DÜSOBED/JDUISS Düzce Üniversitesi Sosyal Bilimler Dergisi, Yıl: 13, Sayı: 2
Duzce University Journal of Social Sciences, Vol: 13, Issue: 2

Makale Türü/Article Type: Araştırma Makalesi/Research Article

IMPROVING LEAN CLINICS (LEAN HEALTHCARE): A VOICE OF EMPLOYEE APPROACH TO REDUCE WAITING TIMES

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Abstract

This study presents a solution-focused strategy for reducing patient waiting times at an aesthetic clinic in Ankara, Turkiye. Focused on the dynamic intersection of operational efficiency and patient satisfaction, this study employs a "Voice of the Employee" approach to glean insights from frontline staff, acknowledging their pivotal role in service delivery. Quality circles, Pareto, and fishbone diagram analyses discern the root causes of prolonged waiting times, identifying factors such as deficient initial registration processes, inadequacies in ERP and CRM applications, and suboptimal waiting area facilities. This investigative process yields pragmatic solutions, positioning the study as a strategic guide for enhancing service quality and ensuring patient contentment in aesthetic clinics. Beyond its immediate implications, the research contributes to the broader academic discourse on sustainable healthcare solutions, championing the integral role of employee perspectives in shaping operational strategies. The refined conclusions drawn from this study propel healthcare institutions toward a future marked by continual improvement, attuned to patient needs while navigating the complexities of an ever-evolving healthcare landscape.

Key Words: Lean clinics, Voice of employee, Root cause analysis, Healthcare efficiency, Quality improvement

YALIN KLİNİKLERİN İYİLEŞTİRİLMESİ (YALIN SAĞLIK HİZMETLERİ): BEKLEME SÜRELERİNİ AZALTMAK İÇİN ÇALIŞANLARIN SESİ YAKLAŞIMI

Öz

Bu çalışma, Ankara'daki bir estetik kliniğinde hasta bekleme sürelerini azaltmaya yönelik çözüm odaklı bir strateji sunmaktadır. Operasyonel verimlilik ve hasta memnuniyetinin dinamik kesişimine odaklanan bu çalışma, hizmet sunumundaki önemli rolleri olan ön saflardaki personelden içgörü toplamak için "Çalışanların Sesi" yaklaşımını kullanmaktadır. Kalite Çemberleri, Pareto ve Balık Kılçığı Diyagramı analizleri, eksik ilk kayıt süreçleri, ERP ve CRM uygulamalarındaki yetersizlikler ve yetersiz bekleme alanı olanakları gibi faktörleri belirleyerek uzayan bekleme sürelerinin temel nedenlerini ortaya çıkarmaktadır. Bu araştırma süreci pragmatik çözümler üretmekte ve çalışmayı estetik kliniklerinde hizmet kalitesinin artırılması ve hasta memnuniyetinin sağlanması için stratejik bir rehber olarak konumlandırmaktadır. Araştırma, doğrudan etkilerinin ötesinde, operasyonel stratejilerin şekillendirilmesinde çalışanların perspektiflerinin ayrılmaz rolünü savunarak sürdürülebilir sağlık hizmetleri çözümlerine ilişkin daha geniş akademik söyleme katkıda bulunmaktadır. Bu çalışmadan çıkarılan temel sonuçlar, sağlık kurumlarını, sürekli gelişen sağlık hizmetleri ortamının karmaşıklıklarında gezinirken hasta ihtiyaçlarına uyum sağlayan, sürekli iyileştirme ile işaretlenmiş bir geleceğe doğru yönlendirmektedir.

Anahtar Kelimeler: Yalın klinikler, Çalışanların sesi, Kök neden analizi, Sağlık hizmetlerinde verimlilik, Kalite iyileştirme

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Cite this article as: Gültaş, P. (2023). Improving Lean Clinics (Lean Healthcare): A Voice of Employee Approach to Reduce Waiting Times. *Düzce Üniversitesi Sosyal Bilimler Dergisi*, 13(2), 198-214.

Makale Geliş Tarihi: 18.11.2023 Makale Kabul Tarihi: 12.12.2021

INTRODUCTION

In recent years, the healthcare sector has undergone a significant transformation aimed at enhancing patient experiences and maximizing operational effectiveness (Ferreira, 2011). This shift necessitates a thorough analysis and consequent improvement of service delivery processes within medical facilities. This research, therefore, addresses this aspect in the context of aesthetic clinics, where the pursuit of a nuanced balance between operational efficiency and patient satisfaction is crucial. Given the global challenges posed by the COVID-19 pandemic, healthcare institutions are confronted with heightened difficulties (Filip et al., 2022). Therefore, it is necessary to reassess existing processes to adapt to the evolving landscape. In response to the growing demand for cosmetic procedures, aesthetic clinics grapple with distinctive challenges in the management of patient wait times (Naiker et al., 2017). The waiting experience significantly impacts patient satisfaction (Mowen, 1993) and perception of service quality. Recognizing the multifaceted impact of prolonged wait times, this investigation seeks to examine the underlying reasons for delays and identify remedies using valuable insights obtained from employee feedback (Noort, 2019). The "Voice of the Employee" approach is essential in comprehending the complexities of daily undertakings, given that staff members are at the forefront of attending to patients and implementing procedures (Sifatu et al., 2020). As the primary executors of operations, clinic employees hold distinctive insights into the challenges and inefficiencies that cause extended waiting times (Dobrzykowski, 2019). Despite being often overlooked, their perspectives are crucial for identifying and addressing root causes.

This study highlights the importance of using employees' voices and first-hand experiences, to inform strategic improvements. The study implements a broad analytical framework, including quality circles, brainstorming discussions, and cause-and-effect diagrams, to streamline the operation and promote a culture of continuous improvement within the clinic. Using the Pareto and fishbone analysis, The investigation will thoroughly examine the reasons underlying the prolonged waiting times. These include registration delays, shortcomings in ERP and CRM applications, and physical limitations within waiting areas. The findings of our analysis will highlight priority areas that require attention, forming a basis for the implementation of targeted solutions.

1. LITERATURE REVIEW

The healthcare sector's ongoing evolution towards patient-centred care and operational excellence has been a focus of research, particularly in aesthetic clinics. This literature review aims to provide a detailed exploration of the key themes surrounding operational efficiency and patient satisfaction within the unique landscape of aesthetic healthcare.

Operational Efficiency in Healthcare:

Operational efficiency in healthcare has been widely recognized as a critical determinant of overall service quality and patient satisfaction (Ogrinc et al., 2015; DelliFraine et al., 2013). This theme encompasses various aspects, from streamlined appointment scheduling and registration processes to effective workflow management. Studies emphasize that efficient operations not only contribute to cost-effectiveness but also have a direct impact on patient experiences (Harrison et al., 2023).

The quest for operational efficiency within healthcare systems has been a persistent concern, underlining the industry's commitment to delivering high-quality services while optimizing resource utilization. The literature indicates that operational efficiency is a multifaceted concept encompassing various dimensions of healthcare delivery. Researchers have explored the role of technology, such as Electronic Health Records (EHR), in enhancing the efficiency of information management (Adler-Milstein et al., 2017). However, the integration of such technological solutions into the intricate operations of aesthetic clinics requires tailored investigation. Aesthetic clinics, as specialized healthcare providers, face unique challenges in operational efficiency (Octaviani et al., 2023). Unlike general healthcare facilities, aesthetic procedures often demand a delicate balance between clinical precision and a personalized, client-centric approach. The literature suggests that achieving operational efficiency in aesthetic clinics involves the adoption of technology and a nuanced understanding of the distinctive factors influencing these clinical environments (DelliFraine et al., 2013).

Patient Satisfaction and Waiting Times:

Patient satisfaction is the linchpin for evaluating the holistic quality of healthcare services, with waiting times emerging as a pivotal factor influencing this crucial metric. Waiting times are especially significant in aesthetic clinics, where individuals pursue elective and time-sensitive procedures (Namakshenas et al., 2023). This section delves into an extensive examination of patient satisfaction in the context of waiting times, emphasizing the need for effective management strategies and a nuanced understanding of the psychological aspects inherent in the waiting experience (Heinonen & Lipkin, 2023). Patient satisfaction, a multifaceted construct encompassing various dimensions of healthcare delivery, is paramount in assessing the effectiveness and quality of services provided (Boudreaux et al., 2019). Within the unique realm of aesthetic clinics, the pursuit of patient satisfaction is intensified, as individuals often embark on transformative and personal journeys. The waiting experience emerges as a critical touchpoint that significantly shapes patient perceptions and overall satisfaction levels (Gualandi et al., 2019).

In aesthetic clinics, the impact of waiting times on patient satisfaction is magnified due to the elective and time-sensitive nature of the procedures sought. Studies, such as those conducted by Alam et al. (2019), underline the necessity of not only reducing waiting times but also proactively managing patient expectations. The multifaceted approach to waiting time optimization encompasses not only the temporal aspect but also the creation of an environment conducive to patient comfort and engagement (Cascella et al., 2023). Clear communication is identified as a cornerstone in mitigating the adverse effects of waiting times on patient satisfaction (Okafor & Chen, 2019; DelliFraine et al., 2013). Aesthetic clinics must adopt transparent communication strategies regarding expected wait times, ensuring patients are informed and engaged throughout the process. Proactive measures, such as providing updates and explanations for delays, contribute to a sense of attentiveness and responsiveness, which is vital in fostering patient satisfaction (Aboumatar et al., 2015).

The physical environment of aesthetic clinics plays a pivotal role in shaping the waiting experience (Faessen, 2008). Beyond mere aesthetics, studies suggest that the design of waiting areas should be strategic, considering the unique psychological aspects associated

with elective procedures (Franklin et al., 2017). A welcoming and aesthetically pleasing environment contributes to patient satisfaction and alleviates anxiety, fostering a positive and calming atmosphere (Iyendo et al., 2016).

Understanding the psychological dimensions of waiting in aesthetic clinics is integral to tailoring service delivery (Browne et al., 2016). Patients in these settings often grapple with a unique blend of anticipation and anxiety, necessitating a nuanced approach to waiting area design and service delivery (Aggarwal et al., 2022). This psychological journey, from anticipation to realization, significantly influences patient perceptions of service quality and satisfaction. The intricate relationship between patient satisfaction and waiting times in aesthetic clinics demands a comprehensive and tailored approach. The optimization of waiting times extends beyond mere temporal considerations to encompass effective communication, proactive engagement, and the creation of a conducive and psychologically attuned environment. Recognizing the significance of these factors is essential for meeting and exceeding patient expectations in the unique realm of aesthetic healthcare.

Challenges in Aesthetic Clinics:

Aesthetic clinics encounter challenges distinct from those faced by general healthcare facilities. These challenges stem from the specialized nature of aesthetic procedures, which often involve intricate planning, specialized equipment, and a heightened focus on the overall customer experience. The literature suggests that operationalizing efficiency in aesthetic clinics requires a comprehensive understanding of these challenges and the development of strategies that align with the unique demands of cosmetic and aesthetic healthcare (Boudreaux et al., 2019). The COVID-19 pandemic has introduced additional layers of complexity to the operational landscape of healthcare (Rubinelli et al., 2023; Biddell et al., 2022; Niaz & Nwagwu, 2023; Kumpunen et al., 2022). Aesthetic clinics, in particular, must adapt to revised safety protocols, altered patient flow dynamics, and an increased reliance on virtual consultations (Yim et al, 2022). This unprecedented context necessitates reevaluating operational strategies to ensure efficiency and patient satisfaction in a dynamically changing healthcare environment (Vrontis et al., 2021).

The literature review highlights the intricate relationship between operational efficiency and patient satisfaction in aesthetic clinics. It lays the groundwork for a comprehensive analysis, emphasizing the need for tailored solutions that consider the unique challenges posed by aesthetic procedures and the evolving landscape of healthcare delivery. The subsequent sections will delve into specific methodologies, analyses, and proposed solutions, building upon the insights gleaned from the existing body of literature.

2. METHODOLOGY

Business improvement requires insights from the process, the customer's voice, and the employees' voice. The voice of the process is used to gather information from the current workflow to identify areas for enhancement within an organization's structure and service or production processes. The voice of the process is used to gather information from the current workflow to identify areas for enhancement within an organization's structure and service or production processes. This method is crucial for gaining insight into these processes. The voice of the customer is frequently used to gain an understanding of their needs and to

generate value in service processes. To identify areas for improvement in a business, both the voice of the process and the voice of the customer are considered. Besides identifying areas that require improvement, listening to employees' feedback is vital in discovering improvement. Employee perspectives offer crucial insights into the practicalities of daily operations, identifying potential blockages and areas for heightened efficiency. Synthesizing feedback from these three integral sources – process, customer, and employee – provides a comprehensive approach to business enhancement. By integrating these perspectives, a comprehensive understanding of existing challenges and opportunities for improvement can be achieved. This approach recognizes the intricate nature of organizational dynamics and seeks to uncover constructive observations to make significant enhancements.

This study was conducted at a specific aesthetic clinic in Ankara to address and improve prolonged patient waiting times. The primary objective was to identify the factors contributing to extended wait times, prioritize these factors, and develop practical solutions. The research methodology involved a systematic approach, incorporating the following key steps:

2.1. Formation of a Quality Circle and Brainstorming Sessions

A Quality Circle is a small team established to improve quality management and operational processes in the workplace. Consisting of skilled employees, usually from the same department, the team strives to produce innovative solutions to operational problems, raise quality standards, and boost overall workplace productivity (Li, 2022). Regular meetings and activities are held by a Quality Circle, which allows employees to share their insights on workplace processes, identify problems, and propose solutions (Samson & Swink, 2023; Goyal et al., 2022). The primary aim is to promote active participation, overcome hierarchical boundaries, and encourage collaborative efforts among employees, ultimately resulting in continuous improvement within the workplace (Malik et al., 2023). A quality circle consisting of two doctors, two nurses, two administrative staff, and one support staff was established to focus on the issue of prolonged waiting times.

Through brainstorming sessions, the quality circle members, including the author as an observer, leveraged their collective expertise to identify factors contributing to extended wait times. The quality subgroups focused on the causes of the problems. Brainstorming meetings were organized online. The purpose of this brainstorming is to identify the factors that cause the problems of the quality team. The participants of the brainstorming meetings ranked the causes among themselves and reported their results. These findings were evaluated and summarized in a cause-effect diagram.

2.2. Cause-and-Effect (Ishikawa) Diagram

The identified factors were systematically analyzed using a cause-and-effect diagram (Ishikawa diagram) to understand the root causes. Well Cause and Effect Diagramming, or the Fishbone Diagram, is a methodology used in product design and quality defect prevention to identify potential factors that could cause an overall effect, such as defects or other issues. Each cause or sub-cause of defects is identified as a source of variation (Elyoussoufi et al.,2022). Firican (2018) emphasizes the importance of objectively examining the root causes of problems to prevent the wastage of resources and to reveal underlying issues. It is essential

to maintain a logical flow of information with causal connections and to use clear, concise language without subjective evaluations, biased wording, or ornamental language (Mandavilli, 2023). Arvanitoyannis and Varzakas (2007) explain how the Fishbone Diagram categorizes problem causes into main categories, allowing for their identification and improved problem-solving. Additionally, precision in word choice and adherence to grammar and formatting guidelines ensure comprehensibility, logical structure, and conventional academic structure. This technique aims to identify all factors implicated in a particular issue, prioritizing recognizing, and improving the factor with the most notable influence on the outcome. The Fishbone Diagram, so named due to its likeness to a fish's spine, represents the outcome or issue on the right of the diagram, with all probable causes set out on the left (Sarazen, 1990).

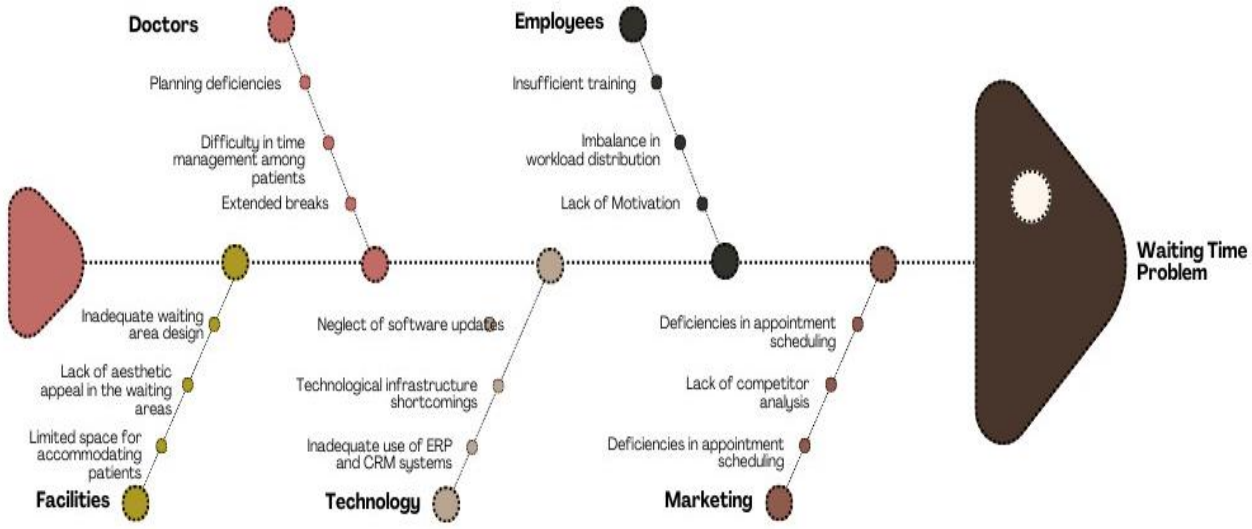


Figure 1. Cause-and-Effect Diagram

This analysis aimed to provide a structured visualization of the interrelated factors contributing to prolonged waiting times, facilitating a comprehensive understanding.

- Employees: Lack of workforce training and an uneven workload can affect employee efficiency, potentially leading to extended waiting times. Communication gaps and motivational issues may negatively impact the overall service quality.
- Doctors: Planning deficiencies and extended breaks can disrupt appointment scheduling and patient time management. Inattentive behavior may contribute to lower patient satisfaction.
- Technology: Inadequate use of ERP and CRM systems and technological infrastructure shortcomings can complicate appointment arrangements and efficient management of patient information. Lack of training and neglect of software updates may hinder optimal system utilization.
- Marketing: Deficiencies in appointment scheduling, weak strategies in target audience communication, and the ineffectiveness of advertising campaigns can

result in ineffective promotion of clinic services and challenges in managing patient flow.

- Physical Facilities: Design deficiencies and insufficient seating arrangements in waiting areas can impact patient comfort. Aesthetic shortcomings and limited space may negatively affect the overall patient experience.

These interpretations provide insights into how each factor may influence the expected outcomes. Addressing these factors is crucial for developing solution strategies and reducing waiting times.

2.3. Prioritization and Scoring of Problems

Quality circle members assessed each identified factor in terms of perceived importance and impact on patient waiting times. A scoring system ranging from 1 to 10 was applied to prioritize the factors, reflecting their significance in contributing to the problem. It is also considered appropriate for each member to score at least three values and for each member to give a score. Accordingly, the score ranking is shown in the table below:

Table 1. The Score Ranking of Waiting Times Problem

Problem	Score
1. Physical Facilities	51
2. Inadequate use of ERP and CRM Systems	49
3. Neglect of Software Updates	19
4. Time Management Issues	14
5. Lack of Motivation	8
6. Insufficient Training	5
7. Extended Breaks	5
8. Planning Deficiencies	3
9. Difficulty in time management among patients	0
10. Planning deficiencies	0
11. Imbalance in workload distribution	0
12. Technological infrastructure shortcomings	0
13. Deficiencies in appointment scheduling	0
14. Lack of competitor analysis	0
15. Deficiencies in appointment scheduling	0
Total Score	**154**

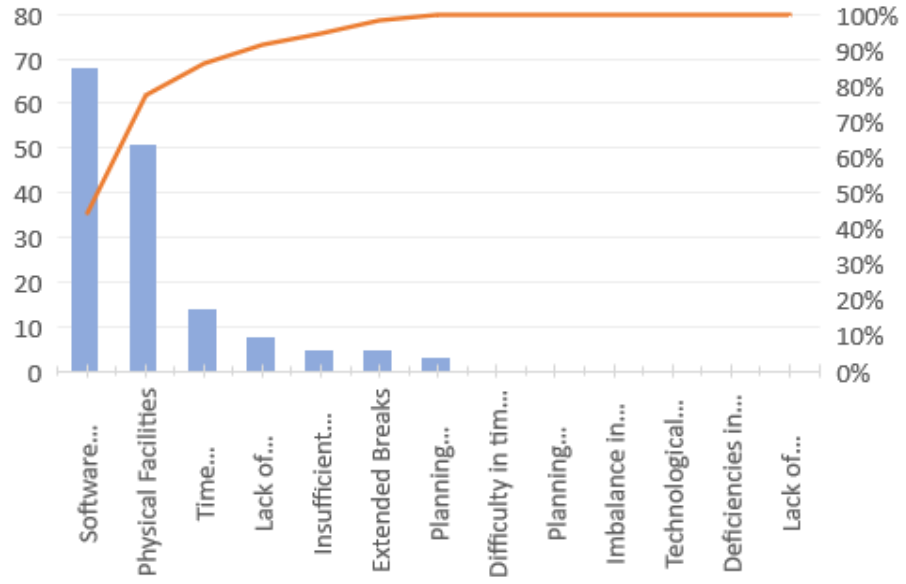
The table's analysis emphasizes the need to prioritize "Physical Facilities and Inadequate use of ERP and CRM Systems." Considering their high scores, these two aspects are likely to have the most significant impact on reducing patient waiting times. The "Neglect of Software Updates" factor holds a particular significance but is rated with slightly less priority than the former two. A correlation between the "Neglect of Software Updates" and "Inadequate use of ERP and CRM Systems" factors has been found, indicating that these two factors can be grouped and labeled as "Software Updates and New Systems." The other factors with low scores or no points suggest that they may not be a top priority or require immediate attention in the current context. This valuable insight guides the allocation of resources and efforts towards those areas of the solution strategy requiring attention. To illustrate these findings, a Pareto analysis and chart have been produced, providing a clear representation of the impact of factors and assisting in strategic decision-making.

2.4. Pareto Analysis

The prioritized factors were subjected to Pareto analysis to determine the critical few contributing most to prolonged waiting times. This analysis facilitated a focused approach to problem-solving by identifying and addressing the most significant issues first.

Table 2. Pareto Chart

Problem	Score	Percentage	Cumulative
1. Software Updates and New Systems	68	44,16%	44,16%
2. Physical Facilities	51	33,12%	77,27%
3. Time Management Issues	14	9,09%	86,36%
4. Lack of Motivation	8	5,19%	91,56%
5. Insufficient Training	5	3,25%	94,81%
6. Extended Breaks	5	3,25%	98,05%
7. Planning Deficiencies	3	1,95%	100,00%
8. Difficulty in time management among patients	0	0,00%	100,00%
9. Planning deficiencies	0	0,00%	100,00%
10. Imbalance in workload distribution	0	0,00%	100,00%
11. Technological infrastructure shortcomings	0	0,00%	100,00%
12. Deficiencies in appointment scheduling	0	0,00%	100,00%
13. Lack of competitor analysis	0	0,00%	100,00%
14. Deficiencies in appointment scheduling	0	0,00%	100,00%



Graph. 1. Pareto Diagram

The Pareto diagram effectively highlights vital factors to patient waiting times, emphasizing "Inadequate use of ERP and CRM Systems" and "Neglect of Software Updates." Combining these two factors under the "Software Updates and New Systems" category provides a comprehensive view of their collective impact. According to Pareto analysis,

"Software Updates and New Systems" accounts for 44% of the total scores, while "Physical Facilities" constitutes 33%. The cumulative percentage of these two prominent factors is 77%, demonstrating a commendable adherence to the 80-20 rule (Loan & Mushtaq, 2023). Furthermore, the inclusion of factors with no assigned scores, which share similarities in terms of potential solutions, represents approximately 20% of the total factors. This aspect aligns with the Pareto principle, affirming that a small percentage of factors contribute to a significant portion of the problem. Consequently, in the subsequent improvement phase, strategic focus will be directed towards addressing "Physical Facilities" and "Software Updates and New Systems." Following the sharing of Pareto results with the quality circle, a renewed brainstorming session has been conducted to devise practical solutions for problem resolution.

2.5. Improvement (Kaizen Principles in Action)

"Software Updates and New Systems," have been addressed. Brainstorming sessions were conducted to propose solutions, and among these, those most aligned with the principles of Kaizen were identified.

Kaizen is a Japanese term derived from the combination of "kai" (change) and "zen" (good), translating to "continuous improvement" or "continuous development (Zighan & Ruel, 2023)." This concept emerged as part of Japanese management philosophy and business culture (Nadayama, 2023). The primary goal of Kaizen is to promote ongoing, incremental improvements, emphasizing small, continuous steps rather than large-scale changes. It has found application in various fields, particularly in business processes and personal development (Jin, 2023).

Here are the recommended solutions:

1. Redesign of Waiting Areas: The focal point is redesigning waiting areas to positively impact patients' waiting experiences. Creating aesthetically pleasing and comfortable waiting environments is a crucial step to transform the waiting process into a more positive experience, thereby enhancing overall service quality.
2. Employee Training Programs: The second initiative involves implementing regular training programs, particularly for front office and reception staff, to enhance their proficiency in utilizing information systems effectively. These programs are developed to enable employees to use ERP and CRM systems more efficiently, contributing to the more effective utilization of resources in line with Kaizen principles.
3. Continuous Software Updates: The third aspect emphasizes the importance of regular software updates to improve the performance of information systems and minimize potential issues. Prioritizing continuous updates is in line with Kaizen's philosophy of fostering a culture of constant improvement. These updates ensure the reliability and efficiency of systems, positively impacting the service delivery processes for patients.

Evaluation and Future Considerations:

Following the implementation of these strategies, continuous monitoring and evaluation will be conducted to measure their effectiveness. Collecting feedback from employees, patients, and stakeholders will provide valuable insights for further optimization. Future considerations involve reassessing and updating the process as needed, maintaining a focus on specific performance goals, and sustaining employee engagement in the continuous improvement journey. These strategies, deeply rooted in Kaizen principles, aim to not only address current issues but also foster a culture of continuous improvement within the aesthetic clinic. Implementing these recommendations will yield positive and lasting results in enhancing patient experiences and optimizing overall operational efficiency.

3. RESULTS AND DISCUSSION

In this section, a comprehensive examination of the results of this study, which focuses on reducing waiting times in an aesthetic clinic, will be provided. The overall assessment of the findings, the impact of the implemented improvement strategies, and recommendations for future studies will be discussed in detail.

- Impact of Improvement Strategies: The improvement strategies implemented, including the redesign of waiting areas, staff training programs, and continuous software updates, have demonstrated significant positive effects within the clinic. The aesthetic enhancement of waiting areas has transformed patients' waiting experiences into more positive encounters, leaving a favorable impression on their interactions with the clinic.
- Staff training programs have ensured the effective use of information systems, fostering more organized and expedited operational processes. Continuous software updates have emphasized maintaining technological infrastructure relevance, minimizing system inconsistencies, and enhancing overall efficiency.
- General Evaluation of Findings: The overall evaluation of the study indicates that the implemented improvements reduced waiting times and enhanced operational efficiency within the clinic. This outcome suggests that similar improvement strategies could be both applicable and effective within the clinic and in other healthcare institutions.
- Recommendations Future Studies: Future research could examine these improvement strategies' sustainability and applicability to other healthcare settings. Additionally, it will be crucial for future research to examine the measurable impacts of improvement strategies in other healthcare institutions in-depth and determine the generalizability of these strategies.
- Overall Importance and Contribution of the Article: This study showcases the general effects of a solution-oriented approach applied to reduce waiting times in the healthcare sector. The implemented improvements not only increased patient satisfaction but also optimized operational efficiency. Consequently, there is a demonstrated need for continuous improvement principles in the healthcare sector, and the integration of such practices at an institutional level is discussed extensively.

CONCLUSION

In conclusion, the favorable outcomes derived from employing a solution-focused approach to diminish waiting times at an aesthetic clinic underscore the pivotal role of proactive strategies in elevating healthcare services (Siddiqui et al., 2023). This study serves as a source of insightful inspiration for healthcare providers grappling with analogous challenges, offering practical insights into the implementation of effective improvement strategies. It significantly contributes to the academic discourse on sustainable and effective solutions for enhancing healthcare service quality, offering a nuanced exploration of patient wait times and enriching the existing literature (Gilmore et al., 2023; Tsai & Ghahari, 2023; Fun et al., 2022; Youn et al., 2022). Addressing the intricacies of challenges in aesthetic clinics demanded a sophisticated approach due to their multifaceted nature. The "Voice of Employee" methodology, often overlooked in the existing literature, emerged as an invaluable guide, providing authentic insights into operational inefficiencies. This analysis, incorporating the "Voice of Employee" approach (Sekar et al., 2023; Jamaludin et al., 2023), pioneers an innovative path while advocating for the integration of employee feedback in operational enhancement strategies.

While the incorporation of the 'Voice of Employee' concept is acknowledged in the existing literature, this study underscores the imperative for heightened recognition and emphasis. Its application proved instrumental not only in diagnosing operational inefficiencies but also in steering the trajectory of pragmatic solutions for enhancing healthcare service quality. This research emphasizes the need for a paradigm shift, urging stakeholders in the healthcare sector to accord greater significance to the invaluable insights garnered from employees, catalyzing more effective and sustainable solutions in the perpetual pursuit of operational excellence. Undoubtedly, the path to operational refinement encountered challenges. The intricacies of balancing technological advancements, physical facilities, and human elements underscored the complexity of healthcare service delivery. To address these challenges, a thorough understanding of the underlying causes was imperative, as demonstrated by precise analyses through quality circles, Pareto, and fishbone diagrams. The implemented tactics, including the overhaul of waiting areas, staff training initiatives, and regular software updates, brought tangible enhancements, albeit the journey is ongoing. The pursuit of excellence demands constant vigilance against emerging challenges and the ongoing refinement of strategies to adapt to the evolving healthcare landscape, especially in the post-pandemic era.

This research lays the foundation for future efforts aimed at optimizing healthcare services. As the healthcare sector evolves, future research may delve into the lasting effects of staff-focused techniques, scrutinizing their extended consequences on service excellence and patient contentment. Exploring the applicability of these procedures within different healthcare environments and cultural contexts presents an auspicious avenue for future study.

In essence, this study makes a significant contribution to the discourse on enhancing healthcare service quality, emphasizing the crucial role of the "Voice of Employee" in crafting effective operational strategies. As healthcare institutions strive for continual improvement, incorporating employee perspectives is crucial in guiding the journey towards a future that is focused on patient needs while being operationally efficient.

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