Effects of Waiting on Patient Mood and Satisfaction

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Waiting for long periods in the physician's office is a frequent complaint of patients,[1] a major reason for subsequent failed appointments,[2,3] and a reason patients do not comply with physicians' orders.[4] This study addressed three questions about patient waiting. First, is waiting related to negative mood state of patients? Second, is waiting associated with patient dissatisfaction with the clinic? Third, to whom do patients express their dissatisfaction about waiting? With the exception of patient satisfaction, these questions have not been previously addressed. Regarding satisfaction, past research has failed to find a relationship between waiting and general satisfaction with medical care.[1] This finding is not surprising, if one assumes that patients want to believe they are receiving the best care and may report they are satisfied even if treatment is unsuccessful.[5]

METHODS

The 87 subjects were patients at a low- to middle-income family practice clinic in Salt Lake City, Utah. Potential subjects were the English-speaking patients who had at least an eighth grade education, were over 18 years of age, and had a scheduled appointment; 98 percent participated.

The mean subject age was 34 years, 81 percent were female, and the mean education level was 12 years. A majority (74 percent) described themselves as white, with the second most-represented group being Hispanic (11 percent). The subjects were representative of the adult clinic population in terms of sex and age, but not in terms of race or ethnic background. Sixty-one percent of the clinic population is white, and a number of non–English-speaking Hispanic and Oriental patients were not eligible to participate in the study.

The Multiple Affect Adjective Checklist (MAACL) was used to assess depressed, hostile, and anxious mood states.[6] To complete the "today form," an individual takes less than five minutes to check which of the 132 positive and negative adjectives describe how he or she feels at the moment. The number of negative adjectives checked on each subscale were counted.

Subjects also completed a clinic satisfaction questionnaire. Using a five-point scale, subjects rated the acceptability of ten aspects of the clinic (Table 1). The total score on the ten items was taken as a measure of patient satisfaction. The satisfaction questionnaire demonstrated acceptable internal consistency (Cronbach's alpha = .83). In addition to the ten items, the acceptability of waiting time was also measured on a five-point Likert-type scale.

Waiting time began from the time of the scheduled appointment. The end of the waiting time occurred when the subject left the reception area to enter the examination room. After a patient's vital signs had been taken, an investigator entered the examination room to interview the patient. The interview lasted about eight minutes and was completed prior to the physician's visit. Patients generally waited less than five minutes for the physician after the data were collected.

RESULTS*

Patients waited an average of 17.5 minutes. Waiting time was positively related to the number of hostile adjectives checked ($r = .23$, $P = .03$), but not to the number of depressed ($r = .10$, $P = .34$) or anxious ($r = .07$, $P < .80$) adjectives checked. The results failed to support an association between longer waiting time and lower satisfaction scores ($r = -.10$, $P = .37$). Multiple regression analysis with backward elimination also failed to support a relationship between waiting and overall satisfaction ($F < 1$).

There was evidence that increased satisfaction is related to the acceptability of waiting time ($r = .57$, $P < .01$). Regression analysis was performed to determine which

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* *To use parametric statistics, appropriate transformations were calculated for nonnormally distributed variables.*

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TABLE 1. ITEMS SIGNIFICANTLY RELATED TO PATIENT SATISFACTION WHILE WAITING FOR PHYSICIAN APPOINTMENT IN FAMILY PRACTICE CLINIC

1. Friendliness of receptionist
2. Adequacy of reading material
3. Acceptability of reception room
4. Comfort of room temperature
5. Attractiveness of reception room
6. Professionalism of clinic staff
7. Friendliness of nurse
8. Cleanliness of reception area
9. Efficiency of clinic operation
10. Pleasantness of examination room

satisfaction items accounted for the variation in patients' acceptability ratings. The overall equation was significant ($F = 5.34$, $P < .001$). Seven items were eliminated as not making a significant contribution to prediction, leaving clinic efficiency ($t = 2.92$, $P = .005$), cleanliness of the reception area ($t = 3.08$, $P = .003$), and staff professionalism ($t = 1.79$, $P = .078$) as the best predictors of the acceptability of waiting time ($R = .62$, $R^2 = .39$) (Table 1). Results were essentially the same when waiting time was calculated from the time patients actually arrived at the clinic. On the average, patients entered the reception area 8.7 minutes before their scheduled appointment.

Among the 53 percent of patients who acknowledged experiencing problems with waiting (47 percent stated their waiting time had always been acceptable), the most common response was that they wanted to say something but rarely did (47 percent). Those who did comment were most likely to talk to friends and relatives (41 percent) or to the receptionist (33 percent), and least likely to talk to a nurse (2 percent) or to a physician (2 percent).

COMMENT

Further research would be helpful to determine ways to reduce patient hostility as well as ways to shorten waiting time. Hostility might be reduced in several ways: the receptionist could inform patients of how long they might have to wait; the physician could acknowledge and apologize for extended waiting times. The effect of encouraging patients to ask about their waiting time could be examined when patients have to wait longer than expected. Finally, if it appears that a patient might have to wait a considerable time, the patient could be called and given the opportunity to reschedule the appointment.

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