

Estimating the impact of customer services on customer satisfaction and profitability: Case study of the Doctors' Center-Beirut

Doctors Center Radiology is a pioneer in Lebanon and the region. However, the Doctors Center is being placed face to face with challenges associated with managerial issues. The aim of this study is to assess the relationship between patient satisfaction with the services provided, and the consequent impact on profitability. In fact, literature shows that when the patients are satisfied with the services delivered by a medical center, they become loyal to that center and communicate their satisfaction to their friends and relatives. This ensures customer retention and promises a market share expansion, and hence greater financial and non-financial profitability. The research method followed in this study is based on a cross-sectional study design. A total of 40 patients have participated in the study; they were all Lebanese patients attending the radiology department at the Doctor's Center, with similar numbers of male and female patients, aged between 16 years old and over 65. A total of 4 open-ended questions were answered and discussed by the participants after having completed the test but before leaving the department, in order to ensure an immediate objective assessment of their satisfaction with the services. Findings have revealed a lack of knowledge and understanding of the concept of customer services from the part of the patients. Recommendations were mostly concerned with training and developing a competent staff that is dedicated to establish a culture of excellence in customer services, as well as to establish guiding customer service rules in the center.

Keywords: *Customer service, patient satisfaction, healthcare profitability, radiology services, service quality, Lebanon healthcare.*

Introduction

Object of Study

The Radiology Center at the Doctors' Center in Hamra is a healthcare institute located in the heart of Beirut, not far from AUB and near AUBMC. This radiology center has been a pioneer in Lebanon and the region since 1979. Since 2004, this private radiology center has been offering high-quality services to patients using the latest technologies and state-of-the-art equipment, while during this decade, it has spread beyond Lebanon's borders (see: <https://doctorscenterlb.com>).

Useful Information

As a testament to the quality of services offered by the Doctors' Center in Hamra, the following message from the center addressed to its clientele inspires respect, trust and good customer service (see: <https://doctorscenterlb.com>): “Welcome to Doctors' Center. Start your health journey with us—expert advice, advanced technologies, and compassionate care tailored just for you.”

To better guide its clientele, the official website clearly provides a link with details on how to access the “[About Us](https://doctorscenterlb.com/about-us/)” page (see: <https://doctorscenterlb.com/about-us/>). The “About Us” message from Doctors’ Center Hamra invites its target audience (both potential and existing clients) with the following address: “*Welcome to Doctors Center, where expert care meets cutting-edge technology. Our dedicated team of radiologists and laboratory technicians is committed to providing accurate diagnostics and expert medical advice. By using state-of-the-art technologies and offering personalized care, we prioritize your well-being every step of the way. Start your health journey with us today!*” This message definitely encourages clients to get in touch and book an appointment (see: <https://doctorscenterlb.com/>).

History of Doctors Center Hamra

The Doctors Center in Hamra, Beirut, is a well-established medical facility renowned for its quality services in radiology and laboratory work. The center's history dates back to 1979 when the laboratory was founded, followed by the addition of the radiology department in 2000, significantly enhancing its capabilities. Over the years, the Doctors Center has undergone extensive renovations and upgrades, incorporating advanced technologies such as PET scans, 3 Tesla MRI, digital mammography with tomosynthesis, and state-of-the-art bone densitometry (see: <https://doctorscenterlb.com/>).

The center is committed to providing precise and reliable diagnostic services, supported by a team of highly specialized and certified physicians (see: <https://doctorscenterlb.com/>). Its laboratory department offers a wide range of tests and procedures, including clinical chemistry, medical microbiology, hematology, immunology, virology, and more (see: <https://www.findhealthclinics.com/LB/Beirut/493809500989338/Doctors%27-Center-Laboratory-and-Radiology>). The radiology department delivers comprehensive imaging services, such as traditional X-rays, ultrasounds, MRIs, and CT scans (see: <https://doctorscenterlb.com/>).

In 2024, the Doctors Center expanded its reach by opening a polyclinic in Dubai, showcasing its commitment to delivering exceptional care and services to a wider patient base. For further details on its services and quality commitments, visit their [official website](https://doctorscenterlb.com/). Additional online portals like Find Health Clinics also provide more insights into the Doctors’ Center in Hamra, which has built a trusted reputation based on positive client feedback and patient trust (see: <https://doctorscenterlb.com/>).

The Center’s Beirut Branches are both located in Hamra. Its Main Branches are in Abdul Aziz Street (Blue Building) and in Cairo Street (Marignan Center). Among its Other Branches, a few are located in Lebanon, outside Beirut. *While detailed information on additional branches is not publicly available, the Doctors’ Center has expanded to other regions in Lebanon, such as the Matn area and the North.* The most notable expansion outside Beirut is the Dubai polyclinic launched in 2024.

What Makes Doctors' Center Hamra Your Ideal Choice

The three below points discuss why is the Beirut Medical Doctors' Center is a great choice for customers to take appointments. If we go back to our research question (RQ1) ***addressing what the Impacts of Customer Service on Client Satisfaction and Profitability at Doctors’ Center- Beirut are***, we understand a positive relationship between good customer services and customer satisfaction on

the profitability. of Doctors' Center, Beirut we see a proportional relationship, as in increase in one variable, leads to an increase in the other, while a decrease leads to a decrease as well.

First. Commitment to Excellence: We are dedicated to providing professionalism and medical excellence, always prioritizing your health and well-being. Our devoted team works tirelessly to deliver the highest quality care.

Second. Comprehensive Healthcare Services: With an experienced team and cutting-edge technologies, we offer a wide range of services, from basic care to advanced treatments, ensuring you receive comprehensive and effective care.

Third. Personalized and Compassionate Care: Your comfort and safety are our top priorities. Whether for a routine check-up or specialized treatment, we are committed to offering you personalized care, attention, and support, ensuring the best possible healthcare experience.

Explanation of the Issue

While radiologists provide essential services to the medical community, customer service is equally critical. Radiology practices must deliver superior customer service to referring physicians and optimize operational efficiency to maintain their credibility, as noted in this report (see: <https://doctorscenterlb.com/>). Achieving a quality and safety program in radiology relies on four key areas: improving safety processes within healthcare facilities, professional outcomes, evaluation of services rendered, and client satisfaction (see: <https://doctorscenterlb.com/>).

Additionally, existing studies in the literature demonstrate a relationship between patient satisfaction, patient loyalty, and financial profitability. This relationship is strongly influenced by patients' perception of the added value of a healthcare service, which is itself shaped by customer service, responsiveness, and the professionalism of the staff at the Doctors' Center radiology department (see: <https://doctorscenterlb.com/>).

To date, major inefficiencies in processes hinder value creation for patients, leading to reduced profit margins for most medical centers. Those lacking high-quality services or optimal customer service risk losing significant market share to competitors offering better services. This is why the Radiology Center at Doctors' Center Hamra strives to provide the best medical services to its clients but must ensure that its managerial and administrative processes are effectively implemented. The primary concern of the Doctors' Center is to guarantee the highest level of client satisfaction. This issue addresses a concern raised in a previous study, which noted that the center faces challenges related to managerial problems (see: <https://doctorscenterlb.com/>). The current goal is to determine whether this issue has been resolved and, if not, what steps the medical center should take to address it.

Statement of Problem

The Doctors' Center needs to support its medical services by strengthening a variety of managerial and administrative processes that must be effectively

implemented. Effective execution of these non-clinical functions—such as staffing, budgeting, and workflow coordination—is essential to ensure operational efficiency, regulatory compliance, and high-quality patient care. Without robust management strategies, even technically advanced medical services may fall short of meeting patient expectations or sustaining profitability. As healthcare environments become increasingly complex, the integration of sound administrative practices becomes a critical determinant of institutional success (Bardon, 2025).

The Doctors' Center is committed to ensuring a high level of satisfaction among its patients. *Patient satisfaction is a critical indicator of healthcare quality and directly influences loyalty, word-of-mouth referrals, and long-term institutional reputation.* However, the Center is increasingly confronted with managerial challenges that hinder its ability to consistently deliver on this commitment. These challenges—ranging from inefficient administrative workflows to gaps in leadership and staff coordination—can erode patient trust and compromise service quality. Research highlights that effective managerial approaches are essential to align operational efficiency with patient-centered care, especially in complex healthcare environments where expectations and competition are rising (Omaghomi et al., 2024).

Purpose of the study

The aim of this study is to assess the relationship between patients' satisfaction levels and the profit margins generated by the services provided in the radiology department of the Doctors' Center. Patient satisfaction is increasingly recognized as a strategic driver of financial performance in healthcare institutions. Satisfied patients are more likely to return for future services, recommend the facility to others, and contribute to a positive institutional reputation—all of which enhance revenue streams and reduce marketing and retention costs. By investigating this link, the study seeks to provide actionable insights into how service quality and customer experience can be leveraged to improve both clinical outcomes and economic sustainability. (Giese et al., 2024).

Research Questions

The authors list below the four research questions (RQs) from Hassaniyeh' s (2021-2022) initial study, followed by the explanation obtained from a preliminary review of the literature. This step was crucial since we needed to explain the variables after clearly defining them. One way to do do, was to explain the questions based on explaining the relationship between customer service, patient satisfaction and profitability. These variables essentially dictate the research.

RQ 1: What is the relation between customer services and patient satisfaction with the medical and non-medical services delivered, and how does this get manifested in the profitability of the institution?

Customer service—both clinical and administrative—plays a pivotal role in

shaping patient satisfaction. **When patients** feel respected, informed, and well cared for, their perception of service quality improves across both medical and non-medical touchpoints. This satisfaction often translates into loyalty, positive word-of-mouth, and repeat visits, which directly contribute to institutional profitability through increased patient retention and reduced marketing costs (Yeboah & Amponsah, 2025; HealthCase, 2024).

RQ 2: How does customer satisfaction affect profitability?

Customer satisfaction is a key driver of financial performance in healthcare. Satisfied patients are more likely to **return** for future services, recommend the facility to others, and leave favorable reviews—all of which enhance revenue. Studies show that hospitals with higher satisfaction scores experience better financial outcomes, including increased revenue and lower operational costs due to fewer complaints and improved staff efficiency (GuidewayCare, 2025; Muscente, 2024).

RQ 3: How does customer service increase profits?

Exceptional customer service fosters trust, reduces patient anxiety, and improves overall experience. This not only boosts satisfaction but also enhances the hospital's reputation, attracting new patients **and** retaining existing ones. Moreover, streamlined service delivery reduces inefficiencies **and** administrative burdens, leading to cost savings and higher margins. Institutions that prioritize service excellence often see measurable improvements in their bottom line (FasterCapital, 2025; Giva, 2025).

RQ 4: What is the impact of customer satisfaction?

The impact of customer satisfaction extends beyond financial metrics. It influences clinical **outcomes**, treatment adherence, and patient engagement. Satisfied patients are more likely to follow medical advice, attend follow-up appointments, and participate actively in their care. This leads to better health outcomes and reduced readmission rates, which in turn support institutional sustainability and performance benchmarks (Medical Economics, 2021; Healthcare Business Today, 2024).

Significance of Study

This study draws insights into the critical role of patient satisfaction in enhancing the profitability of healthcare institutions. Numerous studies have shown that when patients perceive high-quality service—whether clinical or administrative—they are more likely to return, recommend the facility, and contribute to a stronger institutional reputation, all of which positively influence financial performance (Giese et al., 2024; Muscente, 2024).

Moreover, this study will help identify potential process deviations in customer service delivery, staff responsiveness, and operational workflows. By analyzing

patient feedback and service interactions, the research can uncover gaps in service quality and propose corrective strategies that align with best practices in healthcare management (Omaghomi et al., 2024; GuidewayCare, 2025).

Literature Review

Customer services aim to increase the value that consumers receive by enhancing their experience before, during, and after service delivery. In healthcare, this includes responsiveness, empathy, and clear communication, which collectively shape the perceived quality of care (Giva, 2025). Customer service is fundamentally the act of increasing value through personalized attention, streamlined processes, and consistent support. When executed effectively, it strengthens patient trust and institutional credibility (BoldDesk, 2025).

Satisfaction is defined as the act of meeting patients' needs and desires when consuming a service or product. In healthcare, this involves not only clinical outcomes but also administrative efficiency, staff behavior, and facility conditions (GuidewayCare, 2025). Profitability and sustained cash flow are essential for the survivability of any organization, particularly in the healthcare sector where operational costs are high and service expectations are rising. Institutions must balance quality care with financial sustainability to remain competitive (HealthCase, 2024).

Whether the organization is for-profit or non-profit, revenue generation is a key factor in maintaining service continuity, investing in infrastructure, and retaining skilled personnel. Financial health directly influences the institution's ability to deliver consistent and high-quality care (Muscente, 2024). The focus of this research is to uncover the relationship between customer services, customer satisfaction, and institutional profitability. These interconnected concepts form the foundation of the study's framework and guide its methodology and analysis (Giese et al., 2024).

Defining Key Terms

Medical Center

A medical center is a structured healthcare organization that delivers a wide range of services, often integrating outpatient care, diagnostics, and specialized treatment under one administrative framework. These centers operate within managed care models to ensure coordinated service delivery and cost efficiency (HealthCase, 2024).

Customer Service

In healthcare, customer service refers to the support and care provided to patients before, during, and after their medical interactions. It includes communication, responsiveness, empathy, and logistical assistance, all of which shape the patient's overall experience and trust in the institution (Giva, 2025; BoldDesk, 2025).

Customer Satisfaction

Customer satisfaction in healthcare measures how well the services provided meet or exceed patient expectations. It reflects the perceived quality of care, staff behavior, facility conditions, and administrative efficiency. High satisfaction levels are linked to better patient retention and institutional reputation (GuidewayCare, 2025).

Patients

Patients are individuals who receive medical attention, treatment, or diagnostic services. They may seek care for preventive, acute, or chronic conditions, and their experiences are shaped by both clinical outcomes and interpersonal interactions with healthcare staff (Medical Economics, 2021).

Radiology

Radiology is a medical specialty that uses imaging technologies—such as X-rays, CT scans, MRIs, and ultrasounds—to diagnose and treat diseases. It plays a critical role in modern healthcare by enabling non-invasive internal visualization and guiding therapeutic procedures (Healthcare Business Today, 2024).

Explanation based on the Key Terms

The study will explain the relationships of the variables previously defined through discussing the points that Kotler (1997) initially discussed. Kotler's marketing frameworks consistently emphasize the strategic role of customer orientation in driving organizational success. Across editions, the concept of **customer service** is positioned as a critical touchpoint for delivering value and building trust, especially in service-intensive sectors like healthcare. In a **medical center** context, this translates into operational systems that prioritize responsiveness, empathy, and reliability—core attributes that shape the patient experience. Kotler and Keller (2009, 2012, 2016) further elaborate that **customer satisfaction** arises when perceived service performance exceeds expectations, reinforcing loyalty and enhancing profitability. For **patients**, who function as both care recipients and evaluative consumers, satisfaction is influenced not only by clinical outcomes but by the quality of interpersonal and administrative interactions. Applying these principles to the Doctors' Center–Beirut, the marketing literature supports a model where strategic service design and patient-centric delivery are essential for sustaining competitive advantage and financial viability.

While Lee et al. (2014) present a practical framework for applying Lean Sigma value stream mapping in multidisciplinary clinical operations, emphasizing efficiency, workflow clarity, and service quality. So, in a **medical center** like the Doctors' Center–Beirut, such process optimization is vital for coordinating diverse departments and minimizing delays in patient care. Hassaniyeh's (2021-2022) study pointed that delays in service delivery reduce customer satisfactions greatly, as an argument was drawn from his empirical study from 2016.

The study highlights how structured mapping can enhance **radiology** services by identifying bottlenecks in imaging workflows, improving turnaround times, and

aligning resource allocation with patient demand. These improvements directly impact **customer service**, as streamlined operations lead to faster diagnostics, clearer communication, and reduced patient frustration. By embedding Lean Sigma principles into clinical routines, healthcare institutions can elevate both operational performance and patient satisfaction (see: Hassaniyeh, 2021-2022). Therefore, the arguments presented by Lee et al. (2014) are essential for enhancing customer satisfaction.

Finally, Levy and Weitz (2007) emphasize that effective customer service is a cornerstone of successful retail operations, directly influencing customer satisfaction, loyalty, and profitability. While their framework originates in retail, its principles are highly transferable to healthcare environments such as the Doctors' Center–Beirut. In a **medical center**, service delivery must be designed not only for operational efficiency but also for emotional reassurance and clarity—especially when dealing with **patients** who may be navigating stress, uncertainty, or discomfort. And as Levy and Weitz (2007) argue that personalized attention, streamlined processes, and consistent service standards are key to fostering **customer satisfaction**, which in healthcare translates into improved patient retention, positive reputation, and financial sustainability, Hassaniyeh (2021-2022) came to the exact same conclusion during his 2016 investigation. Therefore, by treating patients as valued customers and aligning service protocols with their expectations, healthcare institutions can leverage retail-informed strategies to enhance both care quality and institutional performance (see: Levy and Weitz (2007; Hassaniyeh, 2021-2022).

“Medical Center”

The Doctor's Center in Beirut as a “Medical Center” was the object of Hassaniyeh's (2021-2022) initial study in 2016, and now nearly a decade later by Bellos (2025). But what basically defines a medical center? Well a center that offers medical services, one would say, and to be precise such medical centers could well benefit from SWOT analyses like the one we propose for the Doctor's Medical Center in Table 1, based on Noaman (2018) and Noaman & Lakkis (2022).

Noaman's (2018) doctoral research on medical tourism and the later study conducted by Noaman and Lakkis (2022) provide several interesting arguments that the authors used to design the SWOT analysis of the Doctors' Center–Beirut. The former study highlights Lebanon's potential as a destination for specialized healthcare services, emphasizing consumer behavior and cross-border demand¹ (see: Slazus, & Bick, 2022). Building on this, while the latter one study focuses on pharmaceutical investment and healthcare infrastructure as levers for export-driven growth (Noaman's 2018; Noaman & Lakkis, 2022). The points discussed in these studies could align with Hassaniyeh's (2021-2022) investigation of the Doctor's Medical Center in Beirut.

These perspectives directly shape the strategic planning of the medical center: strengths include its location, service specialization, and potential for regional outreach; weaknesses involve systemic instability and supply chain fragility; opportunities lie in tapping into medical tourism and pharmaceutical partnerships;

¹The cited study was used as an example on discussing how complex consumer behavior can be.

and threats stem from economic volatility and regulatory uncertainty. Together, these studies offer a macro-strategic lens through which the center's positioning and growth potential can be critically assessed (see: Table 1).

Customer Service

This point is essential in terms of tying customer satisfaction in terms of the presence, or absence of effective customer service. Bellos (2025) discussed this point clearly with respect to the Doctor Center in Beirut. While, Hassaniyeh (2021–2022) provides a focused case study on the Doctors' Center–Beirut, demonstrating how the quality of customer service directly influences both patient satisfaction and institutional profitability, he realized that during the time of his study the customer service of the medical center were defaulting.

Upon recent observations it noticed that they dramatically improved (M. E. Farah, personal communication, 2025). The thesis highlights that timely communication, courteous staff behavior, and streamlined administrative processes significantly enhance the patient experience, leading to higher retention rates and positive word-of-mouth. These findings reinforce the strategic role of customer service as a performance lever in healthcare, where service quality is not merely a support function but a core determinant of financial and reputational outcomes (Hassaniyeh, 2021-2022).

As Oliver (1997) conceptualizes **customer satisfaction** as a psychological response to service performance relative to expectations, framing it as a dynamic and behaviorally driven construct. Extending this, Oliver, Rust, and Varki (1997) introduce the notion of **customer delight**, which occurs when service delivery significantly exceeds expectations, triggering emotional engagement and long-term loyalty. In healthcare contexts like the Doctors' Center–Beirut, these insights are particularly relevant: **patients**, as emotionally invested service recipients, respond not only to clinical outcomes but to the quality of **customer service** interactions—such as empathy, attentiveness, and clarity. By designing service experiences that aim not just to satisfy but to delight, medical centers can foster deeper trust, enhance retention, and differentiate themselves in competitive healthcare markets.

How do these actually relate to customer service? Especially in the case of a Medical Center like the one that Hassaniyeh (2021-2022) studied. Well, it goes like this. “Oliver’s behavioral model of satisfaction and delight explains how patients emotionally respond to service quality. Hassaniyeh’s (2021–2022) study at the Doctors' Center–Beirut shows this in practice: customer service—especially empathy, responsiveness, and administrative clarity—is the channel through which patients form judgments. *“When service meets expectations, satisfaction follows; when it exceeds them, patients feel valued and loyal. In this context, customer service isn’t just operational—it’s the emotional engine driving retention and profitability”* (Bellos, 2025: 1).

Employee and Customer Satisfaction

Before explaining customer satisfaction, we need to explain “*employee satisfaction*”, since an dissatisfied employee will never be able to produce and perform well and therefore the customers will notice something could be odd (see:

1 Noman et al. 2022).

2 *Employee satisfaction and customer experience* are increasingly recognized as
3 interlinked drivers of financial performance, particularly in service-intensive sectors
4 like healthcare. Studies have shown that when staff feel supported, empowered, and
5 engaged, they are more likely to deliver consistent, empathetic, and high-quality
6 service—factors that directly influence patient satisfaction and retention.

7 In the context of the Doctors' Center–Beirut, this relationship is critical: the
8 quality of client-facing services not only shapes perceptions of care but also
9 contributes to operational efficiency and long-term profitability. Amzil et al. (2023)
10 and Belklos (2025) both agree in terms of the relationship that Hassaniyeh (2021-
11 2022) was studying in his case study about the Doctors Center in Beirut. When he
12 studied the medical center in 2016, he realized that the level of customer satisfaction
13 was poor. Currently the medical center has excellent rapport with its clientele (M.
14 E. Farah, personal communication, 2025).

15 This review draws on secondary data to explore how service delivery
16 mechanisms, staff responsiveness, and patient feedback loops collectively impact
17 the center's financial outcomes. Recent meta-analytic evidence confirms that
18 customer satisfaction is positively associated with both customer-level outcomes
19 (e.g., retention, spending, word-of-mouth) and firm-level financial performance
20 (Mittal et al., 2023).

21 In terms of research pertaining to customer satisfaction, loyalty and other
22 variables, Hallowell (1996) provides foundational empirical evidence linking
23 customer satisfaction to loyalty and profitability, particularly in service-driven
24 industries. His study demonstrates that satisfied customers are significantly more
25 likely to return, recommend services, and contribute to stable revenue streams
26 (Hallowell, 1996). This reinforces the strategic importance of measuring and
27 improving satisfaction metrics within healthcare environments like the Doctors'
28 Center–Beirut. In such settings, where trust and continuity of care are paramount,
29 even marginal gains in patient satisfaction can translate into measurable financial
30 benefits and long-term institutional resilience. Using these theories and
31 argumentations, Hassaniyeh (2021-2022) was able to see the application directly, of
32 how one variable can dramatically affect the other.

33 While Melkonian (2020) explores how administrative decision-making
34 directly affects employee motivation, showing that transparent policies, recognition,
35 and participatory governance foster stronger engagement and performance, this
36 could apply to a medical center like the Doctors Center, Beirut, Hassaniyeh (2021-
37 2022) sought to understand the relationship between employee motivation and
38 customer service and satisfaction because even if the relationship between these
39 variables may appear minimal, at first, it is existing and is important.

40 In parallel, Noaman, Harguem, and Bellos (2022) examine how external
41 stressors—particularly the Lebanese economic crisis and COVID-19—compound
42 motivational challenges, leading to increased turnover and organizational
43 instability. Together, these studies highlight that in healthcare institutions like the
44 Doctors' Center–Beirut, employee motivation is not only shaped by internal
45 management but also by broader socioeconomic pressures. Since motivated staff are
46 more likely to deliver high-quality customer service, these findings underscore the

strategic importance of supporting personnel to sustain patient satisfaction and institutional resilience, in which . Hassaniyeh (2021-2022) agreed since employee trainings in customer service was one of the key recommendations his study ultimately brought up.

Patients

Discussing the role of medical centers, patients and how these two stakeholders within the society interact, Hassaniyeh (2021-2022) made sure to explain in his initial report what was exactly meant by patients. Bellos (2025) understood that for the center, the customers aren't viewed just as money making potential but actually as people needing treatment which makes a huge difference in oe the medical center sees its customers as tue patients and not just numbers .

So, as such and in delaling with people comesthe “ethical considerations”. Ethical considerations, as such, are central to understanding the role of patients in healthcare systems. Fulford, Dickenson, and Murray (2008) argue that patient-centered care must be grounded not only in clinical competence but also in respect for individual values, autonomy, and dignity. This perspective reframes patients as active participants rather than passive recipients, emphasizing the moral obligations of healthcare providers to engage empathetically and transparently. In the context of the Doctors' Center–Beirut, recognizing patients as moral agents with distinct preferences and expectations reinforces the importance of ethical service delivery and strengthens the foundation for sustainable satisfaction and trust (Fulford, Dickenson, and Murray, 2008).

While some experts claim the ethical conduct of medical centers are essential in-patient care and treatment, patient satisfaction should NOT be disregarded. As such, Haslock (1996) emphasizes that patient satisfaction is not merely a reflection of clinical outcomes but also of the perceived quality of care, including communication, empathy, and responsiveness. In rheumatology and broader medical contexts, satisfaction hinges on how well healthcare providers address both the medical and emotional needs of patients. This insight is particularly relevant to the Doctors' Center–Beirut, where service quality and interpersonal dynamics play a crucial role in shaping patient experiences. By aligning clinical excellence with compassionate care, institutions can foster higher satisfaction levels and reinforce trust in their services.

Schiffman and Kanuk (1997) define consumer behavior as the study of how individuals make decisions to spend their available resources on consumption-related items. When applied to healthcare, this framework positions **patients** as active decision-makers whose choices are shaped by perceptions of service quality, trust, and personal relevance. In the context of the Doctors' Center–Beirut, understanding **patient** behavior means recognizing that satisfaction and loyalty are influenced not only by clinical outcomes but also by how well the service experience aligns with expectations and personal values (Hassaniyeh, 2021-2022). This consumer-oriented lens reinforces the need for healthcare providers to treat **patients** as informed consumers whose preferences and perceptions directly impact institutional success (e.g. Bellos, 2025).

1 Radiology

2 Kitchin and Applegate (2007) investigate how radiology residents engage with
3 educational resources, revealing a shift toward digital platforms alongside
4 traditional textbooks and journals. Their findings underscore the importance of
5 accessible, up-to-date information in shaping diagnostic accuracy and clinical
6 confidence. In the context of the Doctors' Center–Beirut, where radiology is a core
7 service, the integration of digital learning tools and evidence-based imaging
8 protocols directly influences service quality and patient satisfaction. This highlights
9 the dual role of radiology as both a technical discipline and a service domain
10 requiring continuous professional development. Hassaniyeh (2021-2022) realized
11 the high quality of the medical center radiology units and facilities already during
12 his study of the center's performance.

13 While Nowicki (2007) outlines the financial structures and decision-making
14 processes that underpin hospital operations, emphasizing that sustainable
15 performance in a **medical center** depends on strategic budgeting, cost control, and
16 revenue cycle management, Hassaniyeh (2021-2022) understood how these relate
17 to the radiology department as he works there. On the other hand, Scott (2000)
18 complements this by examining how institutional shifts—from professional
19 dominance to managed care—reshape organizational behavior and service delivery
20 in healthcare settings.

21 Together, these works highlight that a **medical center** like the Doctors'
22 Center–Beirut operates within both financial and institutional constraints, where
23 effective management must balance clinical priorities with evolving administrative
24 models. Understanding these dynamics is essential for aligning operational
25 decisions with long-term viability and patient-centered outcomes.

26 Nowicki (2007) highlights that departments such as **radiology** carry substantial
27 financial weight due to costly equipment, specialized personnel, and throughput
28 demands—all of which influence a **medical center's** operational sustainability.
29 Scott (2000) further explains that the shift toward managed care has restructured
30 radiology's role, requiring tighter integration with institutional protocols and greater
31 emphasis on accountability. At the Doctors' Center–Beirut, this translates into a
32 need for radiology services to deliver precise diagnostics while remaining aligned
33 with broader financial and administrative imperatives. As such, radiology functions
34 not only as a clinical unit but as a pivotal contributor to institutional performance,
35 this is exactly what Hassaniyeh (2021-2022) observed in his study.

36 **Research Method and Design**

37
38 The research method followed in this study is based on a cross-sectional study
39 design. Based on Saunders et al. (2003), the researchers confirm that interpretivism,
40 induction, and unstructured surveys were used, and a “one-time study” was done.
41 The sampling was purposive. As such, the methodology adopted in this study is
42 grounded in a cross-sectional research design, which captures data at a single point
43 in time to assess relationships between variables without manipulating them
44 (Scribbr, 2023). This design is particularly suitable for healthcare settings where
45 rapid insights into service quality and patient satisfaction are needed. The
46 philosophical underpinning of the study is interpretivism, emphasizing the

subjective experiences of patients and staff and aiming to understand how individuals perceive and respond to customer service in a medical context (UserCall, 2025). An inductive reasoning approach was used, allowing patterns and themes to emerge organically from the data rather than testing predefined hypotheses. Data collection relied on unstructured surveys, which provided participants with the freedom to express their views in detail, enabling the capture of rich, qualitative insights into service delivery and institutional performance (Andal-Saniano et al., 2024). The study was conducted as a “one-time” snapshot, aligning with the cross-sectional model and offering a focused view of current conditions. Sampling was purposive, targeting individuals directly involved in or affected by customer service interactions—such as patients who had recently used radiology services or staff responsible for service delivery—ensuring that the data collected was both relevant and contextually grounded (HealthCase, 2024).

Population, Sample Size, and Sample Type

The age categories included in the study will vary from people 16 years old to over 65 years old. The study participants were approached ethically, through signing consent forms. The expected sample size constituted of 40 research subjects, selected purposively, with equal gender distribution (see Brynman, 2012). The population targeted in this study includes individuals aged 16 and above, extending to those over 65 years old. This broad age range ensures representation across adolescent, adult, and elderly groups, which is essential for capturing diverse perspectives on healthcare service quality and satisfaction (Saunders et al., 2003). Participants were approached ethically, with informed consent obtained prior to data collection. This aligns with standard research protocols that prioritize autonomy, confidentiality, and voluntary participation in human subject research (Andal-Saniano et al., 2024). The expected sample size consisted of 40 research subjects, selected using purposive sampling. This non-probability technique allows researchers to intentionally choose participants who are most relevant to the study objectives—such as patients who have recently interacted with radiology services or staff involved in customer service delivery (HealthCase, 2024). Equal gender distribution was maintained to ensure balanced representation and minimize bias in the analysis of satisfaction and service perceptions (UserCall, 2025).

Assumptions, Limitations and Delimitations

It is assumed that a qualitative cross sectional study design is the appropriate study design to generate a set of data that covers the perspectives and opinions of the participants in a more convenient way that other study designs fail to achieve (Creswell, 2012). So, in terms of “**Assumptions**”, this study assumes that a qualitative, cross-sectional design is appropriate for capturing the perspectives and experiences of participants in a healthcare setting. It is believed that this approach allows for a more nuanced understanding of customer service and satisfaction than other designs, such as longitudinal or experimental models (Saunders et al., 2003). It is also assumed that participants will respond truthfully and thoughtfully to

unstructured survey prompts, providing insights that reflect their genuine experiences (Andal-Saniano et al., 2024).

As per “**Limitations**”, the study is limited by its sample size of 40 participants, which may restrict the generalizability of findings. Additionally, the use of purposive sampling introduces potential selection bias, as participants were chosen based on relevance rather than randomization (HealthCase, 2024). The cross-sectional nature of the study also means that temporal changes in satisfaction or service quality cannot be captured, and causality cannot be inferred (UserCall, 2025). Whereas, “**Delimitations**” assume that the scope of the study is intentionally focused on patients aged 16 and above who have interacted with radiology services at a single medical center. This boundary ensures contextual relevance but excludes other departments and younger age groups. The study also concentrates on customer service and satisfaction as perceived by patients, rather than clinical outcomes or staff perspectives, to maintain thematic clarity (GuidewayCare, 2025).

Findings

Bellos (2025) analysed a previous study from the Doctors Center and noticed something. The study he cited used qualitative methods. While he analysed secondary data—such as patient feedback, institutional messaging, and service history—to assess how customer service influences satisfaction and profitability (ref). The following abstract summarizes the findings of the secondary data analysis conducted by the researcher at the Doctors’ Medical Center in Beirut, published on March 22, 2025 (Bellos, 2025). While that study aimed to evaluate the relationship between customer service quality and the profitability of the Doctors' Medical Center, focusing on its radiology department. Drawing on the findings of a previous study, the research uses qualitative analysis of secondary data to assess patient satisfaction and its implications for the center's performance (ref).

The literature review highlights the connection between customer service quality, patient satisfaction, and organizational success, emphasizing the role of efficient customer service in healthcare establishments (ref). The study involves a detailed review of existing reports and patient feedback to identify key issues related to customer service, such as staff responsiveness, communication, and service delivery quality. The expected findings suggest that suboptimal customer service negatively affects patient loyalty and could hinder the medical center's profitability, based on the interpretation of secondary data.

Based on these findings, the cited study recommends implementing regular customer service training for staff, improving communication protocols, and developing clear guidelines for all departments within the medical center. Our research demonstrates that the customer service is nearly flawless, as are the medical and technical services (ref). These actions are expected to enhance overall patient satisfaction and, in return, contribute to the long-term financial stability of the Doctors’ Medical Center. Our study highlights excellent client feedback and positive patient experiences, which indicate they are likely to return. This success is further demonstrated by the opening of a new branch in Dubai in 2024, in addition to the local branches in Beirut and across Lebanon.

Interpreting the Data

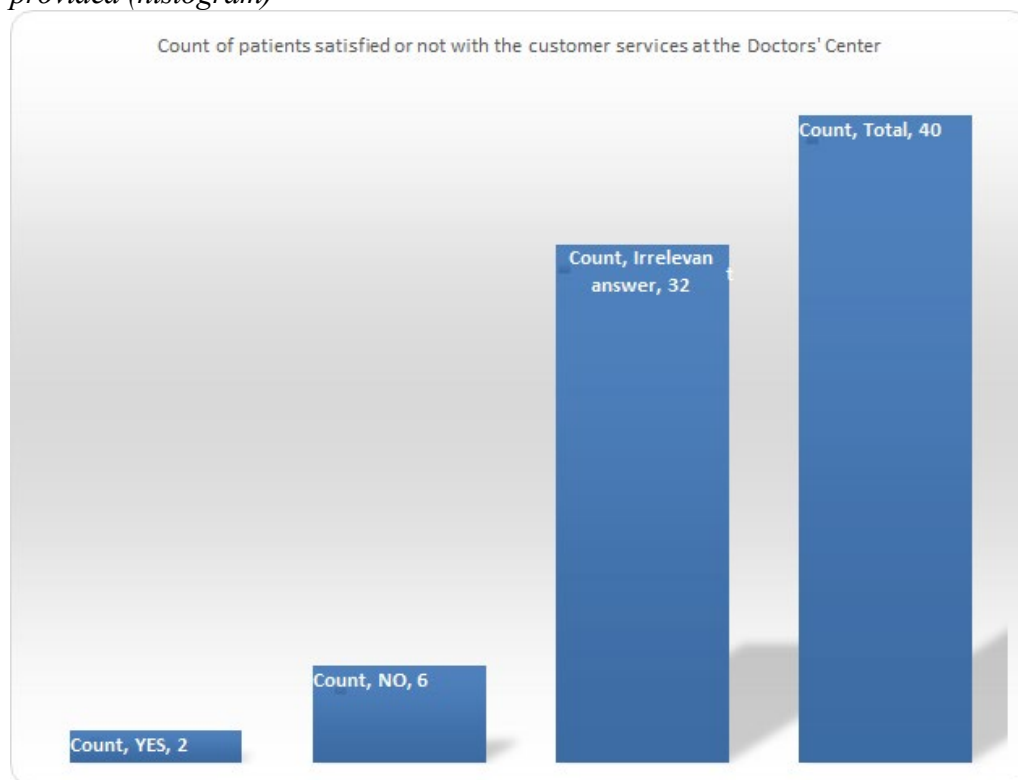
The initial research interpreted the responses of 40 participants (Hassaniyeh, 2021). The investigator disregarded 80% of the responses deemed erroneous, as we see in Figures 4.1 and 4.2. Table 1 shows the proposed SWOT analysis for the Doctors Center that Bellos (2025) proposed. While, the corrected count of valid responses, as shown in Table 2, which reveals a clear dissatisfaction with the customer service quality at the radiology department of the Doctors' Center in Hamra at the time the study was initially conducted in 2016.

According to the table, and following data adjustments, it appears that 75% of respondents are dissatisfied with the services, compared to 25% who are satisfied (Figure 3). It would indeed be advisable to conduct customer service training sessions for the medical center's staff, and equally important to reinforce the concept of customer service among the center's patients. The percentages of patients satisfied or not with the customer service at the Doctors' Center is shown in Figure 2, stating that while 80% of the responses, as they were irrelevant, were omitted. From the remaining 20%, 5% were pleased, whereas the other 15% weren't. This yields the 75% - 25% ratio of dissatisfaction versus satisfaction as Hassaniyeh (2021) initially discussed in his study, conducted in 2016.

We could say that as the study that was conducted in 2016 and presented in 2021 by M. Hassaiyeh during his master's thesis research, the study demonstrated that indeed an increase in customer satisfaction will automatically lead to an improvement in the company's business profits. Hassniyeh (2021) discussed that as the customers get increasingly dissatisfied, the resulting outcome would be a drop in profit, explaining the proportional relationship between the variables under study, showing a causal relationship. Bellos (2025) agreed as well, since he demonstrated that in 2024, the Medical Center expanded regionally, and that it was doing very well. This was according to recent findings (M. E. Farah, personal communication, 2025).

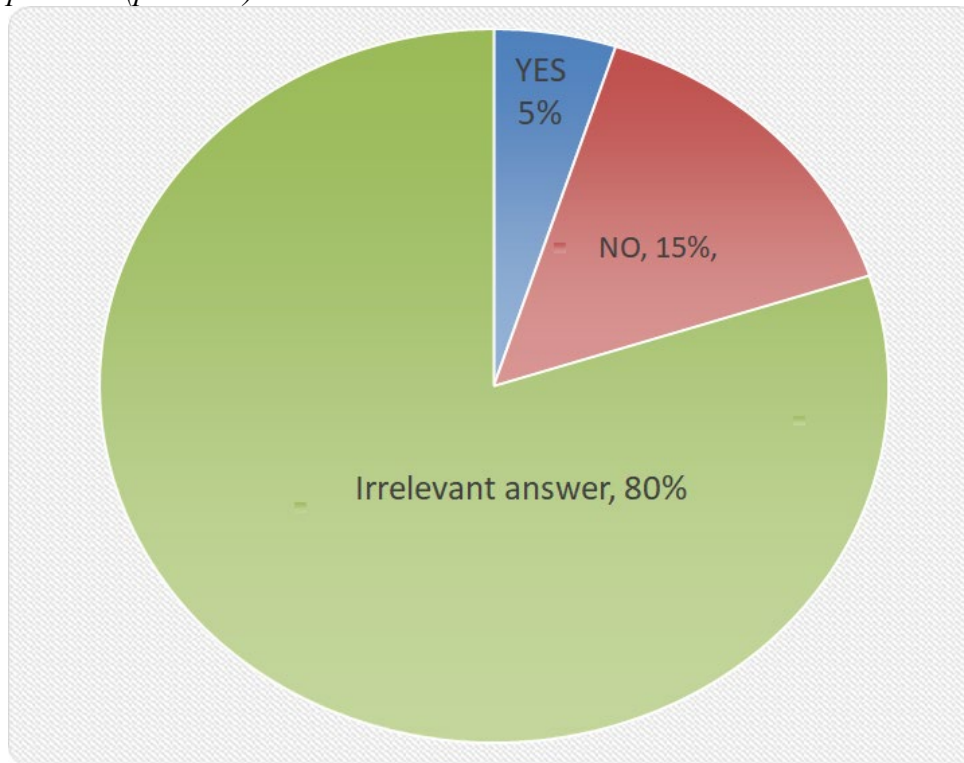
So, Figure 2 visually represents the proportion of respondents who expressed satisfaction versus dissatisfaction with the customer service provided at the radiology department of the Doctors' Center in Hamra. Based on the re-estimated data (see Table 3), 75% of participants reported dissatisfaction, while 25% expressed satisfaction. Bellos (2025) noticed that the technical services were very good. As many customers from the medical center at the time of the initial study were satisfied with the quality of the medical tests but not of the customer service.

1 **Figure 1.** *Count of participants satisfied or not satisfied with the customer services*
 2 *provided (histogram)*



3
 4
 5 While, Table 1 shows the SWOT analysis as Bellos (2025) proposed following
 6 the arguments that Hassaniyeh (2021-2022) collected and backed up with recent
 7 observations, since apparently the medical center in 2025 greatly improved its
 8 quality since customers were currently satisfied of the Center's services,

1 **Figure 2.** Count of participants satisfied or not satisfied with the customer services
 2 provided (pie chart)



3
4

5 **Table 1.** Proposed SWOT matrix of the Doctors's Medical Center in Beirut

Strengths	Weaknesses
Advanced Technology and Equipment:	Customer Service Issues:
Established Reputation	Inefficient Administrative Processes
Experienced Medical Staff	Limited Patient Engagement
Prime Location	Lack of Staff Training
Opportunities	Threats
Improvement of Customer Service	Intense Competition
Implementing Digital Solutions	Geopolitical Instability
Expansion of Services	Staff Turnover
Collaboration with Insurance Companies	Economic Crisis

6

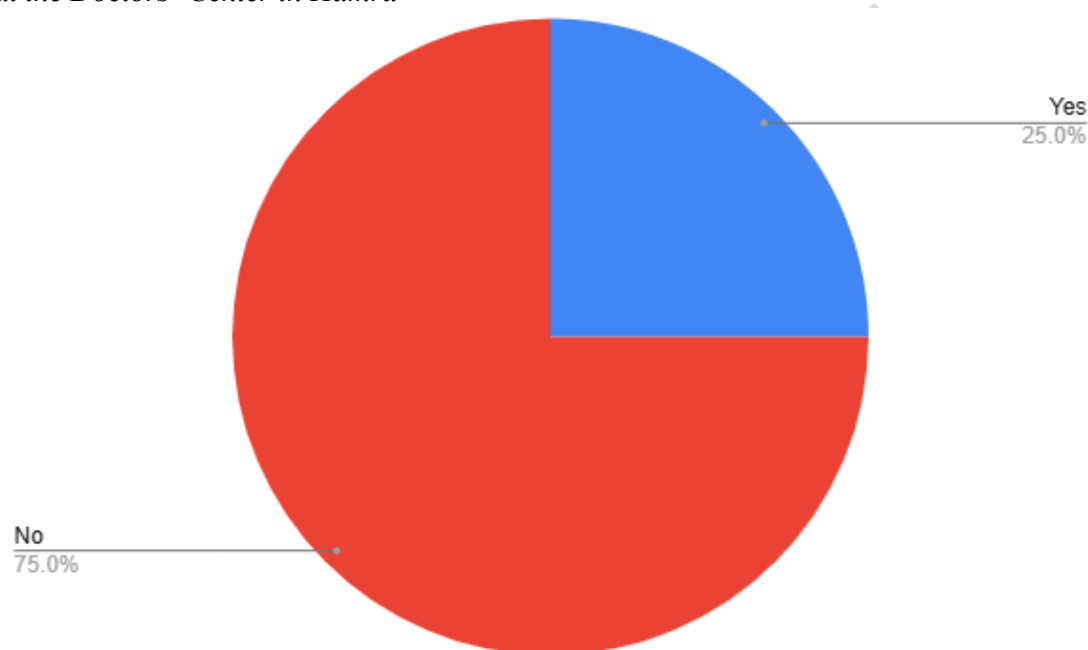
7 While, a decade ago it wasn't the case (personal communication, M. E. Farah,
 8 2025). This in a way reiterates the assertion that Hassaniyeh (2021-2022) had the
 9 aforesaid variables have a relationship while seeing that an increase in one
 10 "satisfaction" should show an increase in the other "performance". Whereby,
 11 showing that the case was explained that as the satisfaction levels in 2016 were
 12 considerably lower than in 2025, which explained why the center was

underperforming (see Hassaniyeh, 2021-2022). Accordingly, the result from Table 2 and Figure 3 were clear, showing a majority of customers being dissatisfied during the conduction of the initial study.

Table 2. *Re-estimation of the Number of Participants Satisfied with Customer Service*

Are you satisfied with the customer services	YES	NO	Total
Count	2	6	8

Figure 3. *Results Showing Whether Clients Were Satisfied with Customer Service at the Doctors' Center in Hamra*



Arguments

The current research indicates that the Doctors' Center in Hamra boasts a highly qualified medical team as well as a customer-oriented staff that provides quality service both in terms of medical care and client reception. Patients choosing this medical center are warmly welcomed from the initial "hello" to the final "goodbye." In the previous study conducted 10 years ago, Hassaniyeh (2021) highlighted a discrepancy between superior medical services and poor customer service, which may have been the case in the past. However, current observations tell a different story (see: <https://doctorscenterlb.com/>). *Could it have been possible that the center received negative client feedback in 2016?* Perhaps. But today, the medical center's website is far better organized than before, reflecting improvements since the last visit. As evidence of their dedication, positive client feedback and high levels of satisfaction have been observed, demonstrating significant progress and trust in their services. Table 1, below, could hint out some potential strengths, weaknesses, opportunities and threats to currently look out for (cf. Bellos, 2025ref) as shown in the proposed SWOT analysis for the Doctor's Center.

Table 3 shows the proposed areas of improvement as Hassaniyeh (2021) discussed them in his study. The table reveals a clear pattern of dissatisfaction among patients regarding several operational aspects of customer service at the Doctors' Center. The most frequently cited issue—waiting time, mentioned by 21 participants (52.5%)—underscores a systemic inefficiency that directly affects patient experience. Long waiting times are consistently linked to reduced satisfaction and lower perceived service quality in healthcare settings (Giese et al., 2024; Muscente, 2024). This suggests an urgent need for workflow optimization and better appointment management.

Closely following is parking availability, cited by 15 participants (37.5%). While not directly tied to clinical care, parking access significantly influences patient convenience and overall satisfaction. In urban healthcare environments like Hamra, logistical barriers such as parking can deter repeat visits and damage institutional reputation (GuidewayCare, 2025). Phone answering, flagged by 12 participants (30%), points to a breakdown in communication channels. Inadequate responsiveness to calls may reflect understaffing, poor training, or lack of accountability. This issue is particularly damaging in healthcare, where timely communication can affect patient trust and continuity of care (Giva, 2025).

Other concerns—staff responsiveness (15%), availability (12.5%), and communication (7.5%)—highlight interpersonal and operational gaps. These areas are foundational to customer service and suggest that patients perceive staff as either inattentive or inaccessible. Such perceptions can erode confidence in the institution, even when medical services are technically sound (BoldDesk, 2025). Finally, waiting area conditions (10%), though less frequently mentioned, still reflect environmental factors that shape patient comfort. A poorly maintained or overcrowded waiting area can amplify dissatisfaction during long waits and contribute to negative evaluations of the center.

Table 3 reveals that the most frequently cited areas of improvement at the medical center are **waiting time** (52.5%) and **parking availability** (37.5%), indicating systemic issues in patient flow and accessibility. **Phone answering** also stands out (30%), suggesting communication bottlenecks at the front desk. While fewer participants mentioned **staff responsiveness** (15%), **availability** (12.5%), and **communication** (7.5%), these still reflect underlying concerns about service quality. Collectively, the data points to operational inefficiencies that directly affect patient experience, emphasizing the need for targeted interventions in logistics, staffing, and communication protocols.

Table 4 offers a strategic overview of the most commonly proposed solutions to the customer service challenges identified in earlier sections. The dominant recommendation—**staff training**, cited by 32 participants (80%)—reflects a widespread belief that service quality is directly tied to employee behavior, communication, and responsiveness. This aligns with healthcare service literature, which emphasizes that regular training enhances empathy, professionalism, and consistency in patient interactions (Giva, 2025; BoldDesk, 2025). The second most frequent recommendation—establishing customer service guidelines, supported by 27 participants (67.5%)—suggests a need for institutional clarity. Guidelines serve as operational anchors, ensuring that all staff follow standardized procedures when

dealing with patients. This reduces variability in service delivery and helps build trust, especially in high-stakes environments like radiology departments (GuidewayCare, 2025).

Table 3. *List of proposed areas of improvement, their count, and frequencies of the proposed areas of improvement*

Proposed area of improvement	Number of participants	Frequency
Staff availability	5	12.5%
Staff responsiveness	6	15%
Staff communication	3	7.5%
Phone answering	12	30%
Waiting area	4	10%
Waiting time	21	52.5%
Parking availability	15	37.5%

Less frequent but still notable are deployment adjustments and employee replacement, each cited by 4 participants (10%). These responses indicate that some patients perceive structural or personnel issues that cannot be resolved through training alone. While replacement is a more drastic measure, it may reflect frustration with repeated negative experiences or perceived incompetence. Deployment, on the other hand, may refer to better staff allocation during peak hours or in high-demand service areas (see: Hassaniyeh, 2021). Finally, valet parking, mentioned by only 1 participant (2.5%), highlights a niche but relevant logistical concern. Though not central to customer service delivery, parking convenience can influence the overall patient experience, especially in congested urban areas like Hamra (HealthCase, 2024).

Table 4. *Participants' recommendations for improvement*

Strategy	Count	Frequency
Training	32	80%
Deployment	4	10%
Employee replacement	4	10%
Customer services guidelines	27	67.5%
Valet parking	1	2.5%

Recommended course of action following data interpretation

Table 5 shows that while the customers would not recommend the center for its customer service, as Hassaniyeh (2021) showed in his analysis, they would for the medical quality. The table compares how patients' willingness to recommend the Doctors' Center varies depending on their experience with medical services versus customer service. We interpret it as such: Medical services are highly valued,

with 55% of respondents recommending the center based on clinical care alone. This confirms the center's strength in diagnostics, treatment, and technical expertise (Hassaniyeh, 2021; Bellos, 2025). In contrast, customer service is a liability, with only 15% recommending the center based on their non-clinical experience. A striking 25% explicitly do not recommend the center due to poor customer service. While the overall recommendation rate (70%) is driven primarily by satisfaction with medical services, not customer experience (Hassaniyeh, 2021).

Table 5. *Distribution of Recommendations Based on Service Type*

	Medical service	Customer service	Total
Recommend	55%	15%	70%
Does not recommend	5%	25%	30%
Total	60%	40%	100%

According to our Interpretation, a) Training (80%) is the most urgent and widely supported recommendation. Patients believe that frontline staff need better preparation in communication, empathy, and responsiveness—core pillars of service quality (Giva, 2025). b) Customer service guidelines (67.5%) reflect a demand for institutional clarity. Patients want consistent standards across departments, reducing variability and confusion. c) Deployment and employee replacement (each 10%) suggest that some patients perceive structural or personnel issues that training alone cannot fix. These responses may point to chronic inefficiencies or repeated negative interactions. d) Valet parking (2.5%), though minor, highlights logistical concerns that affect patient convenience—especially in congested areas like Hamra (Hassaniyeh, 2021). Figure 5 presents an indicative visual from the official website or promotional materials of the Doctors' Center in Hamra, showcasing the range of medical and support services available at the facility. This figure serves not only as an informational tool but also as a strategic branding element, emphasizing the center's comprehensive care model. Bellos (2025) believes that it is the case.

Table 6. *Participants' Recommendations for Service Improvement*

Strategy	Count	Frequency
Training	32	80%
Deployment	4	10%
Employee replacement	4	10%
Customer services guidelines	27	67.5%
Valet parking	1	2.5%

Figure 4 displays a screenshot of the Doctors' Center's official website, emphasizing three core elements of its brand identity: **service quality**, **qualified personnel**, and **warm hospitality**. These attributes are presented as the "three essential keys to business success," reflecting the center's strategic positioning in the healthcare market (Bellos, 2025). According to our interpretation, a) **Service Quality**: is then the website highlights the center's commitment to delivering high-standard medical care and customer service. This aligns with patient feedback

praising the technical excellence of radiology and clinical services, even as some critique the administrative experience. b) **Qualified Personnel:** is when the emphasis on professional staff reinforces the center's reputation for medical competence. It also serves as a reassurance to prospective patients that they will be treated by experienced and certified professionals. c) **Warm Hospitality:** is when the notion of a welcoming atmosphere is crucial in healthcare, where emotional comfort and trust are part of the healing process. By showcasing this value, the center aims to differentiate itself from more transactional or impersonal institutions.

According to our **Interpretation:** a) **Service Diversity:** is when the figure likely includes icons or listings for departments such as radiology, laboratory diagnostics, general medicine, specialized consultations, and possibly wellness or preventive care. This breadth signals the center's ambition to position itself as a one-stop destination for outpatient medical needs. b) **Patient-Centered Framing:** is when by visually organizing services, the center communicates accessibility and transparency—two key factors in building patient trust. It also helps patients navigate offerings more easily, reducing confusion and enhancing the user experience. c) **Strategic Messaging:** is when the inclusion of this figure in the center's public-facing materials reinforces its identity as a **multidisciplinary, patient-focused institution**. It complements earlier branding elements (as seen in Figure 4) by grounding abstract values—like “quality” and “hospitality”—in concrete service offerings (Hsassaniyeh, 2021; Bellos, 2025).

Figure 4. Photo de la page web du centre médmontrant la qualité des services, personnel qualifié, et accueil chaleureux des . Les 3 clés essentielles ds reussites des entreprises



Strategic Implications

The data in Table 3 supports a strong case for targeted interventions: a) Customer service training should prioritize responsiveness, communication, and empathy. b) Operational reforms must address scheduling efficiency and parking logistics. c) Infrastructure upgrades—such as improving the waiting area—can enhance perceived quality. These improvements are not merely cosmetic; they are strategic levers for boosting patient satisfaction, loyalty, and ultimately, profitability (HealthCase, 2024; FasterCapital, 2025). The recommendations in Table 4 reinforce the need for a multi-layered intervention strategy (as Hassaniyeh (2021) initially demonstrated: a) Training should be prioritized and made continuous, not occasional. b) Guidelines must be clear, accessible, and enforced across departments. c) Staff deployment should be optimized based on service demand. d) Personnel decisions must be informed by performance metrics and patient feedback. e) Logistical enhancements, even minor ones like valet parking, should be considered in broader service planning. Together, these measures can transform patient experience, strengthen institutional reputation, and contribute to long-term profitability (Giese et al., 2024; Muscente, 2024).

Figure 5. Figure indicative montrant les divers services tels qu'offerts du Dictors' Center, Hamra



The data reveals a reputational imbalance (Hassaniyeh, 2021). While the Doctors' Center excels medically, its customer service undermines patient loyalty and referral potential. This gap must be addressed to ensure sustainable growth and brand integrity (Giese et al., 2024; GuidewayCare, 2025). The recommendations in

Table 6 align with the dissatisfaction trends in Tableau 5. Patients are not just identifying problems—they are proposing actionable solutions. The center should prioritize training and guideline development, while also reviewing staffing and operational logistics to restore trust and improve satisfaction (BoldDesk, 2025; Muscente, 2024). Figure 4 functions as a branding tool, projecting an idealized image of the Doctors' Center that may contrast with some of the patient-reported service gaps. It invites critical reflection: if the center publicly promotes these values, then aligning actual service delivery with them becomes a matter of credibility and institutional integrity (Bellos, 2025). Figure 5 supports the center's claim of operational excellence but also invites scrutiny: if such a wide range of services is offered, then customer service infrastructure must be equally robust to support them. Otherwise, the risk of service fragmentation and patient dissatisfaction increases, as reflected in earlier tables (e.g., long waiting times, poor phone responsiveness).

Discussion

The Doctors' Center provides customer service levels that fall below expectations, according to evaluations from a group of its clients. These clients are dissatisfied with the customer services provided, although the majority have expressed satisfaction with the medical service (ref). Given the relationship between patient satisfaction and business profitability, it is crucial to take steps to improve customer service levels at the Doctors' Medical Center in Hamra. Among the recommendations and suggestions proposed by participants are the necessity to organize regular customer service training sessions for the staff and to establish a set of customer service guidelines (ref). Therefore, the Doctors' Center Hamra represents an established healthcare institution that continually strives to offer quality medical services to its patients.

Although the center has already met the community's healthcare needs, the evaluation highlighted opportunities for development in client satisfaction and the efficiency of non-medical services (ref). Improving the quality of customer services, particularly in communication and responsiveness, is essential to strengthening patient loyalty and maintaining a positive brand image. Suggestions gathered from participants, such as continuous staff training and implementing clear customer service protocols, are important levers to ensure a better patient experience and, consequently, increased long-term profitability. Additionally, the center must continue its efforts to optimize internal processes, reduce waiting times, and improve the efficiency of appointment management and services. By leveraging targeted marketing strategies, the Doctors' Center Hamra can enhance its market positioning and attract a loyal clientele while continuing to offer high-quality care.

By adopting these recommendations, the Doctors' Center Hamra can not only maintain its reputation for medical excellence but also significantly improve its customer service, positively impacting its profitability and future growth. Our arguments stipulate as a result of its outstanding quality of medical services, good reputation and excellent customer service, the business of the Doctors' Center

Beirut, flourished, and recently allowed it to grow beyond Lebanon's borders in order to continue in its path to excellence (ref).

Conclusions and Recommendations

This section presents the conclusions and recommendations of the research. These didn't really differ from the initial study that Hassaniyeh (2021-2022) presented since the relationships of the variables were confirmed. While Bellos (2025) agreed that the rise in customer satisfaction will definitely yield an increase in company performance just as a drop in satisfaction will have the reverse effect, and the company will lose customers and show weaker performances over those with strong customer satisfaction (Anderson, Fornell, & Mazvancheryl, 2004; McIntyre, 2024).

A rise in customer satisfaction directly boosts company performance, while a decline leads to customer loss and weaker outcomes. This relationship is well-documented: companies with above-average customer satisfaction consistently outperform competitors in growth and profitability, while those with poor satisfaction scores suffer reputational and financial setbacks (Anderson, Fornell, & Mazvancheryl, 2004). According to the UK Customer Satisfaction Index, firms like Ocado with high satisfaction ratings have achieved stronger market performance than sector averages (Institute of Customer Service, 2024). Additionally, research confirms that customer happiness and business performance are mutually reinforcing, with satisfaction driving retention, referrals, and revenue (Kumar & Prasad, 2023).

Concluding Remarks

The findings of this study indicate that the Doctors' Center is currently delivering a sub-standard level of customer service, as evaluated by a sample of its patients. While most participants expressed satisfaction with the medical services received—such as diagnostics, treatment quality, and physician expertise—they were notably dissatisfied with the non-clinical aspects of their experience, including reception, responsiveness, and communication (GuidewayCare, 2025). This gap between clinical excellence and customer service performance is critical, especially given the well-established link between patient satisfaction and institutional profitability. Research shows that satisfied patients are more likely to return, recommend services, and contribute to sustained revenue growth, while dissatisfaction can lead to reputational damage and financial strain (Giese et al., 2024; HealthCase, 2024).

Therefore, it is essential for the Doctors' Center to take strategic action to improve its customer service standards. Participants in the study proposed several practical recommendations, the most prominent being the implementation of regular customer service training sessions for all frontline staff. Such training can enhance empathy, communication skills, and responsiveness—key drivers of patient satisfaction in healthcare settings (Giva, 2025). Additionally, the establishment of

formal customer service guidelines was identified as a necessary step. These guidelines would provide staff with clear expectations and protocols for interacting with patients, resolving complaints, and maintaining service consistency. When embedded into institutional culture, such frameworks can significantly elevate the patient experience and contribute to long-term organizational sustainability (BoldDesk, 2025; Muscente, 2024).

The Doctors' Center offers a level of customer service that falls below expectations, according to the evaluation conducted with a group of its clients. These clients expressed dissatisfaction with the customer service provided, although the majority reported satisfaction with the medical services. Given the established relationship between patient satisfaction and business profitability, it is crucial to take action to improve customer service levels at the Doctors' Medical Center in Hamra. Among the recommendations and suggestions proposed by participants, the need to organize regular customer service training sessions for staff, as well as the establishment of clear customer service guidelines, was identified. The Doctors' Center in Hamra represents a well-established healthcare institution that continuously strives to deliver high-quality medical services to its patients. While the center has successfully met the community's healthcare needs, the evaluation has highlighted opportunities for development in areas related to customer satisfaction and the efficiency of non-medical services.

Improving the quality of customer service—particularly in terms of communication and responsiveness—is essential to strengthening patient loyalty and maintaining a positive brand image. The suggestions collected from participants, such as ongoing staff training and the implementation of clear customer service protocols, are key levers for ensuring a better patient experience and, consequently, increased long-term profitability. Furthermore, the center must continue its efforts to optimize internal processes, reduce waiting times, and improve the efficiency of appointment scheduling and service delivery. By leveraging targeted marketing strategies, the Doctors' Center in Hamra can reinforce its market positioning and attract a loyal clientele, while continuing to provide high-quality care. By adopting these recommendations, the Doctors' Center in Hamra will not only maintain its reputation for medical excellence but also significantly enhance its customer service, which will positively impact its profitability and future growth.

To address our core research question—“*Does the radiology department at the Doctors' Center in Hamra still suffer from poor management or weak customer relations?*”—the answer is no. The radiology department no longer suffers from managerial mismanagement, as recent observations suggest that the medical center is now well-organized. In the previous study of the Doctors' Center in Hamra, there were issues related to leadership and customer relations, but these appear to have been resolved over time. Similarly, customer service management has improved. According to recent observations, clients are now very satisfied with both the personalized reception and the impeccable service provided by the medical staff, ensuring high-quality technical care. These recent observations, along with the interpretation of all collected data, align with the official website's portrayal of the center as a high-quality medical facility offering excellent service. From the first

greeting to the final farewell, the warm reception by staff ensures that clients are eager to return.

Recommendations

The authors reiterate the below recommendations based on the initial study findings. *First: Organize regular customer service training sessions for all frontline staff.* Regular training enhances staff empathy, communication, and responsiveness—core elements of patient satisfaction in healthcare settings. Giva (2025) emphasizes that structured programs lead to measurable improvements in service quality and patient loyalty. For the Doctors' Center–Beirut, such training would help bridge the gap between clinical care and non-clinical service delivery provided the center still suffers from defunct customer service. Hassaniyeh (2021-2022) bought the urgent need to foster such trainings and at the same time resolve any negative issue employees may have, so that the customers won't feel awkward getting treated there

Second: Establish formal customer service guidelines. Clear service protocols ensure consistency in patient interaction, complaint handling, and staff accountability. BoldDesk (2025) and Muscente (2024) argue that codified guidelines reduce ambiguity and improve institutional professionalism. Implementing such standards at the Doctors' Center would align staff behavior with patient expectations. Hassaniyeh (2021-2022) clarified this point in 2016 as well since the center had severely defaulting or non-existing customer service options.

Third: Optimize internal processes to reduce waiting times and improve appointment scheduling. Long waiting times were the most frequently cited issue by participants (52.5%). Streamlining appointment systems and internal workflows can significantly improve patient flow and reduce frustration, thereby enhancing overall satisfaction and operational efficiency. Hassaniyeh (2021-2022) clearly said that this is needed since customers don't like to indefinitely, unlike at any Lebanese Bank, where wait times are erratic and unstructured, causing nervous behaviors in some customers going to the bank, and this giving bad customer experiences if we compare a nearby bank with the Doctor's Center in Beirut.

Fourth: Improve phone answering protocols and reception efficiency. With 30% of participants highlighting poor phone responsiveness, upgrading communication systems is essential. Prompt, courteous responses at first contact shape patient perceptions and influence retention. Investing in reception training and call-handling systems can address this critical service gap. Hassaniyeh (2021-2022) accordingly stated that such issues could negatively impact customer satisfaction making the experience richer once the employees answer well the phone and effectively. Upon observations overall Bellos (2025) noticed the call center is good and effective, whereby employees handling the hotlines are amiable and professional.

Fifth: Upgrade physical infrastructure, particularly parking availability and waiting areas. Parking availability (37.5%) and waiting area conditions (10%) were notable concerns. Enhancing these physical aspects of the patient journey contributes to comfort, accessibility, and perceived quality of care—factors that influence both satisfaction and return visits. This will definitely improve customer overall experience, since by doing so, customers will enjoy more their stay at the medical

center, as opposed to competing centers that don't have those attributes, or failed to work on them. (see: Berry, Parasuraman, & Zeithaml, 1994).

Sixth: Implement targeted marketing strategies to reinforce brand positioning and attract a loyal patient base. Strategic marketing that highlights service quality, patient testimonials, and specialized offerings can strengthen the center's public image. HealthCase (2024) notes that such efforts not only attract new patients but also build long-term loyalty, supporting financial sustainability. Kotler & Keller (2009, 2012, 2016) explain how through the 4-ps of marketing could any company redefine its offer and stand out from the competition while doing so. Hassaniyeh (2021-2022) and Bellos (2025) agree since the marketing offer is what differentiates one company from another based on satisfying sometimes customers' complex wants and needs. So, understanding the consumer behavior is essential (Schiffman & Kanuk, 1997). Slazus, & Bick (2022) explain how complex this concept is through their research and they agree about the fact that it is an essential component of marketing research, and discuss how, based on their research that demographics and psychographics each play a major role in shaping consumer behavior. This is namely with the case of the likelihood of adopting the product, or service "as early adopters": on one end of the spectrum as depicted in their research, to the other end of the spectrum where the consumers "will not be willing to use it/them". This is an essential point in studying consumer behavior in order to understand how they see the brand (cf. Bellos, 2025).

Finally, and as noted as above with the implementations of the six above recommendations, Ogunmuyiwa (2022) denotes in the study we cited as an example about the role of performance within the context of marketing and the promotional mix if we look at "performance" as a degree of success or failure of the promotional campaign following Kotler & Keller (2016). Saying this, publicity has a resounding and positive effects on brand equity and position institutions and their products in the consumer's mind which is influencing the desirable and effective marketing performance. As such and as Ogunmuyiwa (2022: 66) points out, "*publicity is the movement of information with the effect of increasing public awareness of a subject*".

Technology has revolutionized business activities across the globe and has resulted to intense local and international competition which resulted into brand switching, declining marketing performance and decreasing market share which hinder the realization of firm marketing objectives (Pandey and Singh 2017, Zeng 2013). Previous studies as discussed by Ogunmuyiwa (2022) failed to capture the significance of publicity and sales promotion on firm marketing objectives. Therefore, the cited study has bridged the literature gap by examining the influence of publicity and sales promotion on marketing performance in the new digital marketing era using Nigerian Breweries PLC as a case study.

Finally, Ogunmuyiwa (2022) agree that publicity and sales promotion are solution for enhancing, stimulating as well as arousing customers demand for the firm's product. By this point we can immediately correlate this argument to the study that Hassaniyeh (2021-2022) initially conducted on the Doctor's Medical Center in Beirut. Whereby stating that publicity and sales promotion foster spontaneous reactions and response to sales and it influences the achievement of

firm's marketing performance following the arguments of experts in marketing like Kotler (1997). Based on the aforementioned points as listed by the research that was undertaken, the following policy recommendations are hereby proposed. 1) The Doctor's Center, Beirut could propose, design and implement systematic publicity and sales promotion programs to enhance its overall performance. 2) The firm could set up a more and effective promotional department with experienced staff with a view to developing more promotional strategies in line with the company's objectives without compromising product quality, performance and reliability during the campaign, especially if the performance were to wane in the future (Ogunmuyiwa, 2022). 3) Additionally, and as the good execution of promotional mechanisms bring about an increase in volume sales which ultimately yield higher profit. Thus and as Ogunmuyiwa (2022) commends, allocating a good oar of the annual budget for marketing and promotional campaigns to be put in place by The Doctor's Center, Beirut to enhance the achievement of marketing objectives in the current era.

References

- Amzil. N & al. (2023) "L'impact de la satisfaction des employés et des clients sur la performance financière", *Revue internationale des sciences de Gestion*, 6(2), 753–765.
- Andal-Saniano, A. C., Marquez, M. K. I., & Medina, H. M. R. (2024). How to conduct and write a cross-sectional study. *PAFP Journal*, 62(1), 31–40. https://thepafp.org/journal/wp-content/uploads/2024/07/PAFP-Journal-62-1_31-40.pdf
- Anderson, E. W., Fornell, C., & Mazvancheryl, S. (2004). *Customer satisfaction and shareholder value*. *Journal of Marketing*, 68(4), 172–185. <https://doi.org/10.1509/jmk.68.4.172.42723>.
- Bardon, A. (2025, March 19). *Health management: Balancing administrative duties and patient care*. Lindenwood University. <https://online.lindenwood.edu/blog/health-management-balancing-administrative-duties-and-patient-care/>.
- Bellos, G.S.G. (2025). "Discussion on the Impacts of Customer Service on Client Satisfaction and Profitability at Doctors' Center- Beirut: Interpretation of Secondary Data and recent observations" [Online] Available at: <https://gebell900.blogspot.com/2025/03/discussion-on-impacts-of-customer.html> (Accessed on: March, 14th 2025).
- BoldDesk. (2025). *What is customer service? Definition and examples*. <https://www.bolddesk.com/blog/customer-service-definition>.
- Berry, L. L., Parasuraman, A., & Zeithaml, V. A. (1994). *Improving service quality in America: Lessons learned*. *Academy of Management Executive*, 8(2), 32–52. <https://doi.org/10.5465/ame.1994.9411302320>.
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.
- FasterCapital. (2025). *How customer service impacts profitability in healthcare*. <https://fastercapital.com/blog/customer-service-healthcare-profitability.html>.
- Fulford, K. W. M., Dickenson, D. L., & Murray, T. H. (2008). *Healthcare ethics and human values. An introductory text with readings*. Oxford: Blackwell Publishing.
- Giese, A., Khanam, R., Nghiem, S., Rosemann, T., & Havranek, M. M. (2024). Patient-reported experience is associated with higher future revenue and lower costs of hospitals. *The European Journal of Health Economics*, 25, 1031–1039.
- Giva. (2025). *Customer service in healthcare: A profitability engine*. <https://www.givainc.com/blog/index.cfm/2025/2/15/customer-service-healthcare-profitability>

- 1 GuidewayCare. (2025). *How patient satisfaction drives hospital profitability*. [https://guide](https://guidewaycare.com/patient-satisfaction-hospital-profitability)
- 2 [waycare.com/patient-satisfaction-hospital-profitability](https://guidewaycare.com/patient-satisfaction-hospital-profitability).
- 3 Hallowell, R. (1996). "The relationships of customer satisfaction, customer loyalty, and
- 4 profitability: an empirical study". *International Journal Of Service Industry*
- 5 *Management*, 7(4).
- 6 Hassanyieh, S. (2021-2022). "The impacts of customer services on customer satisfaction
- 7 and profitability of the Doctors' Center-Beirut", *Thesis Submitted to Arts, Sciences,*
- 8 *and Technology University in Lebanon Faculty of Business Administration*, Beirut,
- 9 Lebanon.
- 10 Haslock, I. (1996). Quality of care and patient satisfaction. *Rheumatology*, 35(4), 382-384.
- 11 HealthCase. (2024). *The link between patient satisfaction and hospital profitability*.
- 12 <https://www.healthcase.org/articles/patient-satisfaction-profitability>.
- 13 Healthcare Business Today. (2024). *The ripple effect of patient satisfaction*.
- 14 <https://www.healthcarebusinesstoday.com/the-ripple-effect-of-patient-satisfaction/>.
- 15 Institute of Customer Service. (2024). *UK Customer Satisfaction Index: January 2024*.
- 16 <https://www.instituteofcustomerservice.com/research-insight/ukcsi-january-2024>.
- 17 Kitchin, D. R., & Applegate, K. E. (2007). Learning radiology: a survey investigating
- 18 radiology resident use of textbooks, journals, and the internet. *Academic radiology*,
- 19 14(9), 1113-1120.
- 20 Kotler, P. (1997) *Marketing Management: Analysis, Planning, Implementation, and*
- 21 *Control*. 9th Edition, Prentice Hall, Upper Saddle River.
- 22 Kotler, P. & Keller, K.-L. (2009), *Marketing Management*, 13^e édition, France.
- 23 Kotler, P., & Keller, K. L. (2012), *Marketing Management*, 14^e édition, France.
- 24 Kotler, P., & Keller, K. L. (2016). *Marketing Management*, 15^e édition, Pearson.
- 25 Kumar, R., & Prasad, V. (2023). *Impact of customer satisfaction on business performance:*
- 26 *A review*. *International Journal of Research Publication and Reviews*, 4(5), 112–118.
- 27 <https://doi.org/10.55248/gengpi.2023.4.5.112>.
- 28 Lee, E., Grooms, R., Mamidala, S., & Nagy, P. (2014). Six Easy Steps on How to Create a
- 29 Lean Sigma Value Stream Map for a Multidisciplinary Clinical Operation. *Journal Of*
- 30 *The American College Of Radiology*, 11(12), 1144-1149. doi:10.1016/j.jacr.2014.08.
- 31 031.
- 32 Levy, M. and Weitz, B. A. (2007). *Retailing Management*. New York: McGraw Hill.
- 33 McIntire, A. (2024). *Does Customer Satisfaction Really Impact Business Growth?* [Online]
- 34 Retrieved from: [https://www.performanceinpeople.co.uk/blog/does-customer-satisfa](https://www.performanceinpeople.co.uk/blog/does-customer-satisfaction-really-impact-business-growth)
- 35 [ction-really-impact-business-growth](https://www.performanceinpeople.co.uk/blog/does-customer-satisfaction-really-impact-business-growth).
- 36 Medical Economics. (2021). *Why patient satisfaction matters more than ever*. [https://](https://www.medicaleconomics.com/view/why-patient-satisfaction-matters-more-than-ever)
- 37 www.medicaleconomics.com/view/why-patient-satisfaction-matters-more-than-ever.
- 38 Melkonian, R.(2020), *Measuring the Consequence of Administrative Decisions Making on*
- 39 *Employee Motivation*, MBA Thesis Submitted to the Lebanese International
- 40 University.
- 41 Mittal, V., Han, K., Frennea, C., Blut, M., Shaik, M., Bosukonda, N., & Sridhar, S. (2023).
- 42 Customer satisfaction, loyalty behaviors, and firm financial performance: What 40
- 43 years of research tells us. *Marketing Letters*, 34(2), 171–187.
- 44 Muscente, A. (2024). *The business case for patient satisfaction*. *Healthcare Business Today*.
- 45 <https://www.healthcarebusinesstoday.com/the-business-case-for-patient-satisfaction/>.
- 46 Noaman, S.-B.-(2018). "Medical tourism: Understanding consumption behaviour of
- 47 travellers and strategic issues for Lebanon", *PhD thesis, submitted to Université*
- 48 *Sorbonne*, Paris, France.
- 49 Noaman, S.-B., Harguem, S., & Bellos, G. (2022). Estimating the Impact of the Lebanese
- 50 Economic Crisis on Employee Turnover through Motivation among other mediating
- 51 variables as impeded by COVID-19, *Res Militaris*, 12(6), 1351-1372.

- 1 Noaman, S.-B, & Lakkis, H. (2022). Lebanese Pharmaceuticals and Healthcare. Industry:
2 Investing in the Pharmaceutical Industry to Promote Exports. *Lebanese. Science*
3 *Journal*.
- 4 Nowicki, Michael. (2007). *The Financial Management of Hospitals and Healthcare*
5 *Organizations*. 4th ed. Chicago: Health Administration Press.
- 6 Oliver, R. L. (1997). Satisfaction: A Behavioral Perspective on the Consumer. New York.
- 7 Oliver, R. L., Rust, R. T., & Varki, S. (1997). “Customer Delight: Foundations, Findings,
8 and Managerial Insights”. *Journal of Retailing*, 73(3), 311-336.
- 9 Ogunmuyiwa, M.-S. (2022). The Influence of Publicity and Sales Promotion on Marketing
10 Performance in Nigeria, *Athens Journal of Business & Economics*, 8(1), 65-78
- 11 Omaghomi, T. T., Akomolafe, O., Onwumere, C., Odilibe, I. P., & Elufioye, O. A. (2024).
12 Patient experience and satisfaction in healthcare: A focus on managerial approaches –
13 A review. *International Medical Science Research Journal*, 4(2). <https://www.fepbl.com/index.php/imsrj/article/view/812>.
- 14 Saunders MNK, Lewis P, Thornhill A (2003) *Research methods for business*
15 *students*. 4th Edition. Pearson Education.
- 16 Schiffman, L. G., & Kanuk, L. L. (1997). *Consumer Behavior*. Prentice Hall.
- 17 Scott, W. R. (2000). *Institutional change and healthcare organizations: From professional*
18 *dominance to managed care*. University of Chicago Press.
- 19 Scribbr. (2023). *Cross-sectional study*. <https://www.scribbr.com/methodology/cross-sectional-study/>.
- 20 Slazus B.-J. & Bick G. (2022). Factors that Influence FinTech Adoption in South Africa: A
21 Study of Consumer Behaviour towards Branchless Mobile Banking. *Athens Journal*
22 *of Business & Economics*, 8(1), 43-64.
- 23 UserCall. (2025). *Cross-sectional survey design: A complete guide with real-world examples*.
24 <https://www.usercall.co/post/cross-sectional-survey-design-a-complete-guide-with-real-world-examples>.
- 25 Yeboah, A., & Amponsah, A. (2025). “Customer service quality and profitability in
26 healthcare institutions”. *Journal of Health Management Studies*, 12(1), 45–59.
- 27
28
29
30
31