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# ASSESSING PATIENT SATISFACTION WITH HEALTH CARE: DID YOU DROP SOMEBODY?

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Abstract — This study has three objectives: (a) to compare socio-demographic characteristics of dropouts and completers of a health promotion program, (b) to assess each group's satisfaction with specific aspects of the program, and (c) to investigate the reasons for dropout. Data were collected by means of individual structured interviews with 19 dropouts and 20 completers randomly selected. Results show that the two groups do not differ on socio-demographic variables. Completers were significantly more satisfied than dropouts with only a few aspects of care. Investigating dropouts' motives added key information. We conclude that useful measurement of patient satisfaction should focus on specific aspects of care and on survey dropouts as well as completers, and should assess dropouts' motives.

Résumé — Cette étude poursuit trois objectifs: (a) comparer les décrocheurs et les assidus à un programme de promotion de la santé d'un point de vue socio-démographique, (b) mesurer la satisfaction des deux groupes sur différents aspects du programme, et (c) examiner les motifs d'abandon des décrocheurs. Des entrevues individuelles structurées ont été menées auprès de 19 décrocheurs et 20 assidus choisis au hasard. Les résultats montrent que le profil socio-démographique des deux groupes ne diffère pas. Les assidus sont significativement plus satisfaits que les décrocheurs pour seulement quelques aspects du programme. L'examen des motifs d'abandon ajoute une information essentielle. Pour être utiles, les enquêtes de satisfaction devraient examiner les aspects précis des soins, documenter l'opinion des décrocheurs autant que celle des assidus, et recueillir les raisons de décrochage.

PATIENT SATISFACTION IS INCREASINGLY recognized as an important dimension in health care, either as an outcome per se or as a determinant of health behavior (Donabedian, 1966; Hall, Feldstein, Fretwell, Rowe, & Epstein, 1990; Pascoe, 1983; Ware & Davies, 1983;

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Ware, Davies-Avery, & Stewart, 1978). However, there are many problems associated with satisfaction measures (Larsen, Attkisson, Hargreaves, & Nguyen, 1979; Lebow, 1983; Nguyen, Attkisson, & Stegner, 1983). One of these problems is the use of global scores, which do not provide specific information. Assessing satisfaction with various aspects of care would be much more informative and would also reflect the multidimensionality of that concept, that is, that patients may develop distinct attitudes toward each aspect of care (Hall & Doman, 1988; Ware, Snyder, Wright, & Davies, 1983).

But the most important problem, which is germane to the first one, is probably the negative skewness of satisfaction scores. Studies in health care and mental health care consistently report high and undifferentiated levels of satisfaction, regardless of the method employed, the population surveyed, or the object of rating (Hall et al., 1990; Lebow, 1983; Linn, 1975; Nguyen et al., 1983; Ware et al., 1978). Such favorable satisfaction scores may be rewarding for program staff, but they are of limited use in indicating where improvements are needed (Tanner, 1982).

Some researchers have attempted to correct this bias by metrologic means: for example, by forcing the ranking of different aspects of services by clients (Pascoe & Attkisson, 1983) or by increasing the number of points at the positive end of the satisfaction scale (Ware & Davies, 1983). Despite their merits, these solutions do not address a major cause of the problem: selection bias of respondents. When care extends over time, dissatisfied patients are more likely to drop out (Larsen et al., 1979). Since satisfaction is typically assessed at the end of a service episode or program, those who are reached are completers (i.e., satisfied patients) and usually not dropouts.

Although the dropout rate is rather high in health care in general, and despite the fact that the literature on dropping out is voluminous (see Baekeland & Lundwall, 1975; Fielding, 1986; Pekarik, 1985), the literature on client/patient satisfaction has given relatively little attention to the dropout issue. We contend that excluding dropouts from the assessment of patient satisfaction can result in a significant loss of information.

### **PURPOSE OF STUDY**

The purpose of this study is threefold: (a) to compare sociodemographic characteristics of dropouts and completers of a health promotion program, (b) to assess the satisfaction of dropouts and completers with specific aspects of this program, and (c) to investigate the reasons for dropout and examine whether these add information to satisfaction assessment. Because prior research suggests that late dropouts are generally similar to completers (Fiester, Mahrer, Giambra, & Ormiston, 1975; Pekarik, Blodgett, Evans, & Wierzbicki 1984) and that many of them are considered to be "successes" by program staff (Pekarik, 1983), this study focuses on early dropouts versus completers.

#### **METHOD**

The study was performed in a Montreal community service center that is a public clinic providing medical and social services to local residents. The program consisted of a series of six to eight 2-hour sessions in which small groups of participants were taught either relaxation or good nutrition techniques by health professionals (e.g., physician, nutritionist, psychologist). Group size varied between 8 and 15 persons. Dropout rate in the two years preceding the study was high: 18% to 21% of participants dropped out of the program after the first session and 48% to 60% before the end. Faced with this problem, program staff and managers wanted to assess patient satisfaction and determine the reasons for the high dropout rate, and, if possible, to identify what could be done about that dropout rate.

The study took the form of a survey. In the two previous quarters, 35 participants left the program after the first session, and 51 participants completed the program. Using simple random sampling, we selected 19 dropouts and 20 completers from these two groups. (The original study design included 20 persons in each group. Because of time and logistic constraints, it was not possible to survey a 20th dropout.) Selected respondents were first contacted by phone to request their participation and set an appointment. When a person refused to participate in the study (only three did so) or could not be reached (e.g., wrong number, moved), another person was randomly selected from the relevant list.

Individual structured interviews were conducted at respondents' homes within six months of program termination. Face-to-face

interview was chosen over telephone interview or mailed questionnaire, because of its higher response rate, especially with dropouts (Nguyen et al., 1983). To reduce the risk of socially desirable (as opposed to authentic) responses, interviews were performed by persons other than program staff (two graduate and two undergraduate psychology students, and one social research technician) and confidentiality was guaranteed.

Because the data collection needs of this study could not be satisfied by any instrument (i.e., french instrument, assessment of various dimensions of a health promotion program, eliciting of reasons for dropping out), we developed two specific questionnaires: one for completers and one for dropouts. Questionnaires included closed and open questions covering different aspects of a health program as suggested in the literature (Larsen et al., 1979; Ware et al., 1983): physical environment, program/session content, procedures, program staff, quantity and accessibility of services, group atmosphere, impact, and program as a whole.

Both groups were asked how satisfied they were with 33 items, regarding those aspects on a scale from 1 to 6 (1 = very dissatisfied, 2 = rather dissatisfied, 3 = neither dissatisfied nor satisfied, 4 = rather satisfied, 5 = very satisfied, 6 = extremely satisfied). In addition, dropouts had to indicate whether each of those aspects contributed to their decision to leave the program. Both groups were also asked "background" questions: for instance, why they registered in the program, and past experiences with similar programs, including satisfaction and dropping out. Finally, information on five socio-demographic variables was obtained from the clinic's records: age, sex, occupation, education, and source of referral.

Questionnaire format and content were pre-tested for relevance and clarity with program staff and five ex-participants. The final version of the two questionnaires contained 73 items for completers and 86 items for dropouts.

# **RESULTS**

Socio-demographic characteristics of sampled subjects are presented in Table 1. Dropouts were slightly younger than completers (32.2 years vs. 38.4 years), but the t-test was not significant at p < 0.05. There was no difference, using chi-square test, between dropouts and completers on the other variables: most respondents were women, were

either employed or homekeepers, and had 10 or more years of education; and almost all were self-referred to the program.

Table 1 Sample Characteristics

	Dropouts	Completers
Characteristics	(N=19)	(N=20)
Age		
Mean	32.2	38.4
Standard deviation	10.6	10.0
Gender		
Female	74%	80%
Male	26%	20%
Occupation		
Employed	32%	40%
Unemployed	26%	5%
Homekeeper	32%	55%
Student	10%	0%
Education (years)		
16	12%	0%
7–9	13%	35%
1012	25%	25%
13+	50%	40%
Source of referral		
Self (through local newspaper)	85%	80%
Friends, family	5%	10%
Health professionals	5%	10%
Others	5%	0%

Nor did the two groups differ in their "background" regarding the program (results not shown). They had similar goals when they joined the program and similar reasons for choosing this activity at this clinic. About 50% of respondents in both groups had previously participated in a similar program; about 50% had dropped out one or more times, and their degree of satisfaction with past programs was moderate.

Satisfaction of both completers and dropouts was assessed with 33 individual items. Although completers were more satisfied than dropouts on all items, the two groups are significantly different on only four items (t-test, p < 0.05). Instead of presenting a long list of nonsignificant results, we have selected 10 items (see Table 2) that we consider most relevant for several reasons. First, Items 1 to 6, 9, and 10 assess satisfaction with the eight general program aspects (e.g., Item 1 measures satisfaction with physical setting in general; items dealing with specific dimensions of physical setting are not presented). Second, Items 1 to 7 and 9 can be compared to corresponding reasons given by dropouts. Third, the four items for which completers and dropouts have significantly different scores have also been retained.

Table 2
Means and Standard Deviations of Satisfaction Scores
of Program Dropouts and Completers on Selected Items

		Dropouts		Completers	
		( <i>N</i> =19)		(N=2)	20)
Ite	ns	Mean	SD	Mean	SD
1.	Physical setting	3.79	0.86	4.20	.41
2.	Session content	3.89	0.91	4.35	.67
3.	Procedures	3.84	1.21	4.45	.69
4.	Amount and accessibility				
	of service	4.37	0.60	4.60	.60
5.	Program staff	4.84	0.50	5.15	.67
6.	Group	3.53	0.84	4.50	.69*
7.	Applicability of techniques	2.79	0.79	3.20	.69
8.	Usefulness of group				
	discussions	3.47	0.77	4.50	.51**
9.	Outcome of service	2.68	0.67	4.40	.60**
10.	General satisfaction	2.58	0.84	4.95	.39**

<sup>\*</sup> t-test significant at p < .001.

Completers' satisfaction with the program was relatively high, most scores being between 4 and 5 (i.e., *rather satisfied* and *very satisfied*). The highest scores were reported on program staff and general satisfaction. Satisfaction was lowest with day-to-day applicability of techniques taught.

<sup>\*\*</sup> t-test significant at p < .0001.

Satisfaction among dropouts was low to moderate, but variability between item scores was important. Dropouts were very satisfied with treatment staff and, to a lesser extent, with amount and accessibility of services. On the contrary, they were rather dissatisfied with the program in general, the program outcome, and, like completers, with the applicability of techniques taught. On other program aspects, their assessment varied between 3 and 4 (i.e., neither satisfied nor dissatisfied and rather satisfied).

Compared with dropouts, completers were significantly more satisfied with the program as a whole (general satisfaction), the group of participants, the usefulness of group discussions, and program outcome. Completers were also more satisfied with other aspects of care, but t-tests were not significant at p < .05. Finally, with two exceptions (Items 4 and 5), the variability of scores, as indicated by standard deviations, was greater for dropouts than for completers.

Reasons given by dropouts for leaving the program after the first session are shown in Table 3. The first 15 items were proposed to respondents, whereas open questions were used for Items 16 and 17. For each reason, we computed the proportion of dropouts who indicated that this item contributed to some extent to their decision to terminate their participation in the program. Reasons are not mutually exclusive, and most respondents mentioned more than one reason. Nonrespondents on any item were rare.

Reasons for dropout have been grouped into four categories: (a) reasons regarding program process and (b) program outcome, (c) preference for alternative programs for different reasons, and (d) various reasons unrelated to the program (e.g., moving, sickness, change of job schedule).

As shown in Table 3, no single item stands out as the "main" reason for dropping out. Instead, nine items were mentioned by 42% to 58% of respondents, with the occurrence of the other eight items varying between 5% and 26%. With the exception of "program staff" and "amount and accessibility of services," all program process aspects are frequent reasons for dropping out. Reasons related to the lack of positive outcome (Items 8, 9, 12) were mentioned by 42% to 53% of respondents. Dropping out for fear of non-lasting impact or negative impact was much less common. On the other hand, very few persons left the program to enroll in another program that they found preferable. More than

half of dropouts (58%) said they had external reasons that prevented them from attending the program after the first session. An interesting piece of information that is not given in Table 3 is that only 11% of dropouts (two persons) said they left the program solely because of reasons not related to the program, that is, for external reasons. In other words, almost all dropouts found something "unsuitable" for them in the program.

Table 3
Reasons Given by Dropouts (N=19) for Leaving the Program After the First Session\*

	Yes	No	No answer
Reasons	%	%	%
Regarding program process			
<ol> <li>Physical setting</li> </ol>	42	58	_
2. Session content	47	47	5
3. Procedures	53	37	11
4. Amount and accessibility			
of service	11	90	-
<ol><li>Program staff</li></ol>	16	84	-
6. Group	42	58	-
7. Applicability of techniques	42	53	5
Regarding program outcome			
8. First session useless	47	53	-
9. Expects program to be			
useless	53	47	-
<ol><li>Expects no lasting impact</li></ol>	26	74	-
<ol><li>Expects negative impact</li></ol>	21	79	-
<ol><li>Expects program will not</li></ol>			
meet his/her needs	42	53	5
Prefers alternative program			
13. Better schedule	5	95	-
14. Better location	11	90	-
15. More useful	11	90	-
<ol><li>Other advantages</li></ol>	5	95	-
External reasons			
17. Different reasons unrelated			
to the program (e.g., moving	5,		
sickness, change of job)	58	42	-

<sup>\*</sup> Because of rounding, percentages in each row may not total 100%.

Results in Table 3 generally cohere with those in Table 2. Among the reasons given by dropouts concerning program process, the two items that were less frequently mentioned ("amount and accessibility of service" and "program staff") received the highest satisfaction rankings from dropouts. Conversely, the other five aspects of program process were more frequent causes of attrition and were less satisfying. The importance of reasons regarding program outcome is consistent with low satisfaction with outcome of service (Item 9 in Table 2).

## DISCUSSION

The study results reveal that dropouts and completers of a health care program do not differ in socio-demographic characteristics. This finding is consistent with previous research in health care and mental health care (e.g., Fiester et al., 1974; Pekarik et al., 1984; Sabourin, Gendreau, & Frenette, 1987; Zisook, Hammond, Jaffe, & Gammon, 1979), although some studies have found a relationship between certain characteristics and patient attrition (e.g., Baekeland & Lundwall, 1975; Keil & Esters, 1982). One way of reconciling those apparently contradictory findings is to say that there are no typical dropouts across the whole range of health services, and that much depends on the specific context of care.

Results indicating high satisfaction for program completers and lower satisfaction for dropouts are consistent with those of the satisfaction literature in general (Hall et al., 1990; Lebow, 1983; Linn, 1975; Nguyen et al., 1983). But it is important to note that within each group there is non-negligible variation between items and, as a corollary, that not all items receive a very high score. It follows that measuring satisfaction with specific program dimensions may help reduce the problem of negative skewness often reported. As well, assessing satisfaction in this way may be much more informative than using a single global score. Also, lower satisfaction among dropouts suggests that if all persons leaving a program at one point or another as well as completers were surveyed in satisfaction studies, scores would probably be less negatively skewed.

Only four satisfaction items showed significant differences between groups. Several reasons, besides small sample size, would account for this finding.

First, although interviewers were not program staff and confidentiality was guaranteed, it is possible that dropouts in particular felt some pressure to answer in a socially desirable way. Mailed questionnaires might have reduced this problem, but probably would also have brought a much lower response rate.

Second, relatively large variability of scores among dropouts has obviously limited the potential of finding significant differences. This could mean that dropouts, even an apparently homogeneous group such as those who left after only one session, constitute a heterogeneous group. Further support for this interpretation comes from reasons for dropping out, which are numerous and varied.

Third, nonsignificant differences between dropouts and completers may only reflect reality: there are aspects of care with which both groups could be satisfied and there are other aspects about which their opinions differ. This is certainly true at least for some dimensions of care, like "amount and accessibility of services" and "program staff," which received high satisfaction score from both groups and which were not important reasons why dropouts left the program. Moreover, those persons who dropped out solely or mainly because of reasons not related to the program may have been quite satisfied with the services they received during the only session they attended.

Our results show that investigating dropouts' reasons for leaving the program provides important information that would not otherwise have been available. Although satisfaction with some program dimensions is lower among dropouts, the lack of significant difference between dropouts and completers limits the meaningfulness of satisfaction scores. Documenting reasons for attrition points more clearly to the aspects of care that have had greater influence in the dropouts' decisions. It also indicates which program dimensions should receive particular attention from program planners and staff in order to reduce the dropout rate. Moreover, measuring only satisfaction says nothing about external reasons that could have contributed to a decision to drop out.

Previous research findings have demonstrated that satisfaction with health care in general predicts subsequent behavior such as changing medical care provider and disenrollment from prepaid health plans (Ware & Davies, 1983). Our study, which focuses on specific aspects of health care services, suggests that satisfaction and the decision to leave

a program may be two independent although related psychological constructs. For example, reasons 1, 6, and 7 (see Table 3) are all frequently mentioned by dropouts (42%), although satisfaction scores on these program dimensions tend to differ importantly (3.8, 3.5, 2.8). Similarly, satisfaction with session content and procedures is higher than satisfaction with applicability of techniques, even though these two program aspects contribute more often to the decision to quit (47% and 53% respectively vs. 42% for "applicability of techniques").

The assessment of dropouts' motive also yields information about alternative programs sought. Our data show that people do not generally leave the program to join one elsewhere. This could be an area for concern if it meant that persons in need stop looking for care. Our limited data, however, do not allow us to draw this conclusion.

### CONCLUSION

This study suggests that if the assessment of patient satisfaction is to be less biased and more useful to health care planning and evaluation, at least two improvements to current practice should be made: (a) assess satisfaction with specific aspects of care and not just general satisfaction, and (b) survey dropout satisfaction.

Dropping out is not associated with typical socio-demographic patient characteristics, but a significant part of the responsibility rests with health care services themselves (Keil & Esters, 1982). Thus the investigation of reasons for dropout, regarding specific dimensions of care and external reasons, should be given a high priority in measuring satisfaction. This is particularly important when dropout rate is high. Efforts should be made to develop data collection methods that ensure high response rate and low social desirability bias.

This study should be repeated with a larger sample size and various types of care to increase the generalizability of its findings.

# REFERENCES

Baekeland, F., & Lundwall, L. (1975). Dropping out of treatment: a critical review. *Psychological Bulletin*, 82, 738–783.

Donabedian, A. (1966). Evaluating the quality of medical care. *Milbank Memorial Fund Quarterly*, 44, 166–203.

- Fielding, J.E. (1986). Evaluations, results, and problems of worksite health promotion programs. In M.F. Cataldo & T.J. Coates (Eds.), *Health and industry: A behavioral medicine perspective* (pp. 373–396). New York: Wiley.
- Fiester, A.R., Mahrer, A.R., Giambra, L.M., & Ormiston, D.W. (1974). Shaping a clinic population: The dropout problem reconsidered. *Community Mental Health Journal*, 10, 173–179.
- Hall, J.A., & Dornan, M.C. (1988). What patients like about their medical care and how often they are asked: A meta-analysis of the satisfaction literature. *Social Science and Medicine*, 27, 935–939.
- Hall, J.A., Feldstein, M., Fretwell, M.D., Rowe, J.W., & Epstein, A.M. (1990). Older patients' health status and satisfaction with medical care in an HMO population. *Medical Care*, 28, 261–270.
- Keil, T.J., & Esters, R.A. (1982). Treatment dropouts: The effect of client and ecological variables. *The International Journal of the Addictions*, 17, 95–108.
- Larsen, D.L., Attkisson, C.C., Hargreaves, W.A., & Nguyen, T.D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning*, 2, 197–207.
- Lebow, J.L. (1983). Similarities and differences between mental health and health care evaluation studies assessing consumer satisfaction. *Evaluation and Program Planning*, 6, 237–245.
- Linn, L.S. (1975). Factors associated with patient evaluation of health care. *Milbank Memorial Fund Quarterly*, 53, 531–548.
- Nguyen, T.D., Attkisson, C.C., & Stegner, B.L. (1983). Assessment of patient satisfaction: Development and refinement of a service evaluation questionnaire. *Evaluation and Program Planning*, 6, 299–314.
- Pascoe, G.C. (1983). Patient satisfaction in primary health care: A literature review and analysis. *Evaluation and Program Planning*, 6, 185–210.
- Pascoe, G.C., & Attkisson, C.C. (1983). The evaluation ranking scale: A new methodology for assessing satisfaction. *Evaluation and Program Planning*, 6, 335–347.

- Pekarik, G. (1983). Follow-up adjustment of outpatient dropouts. *American Journal of Orthopsychiatry*, 53, 501–511.
- Pekarik, G. (1985). Coping with dropouts. *Professional Psychology:* Research and Practice, 16, 114–123.
- Pekarik, G., Blodgett, C., Evans, R.G., & Wierzbicki, M. (1984). Variables related to continuance in a behavioral weight program. *Addictive Behaviors*, 9, 413–416.
- Sabourin, S., Gendreau, P., & Frenette, L. (1987). Le niveau de satisfaction des cas d'abandon dans un service universitaire de psychologie. Revue Canadienne des Sciences du Comportement, 19, 314–323.
- Tanner, B.A. (1982). A multi-dimensional client satisfaction instrument. Evaluation and Program Planning, 5, 161–167.
- Ware, J.E., & Davies, A.R. (1983). Behavioral consequences of consumer dissatisfaction with medical care. *Evaluation and Program Planning*, 6, 291–297.
- Ware, J.E., Davies-Avery, A., & Stewart, A.L. (1978). The measurement and meaning of patient satisfaction. *Health & Medical Care Services Review*, 1, 1–15.
- Ware, J.E., Snyder, M.K., Wright, W.R., & Davies, A.R. (1983). Defining and measuring patient satisfaction with health care. *Evaluation and Program Planning*, 6, 247–263.
- Zisook, S., Hammond, R., Jaffe, K., & Gammon, E. (1979). Outpatient requests, initial session and attrition. *International Journal of Psychiatry in Medicine*, 9, 339–350.