

Benchmarking of patient satisfaction with physical rehabilitation services in various hospitals of Jeddah

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Abstract: Objective: To study patients' satisfaction in rehabilitation services and its relation to staff job satisfaction in public, private and teaching hospitals in Jeddah. **Method:** A cross sectional survey was used to measure patients' satisfaction with rehabilitation services in ten different hospitals in Jeddah (Kingdom of Saudi Arabia). A validated Monnin and Perneger's questionnaire with a 5-points Likert scale was utilized. At the same time, staff job satisfaction was measured by the Effort-Reward Imbalance model in the same health care facilities. **Results:** On 725 patients who responded to the survey, 80.6% were overall satisfied with the rehabilitation services they received. Patient satisfaction was significantly different ($p=0.001$) between hospital types. In average, 88.5% of the patients of the teaching hospitals were satisfied with the rehabilitation services, compared to 77% of the patients in the public hospitals and 75.7% of the patients in the private hospitals. Moreover there was no statistically significant correlation between staff job satisfaction and patients' satisfaction. **Conclusion:** Patients' satisfaction with rehabilitation services was the highest in the teaching hospitals in comparison with the other types of health care facilities. Patients' satisfaction was however not significantly correlated with the staff job satisfaction.

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1. Introduction

Patients' satisfaction is considered an important quality indicator and a basic element of any quality monitoring program in health care services¹. From the same perspective, one might suppose that if health care providers are satisfied in their work, it could reflect on improved patients' satisfaction and outcomes. It is thought that bringing more satisfaction to the staff in their work could subsequently increase patients' satisfaction though this statement can differ in the rehabilitation services and might be related to other factors of care². The assessment of patient's satisfaction with the treatment outcomes in physical rehabilitation presents underlying difficulties. It is based on the patient's perception of the treatment effectiveness and could be subjective as in severe or pathologies or multiple disabilities where therapeutic outcomes are often related to the patient's well being, relief of pain or functional skills improvement^{3,4}. The intrinsic aspect of the rehabilitation outcomes can be analyzed in a single hospital however, it is not evident when several facilities are compared with various degrees of patient's pathologies.

Several patients' satisfaction evaluation tools have been recently designed for out-patients of physical therapy services such as the Physical Therapy Outpatients Survey (PTOPS)⁵ or the Medrisk instrument⁶. They are considered as valid tools for

measuring patient satisfaction with physical therapy and measure the variables of satisfaction based on the interactions with the therapists, allocated time and explanations or instructions during treatment. The aspect of satisfaction of both in- and outpatients has been evaluated by⁷ in their research using a validated tool suiting both patients' categories. It has considered the fact that, in the healing process, the patients are following a continuum of care from the inpatients to the outpatients services of rehabilitation. The motivation behind using this questionnaire is based on its utilization in studies for inpatients and outpatients without distinction, in addition to its internal validity and the fact of being short and easy to be understood by all patients independently from their educational level. In the current research, the financial aspects were excluded and were not considered as the hospitals participating in the survey were not disclosing their financial data or providing services free of charge.

Correlates of patients' satisfaction

a. *Patients' characteristics* as socio-demographic characteristics of the patients including the age, gender, level of education may be considered in addition to the patient's pathology and if the patient him/herself answers the survey questionnaire or a patient's relative. Age has been

found to be the most consistent factor, with older patients being more satisfied with their care. However, in several researches, most correlations of patients' satisfaction with socio-demographic variables were extremely small and have then been considered as a minor predictor of satisfaction⁸.

- b. *Health related patient behavior:* Compliance to the treatment and utilization of the services are positively related to satisfaction of the patients. As often observed, a patient that becomes unsatisfied with the rehabilitation services will intent to switch services to another care provider or would show a decreased willingness to return. Additionally, patients who are more satisfied are more apt to comply by appearing on time and following treatment instructions⁸.
- c. *Provider-patient interaction:* Perceptions of the quality of care are most heavily influenced by the attitude of the therapist and the manifestations of concern and care with positive communication in addition to the evidence of technical competence. Professionals who are seen as warm, friendly are related to higher levels of patient's satisfaction. Both humaneness and informativeness have been studied in several researches and are the baselines for a good therapist-patient relationship. Sensitivity to patients needs based on clear and sufficient communication are also contributing factors to satisfaction. Heinemann and colleagues⁹ concluded that the same items of communication, effectiveness of care and environmental factors were perceived as important component of the patients' satisfaction. Patients who complete their course of physical therapy reported that the professional interaction between the therapist and patient, especially the meaningful exchange of relevant information, was critical for patient satisfaction with healthcare^{6,10}.

The study aimed at studying the patients' satisfaction with rehabilitation services and its relation to staff job satisfaction in public, private and teaching hospitals in Jeddah.

2. Subjects and Methods

Subjects

A population of 724 patients attending physical, occupational and respiratory therapy services was from public (n= 341), private (n= 250) and educational health care facilities (n= 134) in Jeddah area participated in the survey. Patients received the survey questionnaire after attending their therapy sessions in University hospitals or public hospitals related to the Ministry of Health as well as in private health care facilities and large outpatient clinics of the town of Jeddah. The hospitals' sizes varied in average from 700 in-patients beds to smaller dimensions of

250 beds. By random selection, several healthcare facilities that only treat out-patients were also included in the survey. Exclusive criteria were patients suffering from degenerative pathologies and cognitive abnormalities.

In addition to the patients, a number of 166 therapists and assistant therapists of the same health care facilities received a survey questionnaire evaluating their job satisfaction level using the Effort-Reward Imbalance model¹¹.

Survey Design

Patients' Satisfaction Measure

A survey prospective design by self administered questionnaires to the patient population was used by a standardized and validated survey questionnaire⁷ for both in-patients and out-patients where the aspects of accessibility, communication, attitude in addition to socio-demographic variables have been outlined. As the present research was also targeting the study of both occupational and respiratory therapists in the rehabilitation services, the term physical therapist is replaced by therapist in the questionnaire. The patients' opinions in each domain were measured using 5-point Likert scale that ranges from "strongly disagree" to "strongly agree".

The patients' satisfaction questionnaire has been translated into Arabic (specific to the local Saudi dialect) by Arabic language teachers and bilingual staff members of physical therapy department at King Abdul-Aziz University (appendix). It was validated by physical and occupational therapy patients in a pre-test protocol and was re-translated from Arabic to English. Corrections were made to one question and the term secretary or receptionist was replaced by the term "therapist" as in many hospitals, the therapists commonly handle their patients' appointments by themselves without a secretary or a clerk. Questionnaires were distributed to each patient attending for therapy during one month and collected by an independent person from the departments.

Staffs' Job Satisfaction Measure

In parallel, another questionnaire was distributed to 222 therapists and assistant therapists working in the same health care facilities using the Effort-Reward Imbalance model to evaluate their job satisfaction and received a response rate of 74.9 % with 166 returned questionnaires after two weeks. The questionnaires were specifically adapted for the current research based on three sections; the first one was concerned with the socio-demographic information related to the therapists and assistants, the second section was evaluating the Effort- Reward Imbalance Ratio and over-commitment of the staff¹². A third section was a questionnaire including specific questions related to the practice of work in

rehabilitation such as the schedule and average number of patients seen on daily basis.

Statistical Analysis

The data was encoded and analyzed in a SPSS software and descriptive and correlation analysis were made using the Spearman- rho test , and a mean score of satisfaction was calculated per hospital category and compared by Kruskal Wallis test.

3. Results

Three thousand nine hundred sixty (3960) survey questionnaires were randomly distributed in ten rehabilitation services of the Jeddah area and obtained a response rate of 18.9%. Out of 725 patients, 61.9 % males responded to the survey with a mean age (\pm SD) of 34.9 ± 20.7 yrs and 70.9 % of them were attending the outpatients' rehabilitation services. Moreover, 60 % of the patients completed the questionnaires by themselves while the remaining ones had completed the survey by their close relatives.

From a global aspect in the 10 surveyed hospitals, it was revealed that the average percentages of satisfied patients with rehabilitation services were 88.5%, 75.7% and 77.4% in the educational, private and public hospitals respectively.

Table (1) shows the number and percentages of satisfied staff and their comparison by hospital category. The mean number of satisfied patients showed significant differences between groups for variables of satisfaction related to the therapists' input. While there was a higher mean percentage of satisfaction in the teaching hospitals compared to that in the other two categories regarding the therapists' ability to reassure, the difference between groups showed however no significant difference. The patients' satisfaction with the quality of information and given explanations on the treatment plan as well as the feeling of security are significantly higher in the teaching hospitals. Concerning the patients' satisfaction with the effect of the treatment (if the treatment was adapted to the problem) a significantly higher percentage is seen in the teaching hospitals. In addition, the satisfaction with the information related to the treatment plan is also higher in the non-profit hospitals compared to the profit making hospitals. As to the overall treatment satisfaction, it appears significantly different between groups and higher in the teaching hospitals compared to the non- profit hospitals.

Table (1): Percentage of satisfied patients per hospital categories

Patients Satisfaction Variables	Satisfied Patients per Hospital Category			Total Satisfied Patients N = 725	p-value	p-value within groups
	Teaching N=134	Profit Making N=250	Non Profit N=341			
Reassurance in therapy	119 90.2%	211 84.4%	277 82.0%	84.3%	.090	NS
Explanations in therapy	116 87.9%	181 73.6%	273 80.3%	79.4%	.004	$P1 \leq .001$
Information on treatment plan	106 80.3%	147 59.8%	243 71.7%	69.2%	.001	$P1 \leq .001$ $P3 \leq .003$
Feeling of security	125 93.3%	197 79.4%	268 78.6%	81.6%	.001	$P1 \leq .001$ $P2 \leq .001$
Adapted treatment to problem	124 92.5%	190 76.6%	254 75.1%	78.9%	.001	$P1 \leq .001$ $P2 \leq .001$
Overall treatment satisfaction	115 87.1%	200 80.6%	260 76.5%	79.9%	.033	$P2 \leq .001$

$P1$ = Teaching and Profit Making Hospitals $P2$ = Teaching and Non Profit Hospitals $P3$ = Profit and Non Profit Hospitals

Considering the staff job satisfaction working in the same rehabilitation services, the results identified the Effort-Reward Imbalance ratio for each therapist during the same period of time. However a Pearson analysis did not conclude into a significant correlation between staff and patients satisfaction.

4. Discussion

Patient satisfaction is increasingly used to monitor patient perceptions of the quality of health

care services^{13,14}. The findings of the current study has identified significant differences between the hospital types that the patients expressed a comparatively high level of satisfaction in the educational hospitals and a lesser degree in the private and public facilities.

Some patient's surveys were also completed by their close relative who may contribute to the obtained results of higher level of satisfaction. Our findings show that the patient's relative is commonly more

critical towards the provided services than the patient himself. In accordance, Quintana *et al.*¹⁵ found that the person who completed the questionnaire has an important effect on the results, in that a more negative satisfaction level was recorded on those surveys answered by someone other than the patient. While previous research found that younger patients are more critical about their therapy which is similar in our results^{7,15,16}.

A client centered approach based on the importance of giving attention, information and the feeling of security in treatment was high in the educational hospitals where explanations and detailed information about the treatment plan was significantly correlated to the patient satisfaction. This is confirmed by other studies^{10,17,18}. Teaching hospitals have a strong educational role in their mission to the patients, students and staff and the health care professional's expertise can be reflected by the nature and extend of the explanations given during the treatment. Additionally, as Hills *et al.*¹⁹ outlined the importance to establish the patients' needs in therapy, particularly the extent to which these might be psychosocial rather than physical. In the same line, the description of the patients' overall evaluation of their physiotherapy care in terms of satisfaction has been made in two dimensions and based not only on the clinical outcome but also related to the "Therapeutic Encounter" and interpersonal attributes of the therapist^{4,20}. This appears also for the aspects of medical care in general as Cleary already identified that more "personal" care is associated with higher levels of satisfaction²¹.

While acute cases are more numerous in the teaching hospitals, in agreement with other research we have also identified that acute cases are in general more satisfied with their treatment compared to the chronic patients¹⁹.

On the other hand, the lowest level of satisfaction presented by patients treated in the private hospitals may be related to the lack of explanations at the end of the treatment sessions regarding future planning. This could be explained by the economic mission of such hospitals reflected on an increased productivity. Therapists in private hospitals have a limited time to discuss or clarify the treatment plan to their patients as they concentrate more on the effective treatment delivery and the procedure than on explanations and patient education. In some surveyed hospitals, therapists reported that the treatment plan is discussed within the rehabilitation team or left to be explained by the referring physician. An additional factor is related to the staff expertise to give explanations and it was identified that a larger proportion of staff have a higher educational degree in the teaching hospitals compared to the public hospitals where more numerous assistants therapists are working with a diploma level certification.

In reference to the job satisfaction of the staff, it appears that the therapists' feelings and satisfaction about their work are not directly reflected on their patients and thus independent of the patients satisfaction with the rehabilitation process.

Many therapists in the survey have expressed in written open questions that the most rewarding aspect about their work is related to patients' progress and outcome improvements. The humanistic aspect of the health care profession is fundamental and motivates the therapist without projecting possible negative personal emotions in work. In the same line, one could also expect that the written policies and procedures related to health care practice maintain appropriate standards of care and make the patients receive the quality of treatment and attention independently from the level of staffs' job satisfaction. The high degree of over-commitment in the work that was also identified is an additional indication that therapists are committed about their work in all health care facilities.

Conclusion

The patients' level of satisfaction with rehabilitation services was found to vary between the different hospital types. The highest patients' satisfaction was found in the teaching hospitals, followed by the non-profit making and finally by the profit making healthcare facilities. Patients' satisfaction seemed to be related to the hospitals' mission and to the perception of the process of care and the therapists' input, such as the ability to reassure or the quality of information given. Rehabilitation staffs' job satisfaction was however not correlated with the patients' satisfaction about their treatment and the rehabilitation process.

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Appendix**إستبيان عن مدى رضا المريض عن الخدمات التأهيلية**

يختص هذا الاستبيان بالعلاج الطبيعي أو الوظيفي أو التنفسي الذي يتلقاه المريض بالمستشفى، إجاباتك سوف تساهم للنهوض بخدماتنا، لا يوجد إجابة صحيحة ولا إجابة خاطئة، كما أن الإجابات سوف يتم تحليلها بمنتهى السرية.

طبقا للجملة اختر مستوي الإجابة التي تعكس رأيك.

1 = ضعيف

2 = مقبول

3 = جي

4 = جيد جدا

5 = ممتاز

ممتاز	جيد جدا	جيد	مقبول	ضعيف		
5	4	3	2	1	1	سهولة إجراءات الدخول.
5	4	3	2	1	2	إهتمام ومساعدة السكرتارية.
5	4	3	2	1	3	سهولة الحصول على أول موعد.
5	4	3	2	1	4	قدرة الأخصائي علي طمانتك ومساعدتك.
5	4	3	2	1	5	توضيح ما سيتم عمله أثناء العلاج.
5	4	3	2	1	6	نوعية المعلومات التي حصلت عليها في نهاية العلاج كخطة مستقبلية.
5	4	3	2	1	7	مدى الإحساس بالأمان خلال فترة العلاج.
5	4	3	2	1	8	الإحساس بالأمان خلال فترة العلاج.
5	4	3	2	1	9	مدى ملاءمة العلاج لحالتك المرضية.
5	4	3	2	1	10	سهولة الوصول للوسائل المستخدمة في العلاج.
5	4	3	2	1	11	وجود علامات ارشادية للوصول لأماكن المستشفى المختلفة.
5	4	3	2	1	12	مدى ملاءمة غرفة العلاج.
5	4	3	2	1	13	هدوء وراحة مناخ غرفة العلاج.
5	4	3	2	1	14	تقييمك الشامل للعلاج
					15	هل تنصح المقربين لك بالعلاج في نفس المكان.
				1		لا بالتأكيد
				2		إحتمال لا
				3		غير متأكد
				4		احتمال نعم
				5		نعم بالتأكيد

شكرا لمساعدتكم