THE MULTIDIMENSIONALITY OF PATIENT SATISFACTION WITH A CLINIC VISIT

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ABSTRACT: Three hypotheses regarding the factor structure of patient satisfaction with an ambulatory health care encounter were tested in a New York medical center outpatient sample. All three hypotheses were generally supported. It was found that patients evaluated four distinct aspects of the clinic visit: doctor conduct, convenience, appointment getting, and the visit in general. A significant proportion of the variance in general satisfaction was explained by satisfaction with doctor conduct and satisfaction with convenience. Three factor scales of patient satisfaction were developed with demonstrable internal consistency reliability. Some possible effects of response method on satisfaction ratings were studied; these method effects were not substantial, and it is suggested that this type of psychometric procedure be used in further studies of patient satisfaction.

THE NEED TO MEASURE SATISFACTION WITH PARTICULAR EPISODES OF CARE

In an earlier article it was proposed that patient satisfaction could be defined as (a) multiple evaluations of distinct aspects of health care which are (b) determined (in some way) by the individual's perceptions, attitudes, and comparison processes. The present paper reports an empirical test of the first proposition.

Most patient satisfaction studies have focused on satisfaction with particular health care settings or plans, ranging from specialized inpatient services to community-based programs. Several studies have focused on satisfaction with health care in general, but relatively very few studies have attempted to measure patients' satisfaction with a specific ambulatory care episode. A health care episode is a sequence of encounters or visits related to a particular illness. For practical purposes it is important to develop measures of satisfaction with episodes of care. This is because patients' dissatisfaction or satisfaction probably affects subsequent behaviors such as appointment keeping and compliance. A practical first step in understanding satisfaction with episodes of care is the study of a single clinic encounter or visit.

Until 1977 there were published studies of patients' satisfaction with a particular ambulatory episode. Various methods of measuring satisfaction were used: One researcher used a single measure while seven studies used single question measures for each of several dimensions. Of these seven
studies, two dichotomized responses into dissatisfied versus satisfied,\textsuperscript{5,4} five offered multiple-response continuums,\textsuperscript{5-9} and one used both dichotomous and continuous score categories.\textsuperscript{10} In one study the researchers assigned overall satisfaction ratings on the basis of content analyses of semistructured interviews;\textsuperscript{11} in another study satisfaction was operationalized as care rated better than private care.\textsuperscript{5} Thurstone scales were used in one study.\textsuperscript{12} Linn\textsuperscript{8} used several items pertaining to assumed dimensions of the health care to obtain satisfaction ratings and he created with these items two additive indices.

These studies of satisfaction with a particular episode manifest the methodological weaknesses of satisfaction studies in general, noted in several independent reviews of the patient satisfaction literature.\textsuperscript{13-17} These weaknesses can be summarized briefly as follows:

1. The vast majority of studies used single-item measures which are less reliable than scale measures which comprise several items.
2. Most studies failed to report reliability estimates, that is, estimates of the extent to which the item or scale consistently measures what it is intended to measure.
3. Respondents' biases which might affect their satisfaction ratings might have rarely been considered, let alone controlled for.
4. Most studies failed to document basic methodological information, such as the introduction given to respondents, the amount of missing data, the response method used, and control of researcher bias.
5. Few studies provided tests of the validity of the satisfaction measure(s) used, that is, of the degree to which the item or scale really taps patients' evaluations of care.
6. There has been no standardization of measurement techniques that would allow comparison of satisfaction rates in different settings.
7. Moreover, few researchers have conceptualized patient satisfaction other than as a simple unidimensional phenomenon. Those who did conceive of patient satisfaction as multidimensional made \textit{a priori} assumptions about which dimensions (or aspects) of care clients evaluate.\textsuperscript{10,18-21}
8. The hypothesis of multidimensionality of patient satisfaction was systematically tested by Ware et al.\textsuperscript{15} in relation to health care in general but has never been tested in relation to particular health care episodes.

**OBJECTIVES**

The objective of the present study was to test the hypothesis of multidimensionality of patient satisfaction with a clinic visit. In other words, we were testing the notion that patients evaluate several distinct aspects of a visit, rather than simply reaching one overall assessment. Psychometric methods, including factor analytic procedures, were used to identify the