what is most important to patients, we can strive to enhance both the quality and accessibility of healthcare services for all.

Acknowledgements The authors would like to thank all study participants and team members for their time and contribution to the project.

Contributors C-JEZ, DEK and JE-E were responsible for the conceptualisation and methodology. C-JEZ and AC handled data collection, while C-JEZ and FH conducted the statistical analysis. C-JEZ, AC and EG wrote the initial draft of the paper. All authors contributed to the review and editing of the manuscript. ChatGPT was used for language checks and writing assistance. C-JEZ is the guarantor of the study and is responsible for the overall content. We have used ChatGPT only for language check, (readability and proofreading) as English is not our primary language, and we could not afford professional language editing services due to our country's (Lebanon) current financial situation, which is impacting the availability of research funds. The software helped enhance the clarity, coherence and grammatical accuracy of the text, ensuring that the manuscript met academic writing standards.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by Université La Sagesse Ethics Committee for Research (FSP1/2023). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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