

Patient Satisfaction With Outpatient Physiotherapy Services And Its Socio-Demographic Factors Influence The Levels Of Satisfaction

Seham Abdullah Alsunbul¹, Nawal Faisal Alhouthy², Salman Mohammed Ali Alharissy³, Abdulaziz Ashaq Bader Alotaibi⁴, Rami Ayesha Alanazi⁵, Laila Hassan Shani Al-Dharawi⁶, Aisha Ali Muhammad Khawaji⁶, Sifran Ibrahim Sifran Alharthi⁷, Fuad Saed Masoud Alqethmi⁷, Essa Nasser Essa Jaafari⁸, Abdulaziz Abdallah mohsen sahli⁸, Nawaf Soliman Hamad Alrabiah⁹, Hend ali aleiydi¹⁰, Fahad Hassan Mohammad Atain¹¹

Abstract

Background: Patient centered approach is the cornerstone in health care facility. Therefore, patient satisfaction is of utmost importance. Patient satisfaction (PS) is an essential indicator of the quality of physiotherapy services. Factors related to satisfaction of patient in connection with physiotherapy practice are not evaluated. **The study aims:** To measure PS with outpatient physiotherapy services and to examine the socio-demographic factors that influences the levels of satisfaction. **Methods:** A cross-sectional study was conducted in outpatients' clinics in Jeddah, KSA from January to March 2022. Patient satisfaction with physiotherapy services was assessed using a reliable, valid, and structured questionnaire. Data were collected from 501 patients, and the participants' ages ranged from 18 to 79 (mean + standard deviation = 47.19 + 12.8), with more females (n = 312) than males (n = 189). **Results:** Participants were satisfied or very satisfied with the physiotherapy they received in the domains that measure PS. The highest percentage of satisfaction was in the physiotherapists' attributes and ability to provide detailed explanations to their patients. Patient satisfaction was also associated with gender and occupation, with females and unemployed patients reporting higher satisfaction rates. **Conclusion:** This highlights the value of surveys administered to patients during treatments, as well as the value of strategies to address the influential factors for the improvement of PS in public physiotherapy clinics.

Keywords: patient satisfaction, physiotherapy, outpatient.

Introduction

The need for continuous improvement of quality and safety in the provision of patient care has become self-evident ⁽¹⁾. The resultant paradigm shift from an acceptance of the status quo to a drive for constant improvement in clinical practice has required the engagement of multiple

¹Senior physiotherapist, Al-Rain General Hospital, Saudi Arabia.

²physiotherapist, Al-Rain General Hospital, Saudi Arabia.

³Physiotherapy Technician, Riyadh First Health Cluster Al-Quwayiyah General Hospital, Saudi Arabia.

⁴Physiotherapist, Riyadh First Health Cluster Al-Quwayiyah General Hospital, Saudi Arabia.

⁵Physiotherapist, Riyadh Second Health Cluster, King Khaled Hospital Al-Majmah, Saudi Arabia.

⁶Physiotherapist, Al-Eidabi General Hospital, Saudi Arabia.

⁷Physiotherapy Technician, King Faisal Hospital, Saudi Arabia.

⁸physiotherapy, General Damad hospital, Saudi Arabia.

⁹Therapy and Rehabilitation, PHC nukhaylan, Saudi Arabia.

¹⁰Physiotherapist, Diriyah hospital, Saudi Arabia.

¹¹Physiotherapist, Al-Quwayiyah General Hospital, Saudi Arabia.

monitoring strategies⁽¹⁾. Ascertaining patients and their relatives' satisfaction to care received is one of the most reliable strategies to improve clinical practice⁽¹⁾. Patient satisfaction refers to the extent to which the patients perceive that their needs and expectations are met by the services provided⁽¹⁾. It is often related to health outcomes that are consistent with the patient's values and preferences⁽²⁾.

Patients rate their satisfaction using different constructs including the art of care (caring attitude), technical quality of care, continuity of care, accessibility and convenience, finances (ability to pay for services), physical environment, efficacy, and outcome of care⁽³⁾. Individual patient satisfaction reports may be mediated by variables such as age, reported health status, ethnicity, gender, engagement with the system, faith and gratitude, or perceptions of what constitutes "good" health-care professionals⁽⁴⁾. These variables have been demonstrated to predict patient satisfaction scores⁽⁴⁾. Research has suggested some other factors that could influence patient satisfaction across all care settings; such factors include respect for patient preferences, emotional support, involvement of family and friends, continuity and transition, physical comfort, empathy, and personalized therapy⁽⁵⁾.

Outcome measures such as Physical Therapy Outpatients Survey (PTOPS) and the Med-Risk instrument have been reported to be reliable and valid tools for measuring patient satisfaction with out-patient physical therapy services^(6,7). Various studies conducted around the world, have reported PS with various forms of treatment, including medical management, surgery, and physical therapy^(8,9). It has been related to various factors including patient age, their presenting condition, specific needs, expectations, previous experiences, social background, and personality^(10,11).

Patient-centered physiotherapy practices have been advocated for decades as a better transition from the dominant medical model to a more holistic approach that considers the biological, social, and psychological aspects of a patient's presentation^(12,13). According to this approach, patients' opinions, views, needs, and preferences together play an important role in perceived overall health and well-being^(14,15). As the numbers of people who benefit from physiotherapy services have significantly increased in the last few decades, including people aging with disabilities, there has been an acknowledged need for research on the effectiveness of physiotherapy practices, and particularly for studies that quantify the experiences of patients and their use of physiotherapy services⁽¹⁶⁾. As a result of developments in the theoretical basis of physiotherapy practices, the concept of patient satisfaction has emerged as a parameter for the quality of physiotherapy services for different populations⁽¹⁷⁾.

Patient satisfaction has been determined by many studies as an important indicator of physiotherapy service quality and overall health care system efficiency^(17,18). Moreover, high patient satisfaction levels are associated with adherence to treatment, better health outcomes, and higher health-related quality of life^(19,20). Research on patients' satisfaction with physiotherapy services has been ongoing for over 20 years. For example, a systematic review based on 15 studies by Hush et al., (2011)⁽¹¹⁾ provided some evidence regarding the levels and determinants of patient satisfaction, and overall, the level of satisfaction with physiotherapy services was high across all the reviewed studies. Also, patient satisfaction has been correlated with physiotherapists' abilities and attitudes, such as skills, knowledge, professionalism, and effective communication^(21,22). Other determinants of patient satisfaction include convenience and access to physiotherapy facilities, such as location, parking, wait times, and administrative procedures⁽²¹⁻²³⁾. Furthermore, patient satisfaction may be mediated by socio-demographic variables such as gender, age, education, and psychosocial factors^(24,25).

The concept of patient satisfaction has been well-studied in the past 20 years; however, most studies have been conducted in Europe and North America. Although some studies have been conducted in African countries such as Ghana⁽²⁵⁾ and Nigeria⁽²⁴⁾, their health care systems and socio-demographic backgrounds differ from those of KSA. Except for one qualitative study that described the physiotherapy experiences of patients in Egypt⁽²³⁾, our literature review did

not find any other studies conducted in North African countries. However, due to cultural differences, the findings of these studies cannot be generalized and applied to the rest of the world. To the best of our knowledge, there have been little studies conducted in Saudi Arabia that report PS with physical therapy treatment.

The results of such research can provide evidence for physiotherapists, clinic managers, and policymakers in the health care system to improve service quality and consequently to optimize the efficiency of healthcare services. Therefore, this study aimed to measure PS with outpatient physiotherapy services and to examine the socio-demographic factors that influence the levels of satisfaction in Saudi Arabia.

Methods

A cross-sectional study was designed to measure the levels of satisfaction in outpatients who had received physiotherapy services at 12 physiotherapy clinics in Jeddah, KSA from January to March 2022. The sample size was calculated using Epi Info software, version 3. The expected probability of high patient satisfaction was assumed to be 50%, and by applying a 95% power, precision of $\pm 5\%$, and a design effect of 1.0, the minimum required sample size was estimated to be 384 participants. However, we added 10% to this number to account for possible non-responses, and so the minimum sample size was revised to 422 participants.

A systematic random sampling technique was applied to select participants from patient reception areas. The research assistant obtained the files of all patients who were in a waiting room, and then they picked every third file and arranged an interview with the relevant patients after they finished their treatment sessions. This procedure was done after obtaining permission from the clinics' administrations and obtaining an ethical clearance certificate from the ethical committee of the University. Also, written permission was obtained from all of the 12 public hospitals that participated in this study. Individuals who agreed to participate in this study provided a written consent before proceeding to the study questionnaire.

A sample of 501 patients attending outpatient physiotherapy services at 12 public clinics in Jeddah, KSA participated in this study. In order to be included, patients had to be at least 18 years of age, be able to read and understand the Arabic language, be cognitively and mentally sound (ie, oriented to times, places, and people), be able to sign the consent form (by themselves or by their legal decision-maker), and had completed at least 3 physiotherapy sessions (ie, 1 week of treatment). Patients were excluded if they were cognitively or intellectually challenged and/or if their medical conditions were fragile and needed close medical attention.

The data were collected using a quasi-anonymous structured questionnaire. The questionnaire included 2 parts. The first part contained questions about socio-demographic information such as gender, age, marital status, occupation, and medical condition, while the second part was based on a scale that measures patient satisfaction with physiotherapy services. This scale was developed and validated by Monnin and Perneger, (2002) ⁽²⁶⁾ and adopted by the American Physiotherapy Association ⁽²⁵⁾, and is a valid and reliable tool for assessing patient satisfaction with outpatient physiotherapy services. The original scale was developed in the English language; therefore, we adopted an Arabic version that was translated and validated by Devreux et al., (2012) ⁽²⁷⁾. The scale consisted of 14 survey items. Patients were asked to rate their satisfaction levels with the survey items by using a 5-point Likert scale (1 poor, 2 fair, 3 good, 4 very good, and 5 excellent), except for question number 14, "Would you recommend this facility to people close to you?", where answers were scored using a different 5-point Likert scale: 1 = certainly not, 2 = probably not, 3 = not sure, 4 = yes, probably, and 5 = yes, certainly.

The preliminary questionnaire was tested on 19 patients with similar characteristics in

order to assess the questions' clarity and the time required to complete the questionnaire. Research assistants were also involved in this phase in order for them to gain more experience and to minimize personal errors. Data from the pilot testing were not included in the study. Based on the pilot testing phase, all questions were determined to be straightforward and understandable by different age-groups, and therefore we moved confidently onto the data collection phase.

During the period between January and March 2022, potential participants were approached by the researchers and were invited to participate after receiving adequate information about the study's objectives, procedures, benefits, and possible risks from participating in the study. These individuals were invited to participate in the study and were given a study package that consisted of a study questionnaire, an information sheet, and a consent form, with all documents being written in Arabic. After the patients' treatments, data were collected by researchers via face-to-face interviews in a convenient office in the clinic where the patients had received treatment.

All the collected questionnaires were checked for completeness and consistency and then entered into an Excel spreadsheet. The researchers used a double-check entry method to ensure the quality of the data, and then the pre coded data were imported and analyzed using the Statistical Package for Social Sciences (SPSS) software, version 28. The data were presented in tables and expressed as frequencies and percentages. Mann-Whitney U and Kruskal-Wallis nonparametric tests were used to test the associations between socio-demographic variables. The Mann-Whitney U test was used only for the gender variable, whereas the Kruskal-Wallis test was used for the participants' ages, marital statuses, occupations, and medical conditions. The mean scores and standard deviations were calculated, and a P value of .05 was considered to be statistically significant.

Results

Demographic Characteristics of Participants

Table (1) shows that a total of 530 patients were invited to participate in this study, with 501 questionnaires being completed (response rate 94.5%). Of the included participants, 312 were females (62.28%), and the ages of the participants ranged between 18 and 79 years, with a mean age of 47.19 and a standard deviation of 12.8. Two-thirds (66.47%) of the participants were married, 39.73% were unemployed, and a little over half (55.09%) had musculoskeletal problems.

Participants' Responses Regarding Physiotherapy Services Received

Table (2) presents the frequencies and percentages of the participants' responses to the items in the questionnaire. Overall most participants responded to each question with "very good" or "excellent." For instance, the ease of admission procedure received an overall rating of 74.25%, courtesy and helpfulness of the secretary received an overall rating of 79.44%, and simplicity of scheduling and time to get a first appointment received an overall rating of 66.68%. The highest-rated attributes were reported for question number 14, "Would you recommend this facility to people close to you?" with 62.5% responding "yes, certainly," and only 1.4% answering, "Certainly not."

Socio-demographic Variables and Satisfaction with Physiotherapy Services Received

Table (1) shows the associations between socio-demographic variables such as gender, age, marital status, occupation, and medical condition and the levels of satisfaction with the physiotherapy services. Gender had a significant influence on patient satisfaction, with females being more satisfied than males (P value 0.001). Meanwhile, occupation also had a significant influence on patient satisfaction, with students and unemployed participants reporting high satisfaction (P value 0.029). We found no statistically significant effects of age, marital status, or medical condition on patient satisfaction, with P values of .329, .985, and .991 respectively.

Table (1): Participants’ Socio-demographic Characteristics ^a

Factor (N = 501)		Frequency	Percentage	Mean rank	Mann-Whitney	P value
					U value/Kruskal-Wallis	
					H value (df)	
Gender ^b	Male	189	37.72	224.10	24399.500	.001
	Female	312	62.28	267.30		
Age ^c	18-29	45	8.98	268.73	4.617 (4)	.329
	30-39	106	21.16	254.60		
	40-49	117	23.35	255.61		
	50-59	174	34.73	253.41		
	60+	59	11.78	214.75		
	Range (18-79)					
	Mean + standard deviation $\frac{1}{4}$ (47.19 + 12.8)					
Marital status ^c	Single	129	25.75	248.90	0.151 (3)	0.985
	Married	333	66.47	252.59		
	Widowed	5	1	241.40		
	Divorced/separated	34	6.79	244.85		
Occupation ^c	Student	73	14.57	268.64	10.801 (4)	0.029
	Public sector	125	24.95	238.97		
	Private sector	74	14.77	235.81		
	Unemployed	199	39.72	267.12		
	Retired	30	5.99	188.73		
Medical condition ^c	Musculoskeletal problem	276	55.09	249.74	0.103 (3)	0.991
	Neurological problem	189	37.72	251.78		
	Respiratory problem	14	2.79	261.11		
	Other (eg, cancer)	22	4.39	253.77		

^a P value .05. ^b Mann Whitney U test was used. ^c Kruskal-Wallis test was used.

Table (2): The Participants Responses to the Questionnaire

Factor (N = 501)	Poor frequency (%)	Fair frequency (%)	Good frequency (%)	Very good frequency (%)	Excellent frequency (%)
Question 1: Ease of administrative admission procedures	11 (2.20)	26 (5.19)	92 (18.36)	205 (40.92)	167 (33.33)
Question 2: Courtesy and helpfulness of secretary	4 (0.80)	17 (3.39)	82 (16.37)	218 (43.51)	180 (35.93)

Factor (N = 501)	Poor frequency (%)	Fair frequency (%)	Good frequency (%)	Very good frequency (%)	Excellent frequency (%)
Question 3: Simplicity of scheduling and time to get first appointment	16 (3.19)	42 (8.38)	108 (21.56)	173 (34.53)	162 (32.34)
Question 4: Ability of physical therapist to put you at ease and reassure you	2 (0.40)	4 (0.80)	75 (14.97)	223 (44.51)	197 (39.32)
Question 5: Explanations about what will be done to you during treatment	8 (1.60)	7 (1.40)	70 (13.97)	220 (43.91)	196 (39.12)
Question 6: Quality of information you received at the end of treatment regarding future	6 (1.20)	16 (3.19)	90 (17.96)	228 (45.51)	161 (32.14)
Question 7: Feeling of security at all times during the treatment	1 (0.20)	9 (1.80)	56 (11.18)	208 (41.52)	227 (45.31)
Question 8: Extent to which treatment was adapted to your problem	6 (1.20)	8 (1.60)	79 (15.77)	256 (51.10)	152 (30.34)
Question 9: Ease of access of physical therapy facilities	4 (0.80)	20 (3.99)	83 (16.57)	202 (40.32)	192 (38.32)
Question 10: Indications to help you find your way around and in hospital buildings	25 (4.99)	44 (8.78)	125 (24.95)	183 (36.53)	124 (24.75)
Question 11: Comfort of the room where physical therapy was provided	9 (1.80)	31 (6.19)	97 (19.36)	216 (43.11)	148 (29.54)
Question 12: Calm and relaxing atmosphere in physical therapy rooms	15 (2.99)	38 (7.58)	111 (22.16)	182 (36.33)	155 (30.94)
Question 13: Your physical therapy overall	4 (0.80)	11 (2.20)	96 (19.16)	237 (47.31)	153 (30.54)
Question 14: Would you recommend this facility to people close to you?	7 (1.40)	4 (0.80)	62 (12.38)	115 (22.95)	313 (62.48)

Discussion

This cross-sectional study examined patient satisfaction with outpatient physiotherapy services at 12 public hospitals in Jeddah, KSA. Patient satisfaction has been used worldwide to measure the quality of services provided to the public, and therefore we sought to use a valid questionnaire to identify patients' opinions about important measures of physiotherapy services that might be helpful to improve those services, as the health care system in KSA has been in development over the last 10 years. Patients showed high average percentages of satisfaction when the therapists considered their needs and preferences, and research has shown better

health-related outcomes among satisfied patients compared to their non-satisfied counterparts⁽²⁸⁾. High satisfaction has also been correlated with motivation and adherence to physiotherapy sessions^(29, 30). Thus, patient satisfaction is an important factor in providing quality services and ensuring patients' adherence to physiotherapists' recommendations.

Overall, the levels of satisfaction among the outpatients showed high average percentages for all measures of patient satisfaction, whether admission-related (questionnaire items 1, 2, and 3), physiotherapist-related (questionnaire items 4-8), facility-related, or accessibility domain-related (questionnaire items 9-12). Our study findings are consistent with previous studies that reported high levels of satisfaction percentages among outpatients in physiotherapy settings in Australia⁽³¹⁾, the United States⁽³²⁾, Ireland⁽²²⁾, Nigeria⁽²⁴⁾, and Saudi Arabia⁽²⁷⁾. Despite the differences in geographic location and the nature of physiotherapy services provided, the similar findings in these studies indicate that the factors influencing patient satisfaction are also similar.

In terms of admission-related factors, participants in this study reflected high average satisfaction percentages. For instance, 79.4% of participants rated their reception desk experiences as "very good" or "excellent," and 66.9% of participants rated the simplicity of scheduling their first appointment as "very good" or "excellent." This finding was surprising, given the busy schedule of administrative staff in the public hospitals compared to private institutions. Our study findings, however, seem partially consistent with previous studies. For example, more participants in the study in Nigeria⁽²⁴⁾ were indifferent or dissatisfied with the items that measured physiotherapy accessibility, whereas in our case, the most likely explanation is that most administrative staff in public hospitals are experienced and thus have good interpersonal communication skills. This finding can also be attributable to the generally friendly nature of the people in KSA due to religious and other cultural values.

In terms of physiotherapist-related factors, our results showed high satisfaction percentages for aspects of communication between patients and physiotherapists. The patients rated their physiotherapists as "very good" or "excellent" on their ability to put them at ease, their ability to provide adequate explanations about what would be done during treatment, and the quality of information the patients received at the end of the treatment process, with satisfaction rates of 83.8%, 83%, and 77.7%, respectively. Our findings are consistent with previous studies, as physiotherapists' attributes were among the most consistent factors related to patient satisfaction in the literature^(21, 22, 24, 33, and 34). The ability of physiotherapists to provide enough explanation and details to their patients may be explained by the fact that most physiotherapists have relatively high educational degrees (ie, bachelor or master degrees) in clinical settings. As outlined by Hush et al., (2011)⁽¹¹⁾ professionalism, skills, knowledge, and effective communication with patients were the most commonly mentioned features contributing to a high level of satisfaction among physiotherapy patients who received treatment.

On the associations between the level of satisfaction with physiotherapy services and socio-demographic variables such as gender, age, marital status, occupation, and medical conditions, we found that patients' gender had a significant influence on their overall satisfaction, with females being more satisfied than males. One possible explanation for this finding may be due to the psychosocial nature and personality profiles of females. In fact, based on our clinical experience, females are generally less critical toward services provided than males. Females also may come to treatment sessions with lower expectations than their male counterparts⁽³⁴⁾. Such variations may play a role in satisfaction with treatment; however, there are no data to confirm this assumption, and we encourage future research to consider gender differences in responses to physiotherapy sessions. Internationally, there is controversy in terms of the influence of gender on patient's satisfaction with physiotherapy services. Although

some studies support our finding that females show more satisfaction with physiotherapy services than males^(20, 25, 34), others suggest that males are more satisfied than females^(35, 36). This discrepancy between studies confirms our assumption that female psychosocial characteristics are different according to geographical location and cultural background.

Patients' occupations significantly influenced patient satisfaction, as noted earlier, with students and unemployed participants reporting more satisfaction than employed patients. This finding could be explained in part by employed patients having difficulty in getting an appointment with a physiotherapist, as they may end up on a waiting list for days or even weeks. Waiting time was acknowledged as a source of dissatisfaction and frustration that influenced patient satisfaction, as documented in the literature⁽¹¹⁾. Notably, financial factors played an important role in patient satisfaction with physiotherapy services in previous research^(22, 32); however, for the current research, data were collected in public hospitals which are free of charge for the public, and thus we accounted for the financial influence on satisfaction level.

Contrary to what has been reported in the literature, however, we did not find any significant effect of age. This finding was unexpected because age was significantly associated with overall satisfaction with physiotherapy services in many other studies^(11, 20, and 25). One possible explanation for this finding may be due to the age distribution in our sample. The majority of our recruited patients were less than 60 years old, with only 11.78% of participants being 60 years of age or older. In contrast, however, previous research has shown that satisfaction with physiotherapy services is higher among seniors compared to other segments of the population⁽³⁷⁾. Regardless, we did not find a significant association between age and level of satisfaction with outpatient physiotherapy services.

All in all, the variations in the levels of satisfaction based on the patients' characteristics may be related to the initial expectations of the patients. Patients' expectations, which refers to the fulfillment or gratification of their needs and preferences, are empirically related to patient satisfaction with health care services in general⁽³⁸⁾ and with physiotherapy services in particular⁽³⁶⁾. Therefore, understanding patients' expectations and considering their needs and preferences can significantly improve patients' satisfaction and thus improve the quality of the healthcare system overall.

Conclusion

Overall, this study sheds some light on the experiences of outpatients in public physiotherapy clinics and provides some evidence regarding the factors that contribute to patient satisfaction. Participants in this study were satisfied or very satisfied in the domains that measure satisfaction with the physiotherapy they received; however, there was some variability in satisfaction levels between admission related and physiotherapist related factors, with the latter receiving higher ratings. This study also highlighted the association between high satisfaction and gender and occupation, which needs further exploration in future research. It would also be helpful for the health care system to direct future research to compare public and private clinics in relation to patients' satisfaction with the services provided. Based on our findings, a patient-centered approach is highly recommended, as this has been empirically identified as an essential factor for achieving high levels of patient satisfaction with physiotherapy services.

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