Satisfaction of Patients undergoing Knee Arthroscopy for Meniscal Trimming in the Out-patient Arthroscopy Clinic at Assiut University Hospital

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Abstract

Patient satisfaction is a health care recipient's reaction to salient aspects of the context, process and result of their service experience. Meniscal injuries affects 60 to 70 cases per 100,000 people, In the USA, surgical procedures for the meniscus are performed on approximately 850,000 patients each year. The aim of the present study was to assess satisfaction of patients who will undergo arthroscopic knee surgery for meniscal trimming with medical care received in the out-patient arthroscopy clinic. Subjects and methods: A convenient sample of sixty adult patients (male and female) undergoing arthroscopic knee surgery for meniscal trimming were included in this study. The study was conducted at the arthroscopic out-patient clinic at Assiut University Hospital. One tool was utilized to fulfill the aim of this study; Patient Satisfaction Questionnaire PSQ18. Results showed that patients were highly satisfied with technical quality (65.42 %, high satisfaction), followed by satisfaction with communication with the medical team (63.83 %, moderate satisfaction). While they were least satisfied with financial aspects (36.17 %, mild satisfaction). Conclusion: patients were highly satisfied with the technical quality and least satisfied with the financial aspect.

Key words: patient satisfaction, Arthroscopy, meniscal trimming.

Introduction:

Patient satisfaction was defined by Pascoe (1983) as a health care recipient's reaction to salient aspects of the context, process and result of their service experience. Determining the level of patient satisfaction has been found to be the most useful tool for getting patient's view on how to provide care. This is based on two principles; patients are the best source of information on quality and quantity of medical services provided, also patient's views determine the factors and planning and evaluating satisfaction **(Pascoe; 1983)**.

Patient satisfaction measurement has traditionally been related to service improvement by hospitals and to fulfill accreditation requirements to health plans. Some plans tie satisfaction scores to financial incentives as a portion of their calculation of payment bonus to primary care physicians with capitation contracts **(Beach, Roter, and Wang; 2006)**.

As hospitals experience a growing pressure to increase their the quality of their outcomes, enhance the safety of their patients and lower the cost of their care, analysts expect greater attention and scrutiny to be given to the accountability function of patient satisfaction scores, as well as to the ways in which patient further be integrated into an overall measure of clinical quality **(Ware, Snyder, and Wright; 1997).**

Patient satisfaction data are valuable for staff training, morale building and creative marketing. A recent institute of medicine report outlined six characteristics of quality health care which are; it is safe, equitable, evidence based, timely, efficient and patient centered. The latter three characteristics are directly influenced by patient satisfaction **(Morales, Reise, and Hays; 2000).**

Satisfaction is generally considered as the extent to which the patients feel that their needs and expectations are being met by the services provided. Patient satisfaction predicts both compliances and utilization and may even be related to improved health. Patient satisfaction can be one indicator of quality of care **(Beach et al.; 2006).**

The aim of this work was to assess satisfaction of patients who will undergo arthroscopic knee surgery for meniscal trimming with the medical care provided in the out-patient arthroscopy clinic at Assiut University hospital.

Methods:

Study design:

A descriptive cross sectional survey was used to fulfill the aim of this study. Patients with meniscal tear who attended the out-patient arthroscopy clinic were interviewed individually and the PSQ 18 questionnaire sheet was completed by the researcher herself.

Study population:

A convenience sample of 60 adult patients (male and female) who attended the out-patient arthroscopy clinic of Assiut University hospital with a diagnosis of meniscal tear were included in this study during a period of one year from September 2011 to September 2012.

Setting:

The study was conducted at the arthroscopic out-patient clinic of Assiut University Hospital.

Data collection:

- After taking an oral agreement from patients for voluntary participation in the study, the aim was explained for each patient, the short form patient satisfaction questionnaire sheet (PSQ 18) was used to collect data from the patients. The short form patient satisfaction questionnaire consisted of 18 items to be answered by the patient, the responses to each item were one of five (strongly agree, agree, uncertain, disagree, or strongly disagree).

- Some PSQ-18 items are worded so that agreement reflects satisfaction with medical care, whereas other items are worded so that agreement reflects dissatisfaction with medical care. All items should be scored so that high scores reflect satisfaction with medical care.

- After item scoring, items within the same subscale should be averaged together to create the 7 subscale scores: general satisfaction (2 items), technical quality (4 items), interpersonal manner (2 items), communication (2 items), financial aspects (2 items), time spent with doctors (2 items), and accessibility and convenience (4 items).

Limitations of the study:

- Patient satisfaction questionnaire sheet (PSQ 18) is a self administered questionnaire but as the majority of the studied group were illiterate; this scale was used in its original English language, and was directly translated and filled by the researcher in separate patient interviews.

Results:

Table 1: distribution of the studied sample according to their sociodemographic characteristics:

Item	Number (60)	Percent (100%)
Age: - 18 – 30 - 31 – 45 - 46 and more	41 13 6	68.33 21.6 10
Mean age ± standard deviation	30.15 ± 8.897	
Sex: - Male - Female	51 9	85 15
Level of education: - Illiterate - Read & write - Secondary education - High education	27 14 5 14	45 23.33 8.33 23.33
P value	0.0005	
Occupation: - Office work - Machinery work - Farmer - House wife -Sport trainer -Student -Not working	9 27 9 8 1 3 3	15 45 15 13.33 1.66 5 5
P value	0.145	

Table 2: The score of the different scales measuring patient satisfaction of patients undergoing arthroscopic knee surgery for meniscal trimming in the out-patient arthroscopy unit at Assiut University hospital:

Dimension	Number of Items	Mean ± St. Deviation	Median	% Satisfaction score
1. General Satisfaction	2	5.12 ± 1.236	5.00	51.17%
2. Technical Quality	4	13.08 ± 1.690	13.00	65.42%
3. Interpersonal Manner	2	5.45 ± 1.407	5.00	54.50%
4. Communication	2	6.38 ± 1.151	6.00	63.83%
5. Financial Aspects	2	3.62 ± 1.627	3.00	36.17%
6. Time Spent with Doctor	2	5.02 ± 1.200	4.00	50.17%
7. Accessibility	4	10.62 ± 2.538	9.00	53.08%
Total Satisfaction (PSQ)	18	49.28 ± 8.080	44.50	54.76%

Table (3): Correlation between technical quality on the patient satisfaction questionnaire (PSQ 18) and patient's occupation and educational level using the one way ANOVA test.

Dimension	Occupation		Education levels	
	F	P value	F	P value
Technical quality	**2.325**	**0.055**	**1.942**	**0.133**

Table (4): Correlation between communication domain on the patient satisfaction questionnaire (PSQ 18) and patient's educational level using the one way ANOVA test.

Dimension	Education levels	
	F	P value
Communications	**6.579**	**0.001**

Table (5): Correlation between total satisfaction scores on the patient satisfaction questionnaire (PSQ 18) and patient's age, educational level and their occupation using the one way ANOVA test

Dimension	Age Group		Education levels		Occupation	
	F	P value	F	P value	F	P value
Total Satisfaction	**1.754**	**0.182**	**6.777**	**0.001**	**6.028**	**0.0002**

Table 1: This table shows that the highest percentage of the studied sample were between the age 18 – 30 years old with a mean age of (30.15 years ± 8.897). Also there was a predominance of male (85 %), as regard level of education; the highest percentage were illiterate (45 %). Looking at the occupation; about half of the studied sample were machinery workers (30 % and 60 %) respectively.

Table 2: This table shows that patients in were highly satisfied with technical quality (65.42 %, high satisfaction), followed by satisfaction with communication with the medical team (63.83 %, moderate satisfaction). While they were least satisfied with financial aspects (36.17 %, mild satisfaction).

Table 3: This table shows that there was no statistical significant difference between technical quality and patient's occupation or patient's educational level P value (0.055 and 0.133) respectively.

Table 4: This table shows that there was a high statistical significant difference between communication and patient's educational level P value (0.001).

Table 5: This table shows that there was a high statistical significant difference between total satisfaction and patient's educational level and between total satisfaction and patient's occupation P value (0.001 and 0.0002) respectively, while there was no statistical significant difference between total satisfaction scores and patient's age P value (0.182).

Discussion:

Increasing patient satisfaction is a critical goal for health care organizations, especially in this time of increasing competition, scrutiny and demand for services. when hospital's patients reports that they are receiving an excellent service, this says a lot about clinical safety and the staff (Park JE., and Park K., (1989).

The aim of this work was to assess satisfaction of patients undergoing arthroscopic knee surgery for meniscal trimming with the medical care provided in the out-patient arthroscopy clinic at Assiut University hospital.

The quality of any health care service depends on the performance of a team of medical and non medical personnel. All of them work side by side in order to provide the best possible service for those who need help (Beach MC., Roter DL., Wang NY., Duggan PS., and Copper LA. (2006).

The present study included 60 patients, their mean age was (30.15) years. All patients participated in the study their ages ranged from (18 : 56) years. Great male predominance was observed in the studied sample (85 %). As regard the educational level, the majority of the patients were illiterate or received basic education. Regarding their occupation; about half of the studied group were machinery workers.

In a study that was conducted by Zarko Dasic and Dragan Radoicic (2011) the mean patient age was 36.6 years (range from 15 to 81 years). While Domino and Frank J. (2008) found that the predominant age for meniscal tear for both males and females was as follows; males 31–40 years and females 11–20 years.

As regard male to female ratio; the present study found that the majority of the studied sample in both the study and the control groups were male (80 % and 90 %) respectively. Out of the 60 patients enrolled in the present study there were 51 male patients and only 9 patients were female.

In accordance with this study result; a study that was carried out by Zarko Dasic and Dragan Radoicic (2011), on 213 patients in the orthopedics and Traumatology clinic (68 patients in the Clinical Center in Podgorica, Montenegro, and 145 patients in the Medical Academy in Belgrade, Serbia) in a 24-month period, from 2006 to 2008; the study revealed that meniscal tears are more common in males. There were 171 men (80.28%) and 42 women (19.72%). The male : female ratio ranges from 2.5 : 1 to 4 : 1.

In the same line with these results Kocabey , Nyland , Isbell , and Caborn (2004) in a retrospective study on meniscal repair they found that; out of the fifty-two patients who participated in this study (35 patients were males and 17 patients were females).

Regarding total satisfaction score; the present study revealed that patients enrolled in the study were moderately satisfied with services provided by the physicians in the arthroscopy out-patient clinic (with a total mean score of 49.28).

Moemen (2008); in her study on patient satisfaction among attendance of out-patient clinics of different clinical departments at Alexandria main university hospital, the study concluded that patients were borderline in overall satisfaction with medical care services provided in the out-patient clinics (with a median total satisfaction score of 2.96). which means that patients were fairly satisfied with the services provided.

The present study revealed that patients were highly satisfied with technical quality. While they were least satisfied with the financial aspects. The low score of satisfaction of patients with the financial aspects may be attributed to the limited resources and the low economic status of the studied sample.

Barker and Hall 1991; reported that the relative low satisfaction of patients with all aspects of services provided is a problem everywhere and hence there is a pressing need to optimize the use of personnel and materials and so increase efficiency.

In the same study that was conducted by Moemen M.M. (2008), the highest satisfaction score was observed in the time spent with doctors while the least was in accessibility and convenience with the services scale (with a median score of 2.5). The borderline satisfaction was observed in general satisfaction, technical quality, interpersonal manner, communication and financial scales.

Regarding patient dissatisfaction with the financial aspects in the present study although patients are admitted and treated in the free department but they were talking about the magnetic resonance imaging (MRI) cost which they have to do privately or by payment, also those patients coming from long distance they overwhelming the transportation costs.

The present study results revealed that there was no statistical significant difference between patient satisfaction with technical quality and their occupation or their satisfaction with technical quality and their educational level (P value = 0.055 and 0.133) respectively.

A significant statistical difference was observed in the present study results between patient's satisfaction with communication scale and their educational level (P value = 0.001).

Regarding total satisfaction scores in the present study there was a significant statistical difference between patient's satisfaction and patient's educational level and occupation (P value = 0.001 and 0.0002) respectively. While there was no statistical significant difference between total satisfaction scores and patient's age (P value = 0.182).

Moemen M.M. (2008) study on patient satisfaction found that the most satisfied age group was those above 60 years, the type of work significantly affected the general satisfaction scale as the study revealed that non-workers were the least satisfied group. As regard technical quality and educational level there was a significant difference, the illiterate patients were more satisfied with technical quality than others. About patient satisfaction with physician communication, the illiterate patients and those patients who just read and write experienced the lowest communication satisfaction with physicians.

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