
ANALYSIS OF HEALTHCARE QUALITY: PUBLIC CLINICS AND PRIVATE REHABILITATION CENTERS FROM PATIENTS' PERSPECTIVE

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ABSTRACT

Introduction: Continuous analysis of healthcare quality is crucial to ensure optimal health experiences for patients. In this study, we focus on comparing the quality of care provided between public clinics and private rehabilitation centers, considering the perspective of patients.

Objective: To examine the attitudes of the general population towards satisfaction with care provided in private rehabilitation centers compared to public institutions of physical medicine.

Materials and methods: In this cross-sectional study conducted in February 2023, 125 participants were surveyed via an online Google Form to gather sociodemographic data and explore perceptions of physical therapy. The subsequent statistical analysis, using Microsoft Excel 2007 and IBM SPSS 23.0, encompassed descriptive and inferential statistics, revealing significant insights into respondents' perspectives and forming the foundation for a comprehensive discussion.

Results: Research results indicate higher satisfaction with care provided in private centers compared to public institutions, while simultaneously highlighting issues with the organization of the public sector system. The findings suggest that both types of institutions excel in specific areas, with other areas identified as potential areas for improvement.

Conclusion: Based on the analysis of patient perspectives, we conclude that both public clinics and private rehabilitation centers play a pivotal role in providing quality healthcare. While public clinics emphasized their role in accessibility and comprehensive care, private rehabilitation centers stood out for their personalized approach, prompt patient reception, and utilization of manual techniques.

Keywords: healthcare quality analysis, public clinics, private rehabilitation centers, patients' perspective

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INTRODUCTION

In all areas of healthcare, there is a great interest in studying strategies to implement patient-centered care (PCC) (1). Physical therapy is a non-pharmacological and resource-efficient option that potentiates other forms of treatment, thereby offering the possibility to significantly reduce the environmental burden of health care (2). Musculoskeletal conditions, with the majority of expenditures directed toward high-cost procedures such as surgery, imaging, and prescription medication, represent a substantial burden to the health care system in terms of disability and direct and indirect costs (3). In the field of physical therapy and other health disciplines, there is a growing consensus that the quality of care depends directly on communication and the relationship between patient and therapist (1, 4, 5). Several authors have demonstrated the relationship between the therapeutic relationship and aspects of the environment in which the service is provided (6–8). Opinions and patient satisfaction can serve as indicators of the quality and adequacy of provided healthcare services. The most significant indicator of care quality is patient satisfaction, which is considered an outcome of the healthcare services. Competition among healthcare centers contributes to the improvement of their

service quality and stimulates innovative interventions, thus benefiting patients as consumers (9). According to recent published research, private healthcare services have achieved higher patient satisfaction when compared to public hospitals. Therefore, private care is of competitive nature in reaching its target patients (10–14). Correct diagnosis and appropriate treatment of patients, restoration of function and/or alleviation of symptoms, if not yielding satisfactory results, may prompt patients to seek care and treatment from a different healthcare institution. Patients who are more satisfied with the care provided, thereby contributing to a positive impact on their health condition, are likely to consistently adhere to medically prescribed therapies. Satisfied patients are also more inclined to recommend the hospital to their family and friends. Patient opinions are the best source that service providers can rely on to understand what matters, thus these insights can be utilized in the planning and evaluation of healthcare (15). Three key factors enable healthcare service providers to enhance their services and achieve economic efficiency: healthcare center quality, patient satisfaction, and loyalty (8). Important factors influencing patient satisfaction include timely appointments, compassionate staff, accurate medical

billing, effective communication skills, speed of healthcare service delivery, and willingness to provide support to others (16). Patient satisfaction also influences other aspects of healthcare services, including retention, which is a crucial factor determining their willingness to return to the same center. Furthermore, delivering high-quality healthcare services, motivation, and expressing gratitude contribute to patient retention (9). The study in Lithuania identified most common reasons for shifting from public to private primary health care: long queues to obtain family physician appointments, inconvenient location of public's institution department, patients relocating, enrolment at a former family physician who transitioned from a public to private primary health care institution, and long waiting time at the family physician's office for the appointment. Some statistically significant correlations were found between the specific reasons for shifting from public to private primary health care organizations and patients' demographic characteristics (14).

MATERIALS AND METHODS

This is a cross-sectional study conducted in February 2023, surveying 125 participants aged 20 and above (25 males, 100 females) via an online Google Form. The study

focused on gathering sociodemographic data and exploring perceptions of physical therapy, including knowledge, methods, attitudes towards private rehabilitation centers, and opinions on staff approach.

STATISTICAL DATA ANALYSIS

Statistical analysis, carried out using Microsoft Excel 2007 and IBM SPSS 23.0, involved descriptive and inferential statistics, with measures like mean, median, and standard deviation, alongside visualizations with histograms and scatter plots. Prior to analysis, rigorous data selection and preprocessing were performed. The results revealed significant insights into respondents' perspectives, forming the basis for a comprehensive discussion that considers implications, limitations, and comparisons with existing literature.

RESULTS

The highest number of respondents were in the age group of 20-30 years (33.6%; N=42). Those in the age group of 41-50 years constituted 29.6% (N=37), while 22.4% (N=28) fell within the 31-40 age group. The lowest percentage of participants was in the 51 and above age group, at 14.4% (N=18). In terms of employment status, 42.7% (N=53) of the respondents are engaged in office work,

24.2% (N=30) are manual laborers, students account for 22.6% (N=28), and homemakers constitute 10.5% (N=13). In the past year, 95 (76%) respondents have used physical therapy services. A significant 64.9% (N=63) of the participants availed these services 1-4 times, 20.6% (N=20) utilized them 9-10 times, and 14.4% (N=14) received treatment 5-8 times. The majority of respondents, 64.8% (N=81), initially sought treatment at a public clinic for physical medicine, while 35.2% (N=44) approached a private rehabilitation center. The Chi-Square test results ($\chi^2=10.952$, $df=1$, $p=0.001$) indicate that there is a significant association between the initial choice of seeking medical care (clinic vs. center) and the variables being examined. In other words, there is evidence to suggest that the choice of medical care is not

random and is related to the other variables in the analysis. The low p-value (0.001) suggests that this relationship is unlikely to have occurred by chance. Overall, these results suggest that there is a significant relationship between the choice of seeking medical care and the variables being studied, but further analysis and interpretation of the specific variables are necessary to understand the nature of this relationship. At the physical medicine clinic, the most frequently used treatment method was electrotherapy, at 55.9% (N=33), followed by manual massage at 28.8% (N=17), and kinesiotherapy at 13.6% (N=8). In the private rehabilitation center, the most common treatment method was manual therapy for 38% (N=38) of the respondents, followed by other therapies for 31% (N=31) of them, and manual massage for 23% (N=23).

Table 1. - The comparison of treatment methods between the clinics

	If you have been to a physical medicine clinic, which treatment methods were used?	If you have been to a private rehabilitation center, which treatment methods were used?
Chi-Square	38.831 ^a	48.400 ^b
df	3	4
Asymp. Sig.	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 14.8.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.0.

The Chi-Square test results for both the physical medicine clinic and the private

rehabilitation center ($\chi^2=38.831$ and $\chi^2=48.400$) indicate statistically significant

associations between the types of treatment methods used and the location (Table 1). In other words, the choice of treatment methods is not random and is related to the location. These results suggest that the types of treatment methods used vary significantly between the physical medicine clinic and private rehabilitation

center, and this variation is statistically significant. The most common rating for evaluating the quality of stay at the physical medicine clinic was "good" (58.5%; N=38), while at the private rehabilitation center, 69.6% (N=71) of the respondents rated their stay as "very good."

Table 2. - Number of visits

	How many times did you visit a physical medicine clinic to alleviate ailments?	How many times did you visit a private rehabilitation center to alleviate ailments?
Chi-Square	1.968 ^a	40.820 ^b
df	2	2
Asymp. Sig.	.374	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20,7.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.3.

The Chi-Square test results suggest a statistically significant association between the number of visits to a private rehabilitation center and the effectiveness of resolving health issues. However, no significant association was found between the number of visits to a physical medicine clinic and health issue resolution. The low p-value (close to 0.000) for the private rehabilitation center indicates that this association is unlikely to have occurred by chance. To address their health issues, 63% (N=63) of the respondents needed to visit a private rehabilitation center 1-4 times,

while 40.3% (N=25) needed to do so at a physical medicine clinic. The staff at the physical medicine clinic received a "good" rating from 64.7% (N=44) of the respondents, while the staff's approach at the private rehabilitation center received a "very good" rating from 67.6% (N=69) of the participants. Waiting time for admission to the physical medicine clinic was more than 10 days for 56.3% (N=36) of the respondents. The waiting time for admission to the private rehabilitation center was 1-5 days for 91% (N=91) of the participants.

Table 3. - Association between health care choices and effectiveness of treatment

	Which institution did you visit first, a physical medicine clinic or private rehabilitation clinic?	How many times did you visit a private rehabilitation center to alleviate ailments?
Chi-Square	10.952 ^a	40.820 ^b
df	1	2
Asymp. Sig.	.001	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 62,5.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.3.

The first test indicates a significant relationship between the number of visits to a private rehabilitation center and the effectiveness of resolving health issues. The second test shows a statistically significant association between the initial choice of seeking medical care and the type of facility chosen (clinic or center). Both tests suggest meaningful relationships between the variables being examined. When asked if private rehabilitation centers use manual techniques more than public physical medicine clinics, 91% (N=91) of the respondents answered affirmatively. Greater assistance from manual therapy or physiotherapy devices

(electrotherapy, magnet therapy, ultrasound, etc.) was reported by 83.5% (N=86) of the participants. 18.8% (N=15) of the respondents were able to prevent potential surgery due to treatment received at the physical medicine clinic, while prevention of potential surgery through treatment at a private rehabilitation center was successful for 27% (N=27) of the participants. Looking at the satisfaction levels comparatively, 12.6% (N=13) of the respondents are satisfied with the physical medicine clinic, while 87.4% (N=90) are satisfied with the private rehabilitation center.

DISCUSSION

Healthcare is facing newer challenges, primarily concerning conditions affecting the elderly, disabled individuals, and the increased prevalence of non-communicable diseases. According to the World Health Organization's (WHO) global estimates of

the need for rehabilitation based on the global burden of diseases study of 2019 (17), 2.41 billion individuals live with conditions that can benefit from an improvement in functioning by means of rehabilitation (18). Primary Care Physicians (PCPs) are typically the first

point of contact for patients, intervening in the pathology of diseases (19). The impact of impairments such as sensory loss, ulcerations, and contractures on the quality of life, such as walking difficulties, must be considered. With active support from PCPs through collaboration with PM&R specialists, functional outcomes can easily achieve their full potential. In our study, at the physical medicine clinic, electrotherapy was the most frequently used method, while at the private rehabilitation center, manual therapy was the most common treatment method. The staff at the physical medicine clinic received a "good" rating from 64.7% of the respondents, while the staff's approach at the private rehabilitation center received a "very good" rating from 67.6% of the participants. Patients referred to private rehabilitation clinics have a better experience compared to users of public clinics in terms of environment and basic amenities, communication with healthcare providers, and involvement in their healthcare plans (20). It's important to emphasize that the well-being of an individual is influenced by how they are treated. Understanding user experiences and expectations is crucial for increasing the utilization of healthcare services, reducing treatment dropout rates, encouraging early seeking of care, fostering greater openness in interactions

with healthcare providers, and better adherence to healthcare instructions, all of which contribute to generating improved health outcomes. Waiting time for admission to the physical medicine clinic was more than 10 days for 56.3% of the respondents. The waiting time for admission to the private rehabilitation center was 1-5 days for 91% of the participants. If hospitals trade unattended patients, our game-theoretic models indicate a potential reduction of waiting lists of up to 37%. However, when private hospitals are introduced into the system, we found a possible reduction of waiting lists of up to 60% (21).

CONCLUSION

Surveyed participants overwhelmingly preferred seeking therapy at private rehabilitation centers due to shorter waiting times and a more positive evaluation of staff. Notably, in the context of treatment methods, the physical medicine clinic predominantly employed electrotherapy, whereas the private rehabilitation center favored manual therapy as its primary treatment approach. When it comes to evaluating the quality of their stay, a noteworthy pattern emerged. Most respondents at the physical medicine clinic appraised their experience as "good," while a significant proportion of participants at

the private rehabilitation center rated their experience as "very good." Moreover, the manner in which participants sought to address their health concerns revealed an interesting trend. Notably, a majority needed 1-4 sessions for issue resolution in private centers, indicating efficiency. Overall, respondents expressed higher satisfaction with the services provided by private rehabilitation centers, emphasizing their perceived benefits, notably manual therapy's effectiveness. In assessing overall satisfaction, respondents consistently expressed greater contentment with the services provided by private rehabilitation centers.

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ANALIZA KVALITETE ZDRAVSTVENE SKRBI: JAVNE KLINIKE I PRIVATNI REHABILITACIJSKI CENTRI IZ PERSPECTIVE PACIJENATA

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SAŽETAK

Uvod: Kontinuirana analiza kvalitete zdravstvene skrbi ključna je kako bi se osiguralo optimalno zdravstveno iskustvo za pacijente. U ovom istraživanju fokusiramo se na usporedbu kvalitete pružene skrbi između javnih klinika i privatnih rehabilitacijskih centara, uzimajući u obzir perspektivu pacijenata.

Cilj: Istražiti i procijeniti kvalitetu zdravstvene skrbi u javnim klinikama i privatnim rehabilitacijskim centrima s fokusom na iskustva pacijenata. Analizirajući njihove stavove i iskustva identificirale su se ključne razlike i sličnosti u pružanju skrbi između ove dvije vrste ustanova.

Materijali i metode: U ovoj presječnoj studiji provedenoj u veljači 2023. godine, 125 sudionika anketirano je putem online Google Obrazaca radi prikupljanja sociodemografskih podataka i istraživanja percepcija fizioterapije. Statistička analiza, korištenjem Microsoft Excela 2007 i IBM SPSS-a 23.0, obuhvatila je deskriptivnu i inferencijalnu statistiku, otkrivajući značajne uvide u perspektive ispitanika i formirajući temelj za sveobuhvatnu raspravu.

Rezultati: Rezultati istraživanja ukazuju na veće zadovoljstvo skrbi pružene u privatnim centrima u usporedbi s javnim ustanovama, dok se istodobno ističe problem organizacije sustava u javnom sektoru. Rezultati ukazuju na to kako se oba tipa ustanova ističu u određenim područjima, dok su druga područja identificirana kao potencijalna područja za unaprjeđenje. Zaključak: Na temelju analize stavova pacijenata, zaključujemo da javne klinike i privatni rehabilitacijski centri igraju ključnu ulogu u pružanju kvalitetne zdravstvene skrbi. Dok su javne klinike naglasile svoju ulogu u pristupačnosti i sveobuhvatnoj skrbi, privatni rehabilitacijski centri su se istaknuli po personaliziranom pristupu, brzini zaprimanja pacijenata i primjeni manualne tehnike.

Ključne riječi: analiza kvalitete zdravstvene skrbi, javne klinike, privatni rehabilitacijski centri, perspektiva pacijenata

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