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# Full Length Research Paper

# Patient satisfaction and expectations of the quality of service of University affiliated dermatology clinics

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Patient satisfaction is the major indicator of quality of care provided by a health facility. To determine the level of patient satisfaction with medical care at the Dermatology Clinics affiliated to Qassim University, Saudi Arabia and to identify the socio-demographic characteristics of patients that might influence the level of satisfaction. A crosssectional survey of 741 patients attending the Outpatient Dermatology Clinics affiliated to Qassim University, Saudi Arabia during the time period from January 1st to March 30th 2010. An Arabic language questionnaire was used to assess various domains of patient satisfaction. The satisfaction rate for overall quality of dermatology services was 66.1% in our patients. High levels of satisfaction were expressed about the general maintenance and hygienic conditions of the clinic. About 38% of patients indicated their dissatisfaction regarding the waiting time for appointment and about 40% were not satisfied about the information they received about their problems. About 48% felt that the consultation time was inadequate and 36.7% felt that they were not allowed to express their symptoms in detail. A significantly high level of satisfaction was associated with female gender, age below 40, single status, low education, low socioeconomic status and rural residence. We also found that patients coming on their first visits were significantly more satisfied than those on follow up visits. Majority of our patients were satisfied with overall care. However, specific questioning exposed certain areas that need to be improved such as reducing waiting period for appointments, providing more information about the disease and by ensuring that patients have the opportunity to ask questions.

**Key words:** Patient satisfaction, dermatology clinic, satisfaction score, quality of care.

# INTRODUCTION

Quality of care is a systematic approach to health services which emphasizes both technical competence as well as interpersonal dimensions of health care process. Client/patient's satisfaction is one of the main components of quality of care which includes respect for the client/patient and understanding the need of client and providing services accordingly (Staniszewska and Ahmed, 1998). Patient satisfaction is a major indicator of the quality care and quality of service can be assessed by mapping out patient satisfaction with care providers (O'Connell et al., 1999). A hospital may be well organized, ideally located and well equipped but it will fail in its responsibility to provide quality care if patient satisfaction is not of a high caliber (Turhal et al., 1999 and Nguyen et al., 1999). The objective of this study was

to determine the level of patient satisfaction with medical care at the Dermatology Clinics affiliated to Qassim University, Saudi Arabia and to identify the socio-demographic characteristics of patients that might influence the level of satisfaction. The study findings will provide knowledge about the quality improvement leading to understanding and identification of the principal drivers for patient satisfaction.

# **SUBJECTS AND METHODS**

This study is a cross sectional descriptive survey using a convenient sample of 741 patients attending the Outpatient Dermatology Clinics affiliated to Qassim University, Saudi Arabia during the time period from January 1st to March 30th 2010. An

Arabic language questionnaire was developed by the authors based on the published literature concerning patient satisfaction and it was tested in a pilot study to check its reliability and validity in our clinical settings. In addition to demographic information of participants, the questionnaire covered two main domains of dermatologic services i.e. quality of clinical settings and performance of attending physicians. Each item was scored using four-point Likert scale: very satisfied, satisfied, dissatisfied, and very dissatisfied. Summation of score was carried out for each individual to get the total satisfaction score which ranged between 14 (very satisfied) and 56 (very dissatisfied).

An informed consent was signed by all participants. Approval from the ethical committee of Qassim University was obtained. Statistical analyses were performed using SPSS-version 15. Chi square test was used for comparison between patient subgroups while Student t and ANOVA tests were used for comparison of mean satisfaction scores between groups. p-value <0.05 was considered statistically significant.

# **RESULTS**

The information regarding demographic characteristics of the study participants is provided in Table 1. Analysis of our data revealed a highly significant difference in the levels of satisfaction among males and females in almost all aspects of assessment related to general settings of the clinic as well as physician performance (p=0.0000). The satisfaction rate for overall quality of services received was 61.6% for males and 69.4% for females (Table 2). The male patients were more satisfied than females about employee's courteous behavior (74.9 vs. 68%), and organization of the clinic (100 vs. 75.9%). The female patients on the other hand were more satisfied than males about convenience of appointment (62.7 vs. 61.3%), cleanliness (100 vs. 75%) and adequacy of drugs (87.5 vs. 30.3%).

Table 3 summarizes the satisfaction levels related to performance of attending dermatologists. Female patients were found to be more satisfied than males about physician's explanation about the disease (79.7 vs. 35%), physical examination (75.6 vs. 60.9%), and time spent with the physician (69.2 vs. 29.1%). Hundred percent of the female patients agreed that their questions have been adequately answered and information provided by the physician was helpful. The males were more satisfied with the kind behavior of physician (90.4% males vs. 45.7% females), opportunity to describe their symptoms in detail (79.7% males vs. 60.5% females) and physicians seeking patient's opinion about the treatment (87.6% males vs. 59.4% females). The levels of satisfac-tion according to various demographic and socioecono-mic variables of the study patients are indicated in Table

4. The lower mean score indicates a higher level of satisfaction. The higher satisfaction levels were associated with female gender, age below 40, rural residence, lower level education and single status of the patients. The lower socioeconomic conditions were associated with significantly higher levels of satisfaction. Similarly patients attending the clinic for the first time

were more satisfied than the patients coming for follow up visits.

# DISCUSSION

In recent years patients have increasingly been considered as consumers or customers by the health care system (Kleeberg et al., 2008). It has become increasingly important for health care professionals to systematically measure patients' satisfaction with their care. Measuring patient satisfaction involves evaluating patient's perceptions and determining whether they felt that their needs were adequately met (Kleeberg et al., 2008 and Williams et al., 1998). Patients are usually not in a position to reliably judge the accuracy of a diagnosis or treatment plan, but they can judge whether they have been provided with sufficient information, and they can judge the demeanor and attitudes of their physicians. Reassuringly, these latter factors are under the direct control of medical staff, which makes it possible for patient satisfaction to be improved with appropriate efforts (Lis et al., 2009).

This study assessed the overall patient satisfaction level for dermatologic services at Qassim University. The satisfaction rate for overall quality of dermatology services was 66.1% in our patients. This level of satisfaction is comparable to the range of levels reported for this region. The overall satisfaction with health services at PHCs affiliated with Riyadh Military Hospital has been reported to be 64.2% (Al-Sakkak and Al-Nowaiser, 2008). Al Emadi et al. (2009) have reported 75.2% overall satisfaction rate in Qatar, while in a study from Egypt, the authors have claimed 98% overall satisfaction in their patients (Gadallh and Zaki, 2003). Some studies from Western countries have also claimed very high satisfaction rates. Bodle et al. have evaluated patient satisfaction with outpatient hysteroscopy in gynecology services and the overall satisfaction with their clinic was 95% in 2005 compared with 94% in 2000 (Bodle et al., 2008). Strutt et al. (2008) found that majority of patients were satisfied with treatment, the explanations they received and their perceived health outcomes. Our patients showed varying levels of satisfaction with various dimensions of care. High levels of satisfaction were expressed about the general maintenance organization of clinic. Similarly, most patients were satisfied with hygienic conditions at the clinic. About 38% of patients however indicated their dissatisfaction regarding the waiting time for appointment that may reach up to 60 days. Our results have supported other studies which report high dissatisfaction rate with the waiting time for appointments as well as with the waiting time at the clinic (Pandit and Mackenzie, 1999).

This survey identified a need for more information and explanation about the disease. This is particularly important with relation to chronic dermatologic problems.

Table 1. Demographic characteristics of surveyed subjects.

| Item                        | Number | Percent |
|-----------------------------|--------|---------|
| Age (years)                 |        |         |
| Mean                        | 34.01  |         |
| SD                          | 15.34  |         |
| Range                       | 18-27  |         |
| Gender                      |        |         |
| Males                       | 323    | 43.6    |
| Females                     | 418    | 56.4    |
| Education                   |        |         |
| Postgraduate                | 45     | 6.1     |
| Graduate                    | 364    | 49.1    |
| Undergraduate               | 332    | 44.8    |
| Marital state #             |        |         |
| Single                      | 281    | 37.9    |
| Married                     | 379    | 51.1    |
| Employment                  |        |         |
| Unemployed                  | 33     | 4.5     |
| Employed                    | 399    | 53.8    |
| Retired                     | 96     | 13.0    |
| Students                    | 213    | 28.7    |
| Socio economic standards    |        |         |
| High                        | 165    | 22.3    |
| Middle                      | 545    | 73.5    |
| Low                         | 31     | 4.2     |
| Residence                   |        |         |
| Urban area                  | 584    | 78.8    |
| Rural area                  | 157    | 21.2    |
| Visit                       |        |         |
| First                       | 253    | 34.1    |
| Follow up                   | 488    | 65.9    |
| Diagnosis                   |        |         |
| Pilosebaceous unit disorder | 231    | 31.2    |
| Dermatitis                  | 100    | 13.5    |
| Papulosquamous              | 64     | 8.6     |
| Pigmentary disorders        | 199    | 26.9    |
| Infections                  | 20     | 2.7     |
| Hair disorders              | 34     | 4.6     |
| Tumour                      | 45     | 6.1     |
| Others                      | 48     | 6.5     |

<sup>#</sup> Other forms of marital status were not mentioned as being widow, divorced or separated.

Souter et al have reported that two aspects of care which were ranked most highly in terms of importance by their patients were 'the information and explanation given' and

the 'doctor's attitude' (Souter et al., 1998). About 40% of our patients were less satisfied about the information they received about their problems. They were also critical

Table 2. Items of guestionnaire related to general settings at the Dermatology Clinic of Qassim University.

| Item                   | Very satisfied | Satisfied   | Dissatisfied | Very dissatisfied | P       |
|------------------------|----------------|-------------|--------------|-------------------|---------|
|                        | n (%)          | n (%)       | n (%)        | n (%)             |         |
| Convenience of clinic  |                |             |              |                   |         |
| appointment times      |                |             |              |                   |         |
| Males                  | 178 (55.1)     | 20 (6.2)    | 48 (14.9)    | 77 (23.8)         | 0.00**  |
| Females                | 0 (0)          | 262 (62.7)  | 108 (25.8)   | 48 (11.5)         | 0.00    |
| Satisfaction with      |                |             |              |                   |         |
| employee courtesy      |                |             |              |                   |         |
| Males                  | 97 (30.0)      | 145 (44.9)  | 48 (14.9     | 33 (10.2)         | 0.004 * |
| Females                | 124 (29.7)     | 160 (38.3)  | 52 (12.4)    | 82 (19.6)         | 0.004   |
| Organization of the    |                |             |              |                   |         |
| clinic                 |                |             |              |                   |         |
| Males                  | 0 (0)          | 323 (100.0) | 0 (0)        | 0 (0)             | 0.00**  |
| Females                | 132 (31.6)     | 185 (44.3)  | 101 (24.2)   | 0 (0)             | 0.00    |
| Cleanliness of clinic  |                |             |              |                   |         |
| facilities             |                |             |              |                   |         |
| Males                  | 0              | 244 (75.5)  | 79 (24.5)    | 0 (0)             | 0.00**  |
| Females                | 88 (21.1)      | 330 (78.9)  | 0 (0)        | 0 (0)             | 0.00    |
| Adequacy of drugs      |                |             |              |                   |         |
| supplied by the clinic |                |             |              |                   |         |
| Males                  | 0 (0)          | 98 (30.3)   | 193( 59.8)   | 32 (9.9)          | 0.00**  |
| Females                | 82 (19.6)      | 284 (67.9)  | 52 (12.4)    | 0 (0)             | 0.00    |
| Overall quality of the |                |             |              |                   |         |
| service received       |                |             |              |                   |         |
| Males                  | 0 (0)          | 199 (61.6)  | 79 (24.5)    | 45 (13.9)         | 0.00**  |
| Females                | 20 (4.8)       | 271 (64.8)  | 93 (22.2)    | 34(8.1)           | 0.00    |

<sup>\*</sup>p significant <0.05. \*\*p significant <0.001.

of the time spent with their physicians. About 48% felt that the consultation time was inadequate and 36.7% felt that they were not allowed to express their symptoms in detail. Informing patients about different aspects of their health care is an important aspect of management. Also, treating patients as co-participants in the process of decision-making have been repeatedly emphasized as an important patient's right (Sitzia and Wood, 1997). When patients are well-informed and participate in treatment decisions, their anxiety decreases and their therapeutic adherence improves, thus increasing the chances of getting better health outcomes (Stewart, 1995). Improving the physician's interpersonal skills can increase patient satisfaction, which is likely to have a positive effect on treatment adherence and health outcomes. Dermatologists succeeded better in establishing a good relationship with clinically more severely affected patients than with patients who were clinically mildly affected despite

their quality of life being impaired. Thus, the inclusion of a patient-rated quality of life can be a useful measure in dermatology, as it enables clinicians to perceive the patients' perception of their health status (Renzi et al., 2001).

Many studies have highlighted the patients' concern and perception about too little time spent by the physicians during consultations (Waghorn and McKee, 2000). In fact, the examination time could be variable corresponding to the nature of the disease, that is, it can be as short as 10 min or as long as half an hour and also spending longer time with the patient may pose a problem to treating physicians in busy clinics. Nevertheless, some studies have stressed that 'more effective and frequent use of written information is clearly indicated as having the potential to address some of the patients' information needs' (Souter et al., 1998). Improvements may be made by providing patients with

Table 3. Items of questionnaire related to performance of dermatologists in the Dermatology Clinic of Qassim University.

| Item                                      | Very satisfied n (%) | Satisfied n (%) | Dissatisfied n (%) | Very dissatisfied n (%) | Р     |
|---|----------------------|-----------------|--------------------|-------------------------|-------|
| Kindness of the dermatologist             | ` '                  | , ,             | ` ,                | . ,                     |       |
| Males                                     | 114 (35.3)           | 178 (55.1)      | 31 (9.6)           | 0 (0)                   | 0.00* |
| Females                                   | 20 (4.8)             | 171 (40.9)      | 179 (42.8)         | 48 (11.5)               | 0.00* |
| Satisfaction with the opportunities       |                      |                 |                    |                         |       |
| to describe the diseases or symptoms      |                      |                 |                    |                         |       |
| Males                                     | 79 (24.5)            | 179 (55.4)      | 0.0 (0)            | 65 (20.1)               | 0.00* |
| Females                                   | 99 (23.7)            | 112 (26.8)      | 155 (37.1)         | 52 (12.4)               | 0.00  |
| Explanation of the symptoms or            |                      |                 |                    |                         |       |
| disease in details by dermatologist       |                      |                 |                    |                         |       |
| Males                                     | 0 (0)                | 113 (35.0)      | 164 (50.8)         | 46 (14.2)               | 0.00* |
| Females                                   | 122 (29.2)           | 211 (50.5)      | 65 (15.6)          | 20 (4.8)                | 0.00  |
| Physical examination by the dermatologist |                      |                 |                    |                         |       |
| Males                                     | 78 (24.1)            | 119 (36.8)      | 126 (39.0)         | 0 (0)                   | 0.00* |
| Females                                   | 135 (32.3)           | 181 (43.3)      | 82 (19.6)          | 20 (4.8)                | 0.00  |
| The Dermatologist spends enough           |                      |                 |                    |                         |       |
| time on the consultation                  |                      |                 |                    |                         |       |
| Males                                     | 0.0 (0)              | 94 (29.1)       | 229 (70.9)         | 0 (0)                   | 0.00* |
| Females                                   | 32 (7.7)             | 257 (61.5)      | 52 (12.4)          | 77 (18.4)               | 0.00  |
| The Dermatologist allows the patient      |                      |                 |                    |                         |       |
| to give an opinion about the treatment    |                      |                 |                    |                         |       |
| Males                                     | 31 (9.6)             | 252 (78.0)      | 20(6.2)            | 20 (6.2)                | 0.00* |
| Females                                   | 45 (10.8)            | 203 (48.6)      | 170 (40.7)         | 0 (0)                   | 0.00  |
| Questions have been answered              |                      |                 |                    |                         |       |
| by the doctor                             |                      |                 |                    |                         |       |
| Males                                     | 91 (28.2)            | 119 (36.8)      | 113 (35.0)         | 0 (0)                   | 0.00* |
| Females                                   | 217 (51.9)           | 201 (48.1)      | 0 (0)              | 0 (0)                   | 0.00* |
| Information given by doctor was helpful   |                      |                 |                    |                         |       |
| Males                                     | 51 (15.8)            | 148 (45.8)      | 79 (24.5)          | 45 (13.9)               | 0.00* |
| Females                                   | 90 (21.5)            | 328 (78.5)      | 0 (0)              | 0 (0)                   | 0.00* |

<sup>\*\*</sup>p significant <0.001.

more explanation and written information particularly in relation to the causes, investigation, treatment and preventive aspects of the disease. Patients with widespread inflammatory skin disease are most severely handicapped by their skin disease and can be most helped by dermatology services. It is essential that such patients be given priority in the delivery of dermatological care. Where necessary, protected clinic time and specialist support services should be created to ensure that such patients are not adversely affected by pressures to review patients in other diagnostic groups

(Finlay, 2000).

Many satisfaction studies have tried to relate patients' demographic characteristics to the level of satisfaction. Most of satisfaction studies showed variable determinants of satisfaction, which revealed that satisfaction is multi-factorial and no one factor could be claimed to be the only contributor to satisfaction or dissatisfaction (Al-Sakkak and Al-Nowaiser, 2008; Zastowny, 1989; Baker, 1993). Weiss found that patient background characteristics are among the most difficult to relate to the level of satisfaction (Weiss, 1988). Our results, nonetheless,

**Table 4.** The comparison of mean satisfaction score according to socio-demographic variables of patients.

| Items                   | Number — | Total satisfac | tion score | D.#     |
|-------------------------|----------|----------------|------------|---------|
|                         |          | Mean           | SD         | Р#      |
| Gender                  |          |                |            |         |
| Males                   | 323      | 31.76          | 2.68       | 0.00 ** |
| Females                 | 418      | 29.59          | 2.20       | 0.00 ** |
| Age                     |          |                |            |         |
| -40 years               | 511      | 29.96          | 2.10       | 0.00**  |
| >40 years               | 230      | 31.82          | 3.22       | 0.00**  |
| Residence               |          |                |            |         |
| Urban                   | 584      | 30.62          | 2.80       | 0.044*  |
| Rural                   | 157      | 30.23          | 1.95       | 0.044*  |
| Marital status          |          |                |            |         |
| Single                  | 281      | 29.26          | 1.78       | 0.00**  |
| Married                 | 379      | 30.79          | 2.75       | 0.00**  |
| Education               |          |                |            |         |
| Postgraduate            | 45       | 36.00          | .00        |         |
| Graduate                | 364      | 30.34          | 2.38       | 0.00**  |
| Undergraduate           | 332      | 30.02          | 2.25       |         |
| Employment              |          |                |            |         |
| Employed                | 399      | 30.70          | 2.71       |         |
| Non employed            | 33       | 35.0           | .00        | 0.00**  |
| Retired                 | 96       | 31.0           | 2.01       | 0.00    |
| Students                | 213      | 29.34          | 2.035      |         |
| Socio-economic standard |          |                |            |         |
| High                    | 165      | 30.86          | 3.37       |         |
| Moderate                | 545      | 30.59          | 2.39       | 0.00**  |
| Low                     | 31       | 28.00          | .00        |         |
| Visit                   |          |                |            |         |
| First                   | 253      | 29.50          | .64        | 0.00**  |
| Follow up               | 488      | 31.08          | 3.09       | 0.00    |

<sup>\*\*</sup>p significant <0.001.

have shown that a significantly high level of satisfaction was associated with female gender, age below 40, single status, low education, low socioeconomic status and rural residence. We also found that patients coming on their first visits were significantly more satisfied than those on follow up visits. These findings are inconsistent with the results of other studies. Al-Sakaar (Al-Sakkak and Al-Nowaiser, 2008), Abdul-Kareem, (Abdul Kareem et al., 1996), and Al-Eisa (Al-Eisa and Al-Mutar, 2005) found that males were significantly more satisfied than females. Al-Dawood identified sex of the respondent as the most influential factor on the level of satisfaction, the males

being most satisfied (Al-Dawood and Elzubier, 1996). Similarly Nguyen et al have reported that older people tend to be more satisfied with care than do younger people (Nguyen et al., 2002). The studies have provided contradictory findings in relation to the education status.

Educational level has a positive and sometimes negative effect on satisfaction (Al Emadi et al., 2009 and Weiss, 1988). In general, less educated people tend to be more satisfied, as they are less demanding (Babic-Banaszak et al., 2001), while highly educated people may be more critical (Al-Faris et al., 1996). These contradictory results provided by different studies indicate

that patient satisfaction is a complex phenomenon. Margolis et al. concluded that overall satisfaction was not statistically significantly related to any of the measured demographic characteristics (Margolis et al., 2003). Sitzia reported that socio-demographic characteristics were at best a minor predictor of patient satisfaction (Sitzia and Wood, 1997). Findings from a study suggest that the most important determinants of patient satisfaction appear to be physical comfort, emotional support, and respect for patient preferences (Jenkinson et al., 2002). It should, therefore, be emphasized that irrespective of demographic status, health care systems should attempt to achieve a balance in services that offer not only clinically effective care, but are also perceived by the patients as acceptable and beneficial (Fitzpatrick, 1997). This sort of studies confirms that patient satisfaction analysis is a useful instrument also among dematological inpatients, and satisfaction is a valid measure of quality of health care (Tabolli et al., 2003).

One of the limitations of the present study is that because a vast majority of our patients expressed satisfaction with care, even a sample of 741 patients is relatively not large enough to detect any significant association between demographic characteristics and patients' overall satisfaction. Therefore, in quantitative studies of patient satisfaction a large sample size is required and this fact should be taken into consideration for future studies on the topic. In conclusion, majority of our patients were satisfied with overall care. However, specific questioning exposed certain areas that need to be improved. Improvements may be made by reducing waiting period for appointments, providing more information about the disease and by ensuring that patients have the opportunity to ask questions.

#### **REFERENCES**

- Abdul Kareem A, Aday LA, Walker GM Jr (1996). Patient satisfaction in government health facilities in the state of Qatar. J. Commun. Health, 21: 349-358.
- Al Emadi N, Falamarzi S, Al-Kuwari GM, Al-Ansari A (2009). Patients' satisfaction with primary health care services in Qatar. Middle East J. Fam. Med., 7(9): 4-9.
- Al-Dawood KM, Elzubier AG (1996). Patients' expectations and satisfaction in a teaching hospital outpatient clinic, Al Khubar, Saudi Arabia. Saudi. Med. J., 17: 245-250.
- Al-Eisa, Al-Mutar (2005). Patients' satisfaction with primary health care services at capital health region, Kuwait. Middle East. J. Fam. Med., 3(2): 10-16.
- Al-Faris EA, Khoja TA, Falouda M, Saeed AA (1996). Patients' satisfaction with accessibility and services offered in Riyadh health centres. Saudi. Med. J., 17(1): 11-17.
- Al-Sakkak MR, Al-Nowaiser NA (2008). Patient satisfaction with primary health care services offered in Riyadh health centres. Saudi. Med. J., 29(3): 432-436.
- Babić-Banaszak A, Kovacić L, Mastilica M, Babić S, Ivanković D, Budak A (2001). The Croatian health survey--patient's satisfaction with medical service in primary health care in Croatia. Coll. Antropol., 25(2): 449-458.
- Baker R (1993). Use of psychometrics to develop a measure of patient satisfaction for general practice. In Fitzpatrick R, Hopkins A (eds.). Measurement of Patients' Satisfaction with Their Care. London: Royal

- College of Physicians of London, pp. 57-75.
- Bodle JF, Duffy SRG, Binney DM (2008). Patient satisfaction with outpatient hysteroscopy performed by nurse hysteroscopists. Int. J. Gynecol. Obstet., 103: 116-120.
- Finlay AY (2000). Dowling Oration 2000. Dermatology patients: what do they really need, Clin. Exp. Dermatol., 25(5): 444-450.
- Fitzpatrick R (1997). The assessment of patient satisfaction. In: Assessment and Evaluation of Health and Medical Care in Jenkinson C (ed.). Open University Press, Buckingham, pp. 85-101.
- Gadallh M, Zaki B (2003). Patient satisfaction with primary health care services in two districts in lower and Upper Egypt. Eastern Mediterr Health J., 9(3): 422-430.
- Jenkinson C, Coulter A, Bruster S, Richards N, Chandola T (2002). Patients' experiences and satisfaction with health care: Results of a questionnaire study of specific aspects of care. Qual. Saf. Health Care., 11: 335–339.
- Kleeberg UR, Feyer P, Gunther W, Behrens M (2008). Patient satisfaction in outpatient cancer care: a prospective survey using The PASQOC(R) questionnaire. Support. Care. Cancer, 16: 947–954.
- Lis CG, Rodeghier M, Grutsch JF, Gupta D (2009). Distribution and determinants of patient satisfaction in oncology with a focus on health related quality of life. BMC Health. Serv. Res., 9: 190.
- Margolis SA, Al.Marzouqi S, Revel T, Reed RL (2003). Patient satisfaction with primary health care services in the United Arab Emirates. Int. J. Qual. Health Care, 15: 241-249.
- Nguyen Thi PL, Briancon S, Empereur F, Guillemain F (2002). Factors determining inpatient satisfaction with care. Soc. Sci. Med., 54: 493-504.
- O'Connell B, Young J, Twigg D (1999). Patient satisfaction with nursing care: a measurement conundrum. Int. J. Nurs. Pract., 5: 72-77.
- Pandit MJ, Mackenzie IZ (1999). Patient satisfaction in gynaecological outpatient clinic attendances. J. Obstet. Gynaecol., 19(5): 511-515.
- Renzi C, Abeni D, Picardi A, Agostini E, Melchi CF, Pasquini P, Puddu P, Braga M. (2001). Factors associated with patient satisfaction with care among dermatological outpatients. Br. J. Dermatol., 145(4): 617-623.
- Sitzia J, Wood N (1997). Patient satisfaction: a review of issues and concepts. Soc. Sci. Med., 45: 1829-18243.
- Souter VL, G.Penney, Hopton JL, Templeton AA (1998). Patient satisfaction with the management of infertility. Hum. Reprod., 13(7): 1831-1836.
- Staniszewska S, Ahmed L (1998). Patient expectation and satisfaction with health care. Nurs. Stand., 12: 34-38.
- Stewart MA (1995). Effective physician-patient communication and health outcomes: a review. Can. Med. Assoc. J., 152: 1423-1433.
- Strutt R, Shaw Q, Leach J (2008). Patients' perceptions and satisfaction with treatment in a UK osteopathic training clinic. Man. Ther., 13(5): 456-467.
- Tabolli S, Molino N, Renzi C, Abeni D, Picardi A, Puddu P (2003).
  Satisfaction with health care among dermatological inpatients. Eur.
  J. Dermatol., 13(2): 177-182.
- Turhal NS, Efe B, Gumus M, Aliustaoglu M, Karamanoglu A, Senoz M (2002). Patient satisfaction in the outpatients' Chemotherapy unit of Marmara University, Istanbul, Turkey: a staff survey. BMC Cancer., 2: 30.
- Waghorn A, McKee M (2000). Understanding patients' views of a surgical outpatient clinic. J. Eval. Clin. Pract., 6(3): 273-279.
- Weiss GL (1988). Patient satisfaction with primary medical care. Evaluation of sociodemographic and predispositional factors. Med. Care., 26: 383-392.
- Williams B, Coyle J, Healy D (1998). The meaning of patient satisfaction: an explanation of high reported levels. Soc. Sci. Med., 47: 1351-1359.
- Zastowny TR, Roghmann KJ, Cafferata GL (1989). Patient satisfaction and the use of health services: exploration in causality. Med. Care, 27: 705-723.