

**NIVEL bibliography no. 35**

**Methods for assessing  
patient satisfaction with primary care  
review and annotated bibliography**

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**July 1992**

This bibliography is part 35 of a series of the Library & Documentation Department of the Netherlands Institute of Primary Care (NIVEL).

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CIP-GEGEVENS KONINKLIJKE BIBIOTHEEK, DEN HAAG

Methods for assessing patient satisfaction with primary care : review and annotated bibliography / comp. C. van Campen, R.D. Friele, J.J. Kerssens.  
Utrecht : NIVEL, Netherlands Institute of Primary Care. - (Bibliography / Netherlands Institute of Primary Health Care ; nr. 35)  
Met reg.  
ISBN 90-6905-175-3  
Trefw.: patiënten en eerstelijnsgezondheidszorg ; bibliografieën.

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## Introduction

This bibliography was compiled because of the growing interest in the Netherlands in assessing and assuring quality of health care. The Dutch National Council of Public Health (NRV), for instance, has recently published a series of reports concerning the quality of care.<sup>1</sup> These reports gradually shifted their emphasis concerning responsibility for the quality of care. More and more they recognized the need to introduce the patient as an active participant on stage. This trend culminated in two conferences<sup>2</sup> at which professional organizations, patient organizations, health insurers and government representatives agreed upon an independent role of patients in phrasing quality requirements. And feedback from the users of care is considered to be a vital part of quality assessment and assurance. Therefore reliable methods for assessing the patient's judgement of the quality of care should be available.

Primary care is an important sector of health care in the Netherlands. Most of the homecare is provided by primary care workers. The development of instruments for assessing the patient's judgement of the quality of primary or home care is considered a priority issue for two reasons. On the one hand, home care becomes an increasingly important substitute for hospital care in a society with a growing number of elderly and a greater emphasis on patient autonomy and independence. On the other hand home care, as well as primary care, is a multi-disciplinary provision in a complex situation where much can still be gained from starting to monitor quality.<sup>3</sup> This bibliography, documenting over 150 recent titles and containing a running discussion on the methodological issues in these titles, is the first step in this developmental process to develop a reliable method for assessing the patient's judgement of primary or home care. In this bibliography the terms homecare and primary care will be used as if referring to the same type of care. This is done for practical reasons. Literature that is relevant to homecare is certainly also relevant to primary care. And no consistent definition and distinction between the two types of care can be found in the international literature. Adhering to a, theoretically sound, restriction to either homecare or primary care would exclude titles bearing relevance to the issue at stake in this bibliography.

<sup>1</sup> Nationale Raad voor de Volksgezondheid (1986) Discussienota Begrippenkader Kwaliteit Beroepsuitoefening. Zoetermeer: NRV.; Nationale Raad voor de Volksgezondheid (1991) Discussienota Algemeen Begrippenkader Kwaliteitsbevordering. Zoetermeer: NRV.

<sup>2</sup> Conferentie Kwaliteit van Zorg van de KNMG te Leidschendam op 6 en 7 april 1989; Vervolgconferentie Kwaliteit van Zorg: van Uitspraken naar Afspraken van het KNMG te Leidschendam op 14 en 15 juni 1990.

<sup>3</sup> Raad voor Gezondheidszorgonderzoek (1990) Advies Kwaliteit van Zorg: Terreinverkenning en Prioriteiten voor Wetenschappelijk Onderzoek. The Hague: RGO.

### **Two questions to be answered:**

This bibliography should provide the answer to two questions.

1. *Are there any instruments that may be used for assessing the quality of home care or primary care from the patient's perspective?*
2. *What can be learned from the failures and successes reported by other authors in developing questionnaires to assess patient satisfaction with health care?*

### **Method**

First we start with a description of the sources of the publications that are contained in this bibliography.

This bibliography presents a selection of the enormous production of literature on patient satisfaction (more than 3000 titles over the last ten years). Attention is directed to methodological aspects and the assessment of patient satisfaction in the first place, and to primary care in the second place.

First, we searched in the broadest sense for methodological and research literature on patient satisfaction, perceptions, and evaluations of the quality of health care in general. Titles were drawn from the databases of MEDLINE, Psychological Abstracts, the Ministry of Health, and the NIVEL institute. We formulated our searches into a combination of the keywords "consumer satisfaction", "quality of care" on the one hand and several keywords on methodology, measurement and assessment on the other (see note at the end of this chapter for further details). This resulted in a selection of studies of patient satisfaction and perception of quality of care that concerned methodological issues as well as studies assessing patient satisfaction or perceptions of quality of care. Further we restricted ourselves to publications from 1980 onward, because many reviews were published at the beginning of the eighties that covered the literature before then [nos. 147, 148, 149, 150, 154, 155]. A collection of 486 publications resulted.

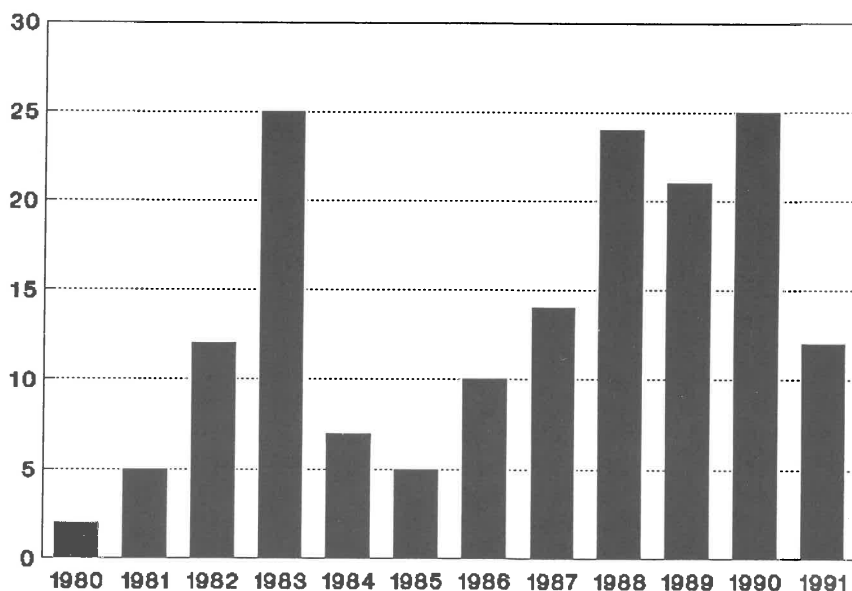
Still having too large a number of titles to handle, we further limited the scope to methodological articles and research articles that dealt with or were relevant to primary care. Therefore, we read all titles and abstracts and created two smaller selections. The first selection consisted of methodological studies in patient satisfaction or patient perceptions of quality of care. The second selection consisted of studies in patient satisfaction and patient perceptions of quality of care in the field/setting of primary health care in the broadest sense. The selection of these two samples resulted in a total of 165 titles. The figure on the next page shows the distribution of the titles over the years. Two publication peaks can clearly be distinguished.

In conclusion, the bibliography covers the field of literature on *methods and methodology to assess patient satisfaction in general and specific data on patient satisfaction with primary care (and relevant domains)*.

The bibliography consists of three parts. Part I is an overview of the titles from a methodological point of view. It was decided to write such an overview since most abstracts concentrate on "results". Such as: how satisfied are patients with a certain type of health care, and what is the relationship between satisfaction scores and several independent variables? It was considered necessary to extract additional information from the titles that provide specific insight into the methodological issues. In Part II of this bibliography all titles are documented



## Number of publications in bibliography



with relevant keywords and an abstract. Part III contains copies of five frequently used questionnaires.

### Note:

Keywords that were used:

MEDLINE (1985-1991)

- Searched for:
- 1) "consumer satisfaction statistics and numerical data".
  - 2) "consumer satisfaction" and ("psychometrics" or "methodology" or "sociometric techniques").
  - 3) "quality of health care statistics and numerical data" and "patient".
  - 4) "quality of health care" and "patient" and ("psychometrics" or "methodology" or "sociometric techniques").

PsycLit ( Psychological Abstracts)

- Searched for:
- 1) ("quality of care" or "health care delivery" or "health care utilization") and "client attitudes" and ("methodology" or "measurement" or "evaluation").
  - 2) "satisfaction" and "client attitudes" and ("methodology" or "measurement" or "evaluation").

Ministry of Health

- Searched for:
- 1) "patient" and "satisfaction".
  - 2) "patiënten" and "tevredenheid" and "meten".
  - 3) "consumer" and "satisfaction".

NIVEL Institute

- Searched for:
- 1) "patientensatisfactie" and "onderzoek".
  - 2) "kwaliteit van de zorg" and "patiënten/" and "attitudes" and "onderzoek".

## Guide to the bibliography

The abstracts in the bibliography in Part II are arranged in chapters, as can be seen from the contents. Within each chapter the abstracts are arranged by year of publication. Each abstract consists of three little blocks. The first block includes a reference number (used in the introduction, not in the indexes), the name of the authors, the title, the journal or publisher and the marker *nivel* when it is available at the NIVEL library (the number between brackets indicates the location of books, reports and copies; no number indicates that the complete journal is available). The second block consists of a characterization of the article on the aspects: variables, methods, reliability test, validity test, population, and dimensions. The aspect *variables* indicates which variables the researchers studied, the aspect *methods* how they studied the variable "patient satisfaction", for example by using a questionnaire (if known the source of the questionnaire is mentioned between brackets and can be found in the article). The aspects *reliability test* and *validity test* indicate whether the researchers have tested these psychometric qualities of the questionnaire used. The number and kind of respondents are mentioned in the aspect *population*, and if the researchers differentiated the concept of patient satisfaction into dimensions, these are described in the aspect *dimensions* (sometimes the items are mentioned). The third block is the abstract of the article. The marker *author* at the end means that the abstract of the article is used.

## **Part I**

**A review from a methodological point of view**



## Prologue

In this part of the bibliography an overview is given of the titles from a methodological point of view. The overview is organized in a pragmatic way. First titles with a theoretical impact are presented. Second, qualitative inventories are discussed. In the third chapter five relatively frequently used questionnaires are discussed. These questionnaires have been used in a number of different health care settings. Also, most of these questionnaires were available at the beginning of the 1980's. Later other questionnaires have been developed. These questionnaires are presented in the fourth chapter. For reasons of convenience questionnaires that assess the patient's assessment of quality of home care and primary care are grouped together, as are articles concerning methodological aspects of assessment of quality in other types of care (nursing, hospital care, health maintenance organizations (HMOs), dentistry and physical therapy). Some questionnaires remained: they were added under the headings: patient education, care for children, diabetes care and palliative care. With this way of presenting the titles we hope that interested readers may easily find their way in this bibliography to find what they want. The fifth chapter contains reviews and meta-analyses. These again bear relevance to different types of care, and therefore are discussed independently of a certain type of care. The sixth chapter can be read on its own. In it we attempt to answer the questions we started with, and we present the "lessons" from this literature search.

## 1 Publications with mainly a theoretical impact

Few titles could be gathered under this heading. Most of the literature is empirical, with only very shallow references to a more theoretical grounding of the concept of patient satisfaction. In this chapter eleven titles are presented that focused upon the theoretical issue.

Linder-Pelz [3,4] is one of the few authors venturing a theoretical approach to the issue of patient satisfaction based on a literature search with subsequent empirical testing. She based her definition of patient satisfaction on job satisfaction research. Satisfaction can be defined as an attitude, a positive evaluation of distinct dimensions of health care. A major finding of her empirical testing was that expectations and satisfaction are closely related. Positive expectations and high satisfaction went together. Elbeck [9] also defines satisfaction as an attitude. He distinguished three components: cognitive, affective and a conative or an intentions component. This latter component is an addition compared to the definition of Linder-Pelz. Lebow [154] gives a narrow definition of satisfaction: the extent to which treatment fulfils the wants, wishes and desires for treatment of the client. Hughes and Larson [13] suggest that an individual's reaction to a decision-making process is independently based on the fairness of the procedures used in this process as contrasted to the assumption that people judge experiences in terms of outcome. Gauthier [8] presents two definitions of satisfaction: an objective and a subjective satisfaction. Objective satisfaction is the reduction of the discrepancy between the current situation and the desired situation. Subjective satisfaction is a feeling of contentment that may be produced in a client because of his/her participation in the programme. The latter is the definition that is assessed most

frequently. Objective satisfaction is independent of subjective satisfaction. With regard to expectations Fitzpatrick and Hopkins [5] raise the issue of the development of expectations during the process of health care delivery. Expectations are revised in the light of experiences. Hence, expectations and satisfaction are both evaluations of a health care episode. Although bearing face validity, the definition of satisfaction as the difference between expectations and care actually provided seems unable to hold its ground in the light of the findings of both Linder-Pelz and Fitzpatrick and Hopkins. Similar discussions can be found in numerous other publications. To our knowledge no one has yet come up with a theoretically sound definition of patient satisfaction that stood up in empirical testing. This makes the issue of measuring satisfaction like measuring an undefined object or construct. The major problem will be validity, since no "gold standard" can be defined.

Ware [28] raised the issue of subjectivity of satisfaction ratings. Compared to a report satisfaction rating are subjective. But they are intentionally subjective. They do not necessarily correspond to objective reality, or the reality from the point of view of a health care professional.

Ley [11] demonstrates the relationship between satisfaction and compliance, with correlation coefficients ranging from 0.13 to 0.67. It is concluded that striving for patient satisfaction has its relevance to patient compliance and with this to therapeutic effectiveness. This issue is also mentioned by Fitzpatrick [15]. Vuori [14] tried to answer the question whether the measurement of patient satisfaction improved the quality of care. No evidence in the literature for answering this question was found. Apart from this finding Vuori states, on more or less moral grounds, that health care aiming at satisfying patients is better than health care not taking patient satisfaction into account.

## **2 Qualitative inventories of patient satisfaction items**

The issue of validity is a major worry when constructing a questionnaire on patient satisfaction. This is especially true since the concept of patient satisfaction is poorly founded from a theoretical point of view. As discussed earlier, several attempts have been made to define the concept. None of these attempts succeeded into convincingly rooting the definition of the concept of patient satisfaction in a profound theoretical framework. Therefore, in most studies the assessment of patient satisfaction is "data-driven". Questionnaires are based either on an assessment of relevant items gained from the experience of professional workers and researchers, or on the items generated by asking patients about their satisfaction with care. In this chapter studies will be discussed that aimed at generating information on patient satisfaction from patients or their relatives. In these studies open-ended questions or focus-group interviews were used to explore the domain of patient satisfaction from a patient's perspective. In our sample of abstracts we found 11 titles explicitly presenting information based on qualitative inventories of patient satisfaction [16,18,19,20,21,22,23,86,117,120,127,142].

From a patient's point of view, patient satisfaction is a multi-dimensional concept [117]. Most reported dimensions of patient satisfaction with a care provider are Communication, Building a relationship and Friendliness [16,19,21,117,127]. In a Swedish study on patient satisfaction with primary care, patients mentioned

as important issues: Availability, Continuity and Reception/service [23]. General-practice patients mentioned in descending order of importance: Facilities, Personal rapport and relationship, Patience and civility, Professional skills, Organization and equipment [71]. Patients with AIDS stress the following characteristics as most important in a general practitioner: Understanding and Expertise. Reasons for patients with AIDS not wishing their general practitioner to know their diagnosis of AIDS were (in descending prevalence): general practitioner not maintaining confidentiality, lacking sympathy, lacking knowledge, lacking skills and lacking interest [18]. In a study on the characteristics of an ideal acute psychiatric care unit two dimensions were identified: Behavioural autonomy and Supportive care [22]. An inventory of criticism of breast screening yielded the following issues: Access, Privacy and Feelings of claustrophobia [142]. For 24 older HMO clients the physician is the major focus of their comments. Financial aspects and the making and keeping of appointments follow suit [120]. Scott and Pill [20] supported a quantitative inventory with open-ended questions. Results of the quantitative questionnaire showed that general practitioner's patients are in favour of counselling about lifestyle habits. The qualitative analyses of the patient's response, however, demonstrated that such counselling should be relevant to the complaints that were presented by them. Most remarkable is the generally low priority given to issues of medical skills and health-outcome, although in one study the qualitative inventory also produced a number of items referring to the technical skills of a physician [86]. In a study employing extensive open interviews and focus-group interviews these two issues were not mentioned by the patients [127].

### 3 Five questionnaires used frequently

Five questionnaires appear in our bibliography more often than other questionnaires (more than three references). They have All of these questionnaires were published in the seventies, except for the Evaluation Ranking Scale (ERS) which was published in 1983 [52]. The items of these questionnaires were mainly derived from the literature or professional workers' experience, without explicitly referring to a qualitative inventory among health-care users.<sup>4</sup> An exception is the Medical Interview Satisfaction Scale (MISS) which is partly based on patient interviews.<sup>5</sup> The Patient Satisfaction Questionnaire (PSQ) assesses patients satisfaction with health care or medical care in general. The Satisfaction with Physician and Primary Care Scale (SPPCS) also assesses patient satisfaction in general, but is focused upon physicians and primary care in general. The Client Satisfaction Questionnaire (CSQ) refers to a more specific encounter with,

<sup>4</sup> Hulka, B.S., Zyzanski, S.J., Cassel, J.C., Thompson, S.J. Scale for the measurement of attitudes towards physicians and primary medical care. *Medical Care*; 8, 1970, no. 5, pp. 429-236.

Larsen, D.L., Attkisson, C.C., Hargreaves, W.A., Nguyen, T.D. Assessment of client/patient satisfaction: development of a general scale. *Evaluation and Program Planning*; 2, 1979, pp. 197-207.

<sup>5</sup> Wolf, M.H. et al. The Medical Interview Satisfaction Scale: development of a scale to measure patient perceptions of physician behaviour. *Journal of Behavioural Medicine*; 1, 1978, no. 4, pp. 391-400.

mainly, mental health care. The Evaluation Ranking Scale (ERS) also assesses patient satisfaction with specific encounters in medical or health care. The Medical Interview Satisfaction Scale questionnaire assesses patient satisfaction with a medical interview. An example of each of these five questionnaires is provided in the appendix.

### 3.1 The Patient Satisfaction Questionnaire (PSQ)

The development of the PSQ took several years and started as early as 1973, beginning with the Seven-Country Study. The PSQ was developed to assist planning, administration and evaluation of health services delivery programmes [28]. Results of studies using the PSQ may also be used to assist in educating physicians.<sup>6</sup> Ware [28] defines patient satisfaction as a patient's evaluation of health care services and providers. Satisfaction ratings are intentionally subjective; attempting to capture a patient's evaluation of care that cannot be known by observing care directly. In 1976 a short version called "Form II" was published [28]. The questionnaire covers several dimensions of the domain of patient satisfaction: Access to care, Financial aspects, Availability of resources, Continuity of care, Technical quality, Interpersonal manner and Overall satisfaction. Items are stated with a general referent (e.g. "Doctors let their patients tell them everything that the patient thinks is important") or with a personal referent (e.g. "I'm very satisfied with the medical care I receive"). This "mixed approach" was based on conclusions of two field studies in which no differences in validity or reliability coefficients between both types of stating the items were found. It was, however, noted that mean scores for items evaluating personal care experiences were more favourable than items evaluating care experiences of people in general [28]. This also leads to a higher variability in satisfaction scores for items referring to care experiences in general. Questionnaire items referring to general care experiences are also "always applicable", since if a respondent did not receive medical care recently, the respondent is asked to "think about what you would expect if you needed care today" [28].

The questionnaire response categories are of a Likert-scale type. This type of scale, with standard response categories, is considered to make responding fairly easy. Also, questionnaire-formatting is relatively easy with standard response categories. Scales are balanced to control for acquiescent response set.

Measures of internal consistency vary per study and for the several dimensions. Roberts et al. [31] reported that internal consistency ranged from .43 for the Finances scale to .85 for the Humaneness scale. Overall internal consistency was .90. Pascoe et al. [30] found internal consistency for the subscales ranging from .60 (Access) to .86 (Humaneness). Overall consistency was .89. Test-retest reliability was tested [37]. No significant difference in PSQ scores was found when comparing scores four and six months post-myocardial infarction. Pearson correlation between both periods was .64.

PSQ scores were found to be closely related to scores on the SPPCS [37].

<sup>6</sup> Ware, J.E., Snyder, M.K. Dimensions of patient attitudes regarding doctors and medical care services. *Medical Care*; 13, 1975, no, 8, pp. 669-682.



Pearson correlation assessed in two different periods was .75 and .81. Even the ranking of the several dimensions of patient satisfaction agreed between both instruments [37]. PSQ scores show high correlations with a general factor in the Older Patients Satisfaction Scale (OPPS) [99]. Several OPPS scales correlated well with PSQ dimensions. But some OPPS scales were not correlated to any PSQ dimension, suggesting that the PSQ does not fully cover the relevant realm of patient satisfaction items that is assessed using the OPPS. The PSQ has been used in several studies. Sometimes only as a source for developing a new questionnaire [24,26,32,39,42], sometimes only part of the questionnaire [27,33,40,64,79,136], but often the questionnaire has been used as a whole [29,30,34,35,36,37,38,49]. The PSQ is applied among a wide variety of respondents: adults using physician services [27,35], terminally ill cancer patients [33], pregnant women [39], patients of a medical clinic [36], family practice patients [39,64], mothers of children with chronic illnesses [41], patients of family physicians versus general internists' patients [38], university employees [42], a "household-population" [29], "patients" [29], patients of a prepaid health plan [29], patients of a prepaid health plan versus fee-for-service patients [136], health centre patients [30,49], telephone or mail respondents [32], intensive care patients [37] and HMO subscribers [120,40].

The relationship between PSQ scores and several other respondents' characteristics has been studied. In one study no influence of socio-demographic variables on patient satisfaction was found [24]. Also, no effect was found for the seriousness of the illness [24] and only a minor difference was found when comparing a conventionally organised medical clinic with a group practice [36]. Nor was any difference found in patient satisfaction when comparing between patients of a family physician and a general internist [38]. One study found no relationship between provider continuity and patient satisfaction [34], whereas in another study a positive correlation between satisfaction and perceived continuity of care was found [64]. In this study it is discussed that this relationship may be an artefact, since both instruments used measured attitudes that may have been prone to similar biases. Other studies did find effects of independent variables on patient satisfaction. Age was found to correlate positively with patient satisfaction [26,42]. Also, women tend to score higher than men [24,42]. Ethnicity [26,42], marital status and employment status [26] are also related to patient satisfaction as assessed with the PSQ. Hospice care, in comparison with traditional hospital care, was related to higher satisfaction among terminally ill patients [33], as well as a fee-for-service practice compared to a prepaid practice [136,42]. Perceived patient waiting time [34] and length of a period of regular hospital visits [24] were negatively associated with patient satisfaction. Having discussed one's child's progress and treatment [41], number of visits to a doctor [42], length of contact with one physician [24], receiving "non-technical interventions" [40] and having a relationship with a care provider [41] are all related to higher patient satisfaction. Health status [42], ratings of general health [26], life satisfaction and well-being [31] and one's child's health status [41] were positively related to patient satisfaction as assessed with the PSQ. No correlation between PSQ scores and SCL-6 (assessment of well-being) was found [31]; on the other hand, a significant association was found with life satisfaction [31]. Finally, a set of variables called "expectations" showed a strong relationship with patient satisfaction [42]. However, in another study no systematic relationship between the degree to which expectations with regard

to a medical interview were fulfilled and patient satisfaction was found [40]. In two publications a prospective study-design is described. In both publications a relationship between patient satisfaction scores and subsequent change of providers is presented [29,27].

Major criticism of the PSQ was ventilated by Pascoe, et al. [30] and Roberts et al. [31]. They compared the performance of the PSQ with two other instruments: the CSQ and the ERS. They consider it safe to state that the PSQ assesses a different domain than the CSQ and the ERS. PSQ scores will reflect views about the overall health care delivery system, whereas ERS and CSQ will reflect views about a specific service program. Their criticism comes in threes. They found a relationship between PSQ scores and measures of life satisfaction and well-being. This relationship did not exist for the CSQ. PSQ scores seem partly to reflect feelings of well-being and life satisfaction. These are not necessarily related to the quality of health care delivery systems. Secondly, the PSQ allows for assessment of inconsistencies in response. Similar questions are included in a questionnaire, after which the response to these questions is compared. Several inconsistent response-pairs were found. Pascoe et al. attribute these inconsistencies to the PSQ, since such inconsistencies were not found for the CSQ and the ERS. It should, however, be remarked that a test for inconsistencies is not contained in the CSQ or in the ERS, thus rendering the comparison for this aspect between the three questionnaires fragmentary. Thirdly, PSQ scores were not related to a global service satisfaction measure, as contrasted with the CSQ and the ERS. This finding seems to be consistent with the stated difference in domain that is assessed by the various questionnaires, since the global service satisfaction measure related to the quality of a specific health care service, not to the quality of health care in general. One finding in favour of the PSQ in the comparison with the CSQ and the ERS is that former scores tend to be less negatively skewed than the latter.

### **3.2 The Client Satisfaction Questionnaire (CSQ)**

The development of the Client Satisfaction Questionnaire was reported by Larsen et al.<sup>7</sup> In their view client satisfaction ratings should be one component of a human service program evaluation. Patient satisfaction is the patients' evaluation of the services provided to them. They developed an eight-item scale for assessing general patient satisfaction with health care services. Items were generated by consulting published and unpublished sources and by presenting a pool of 81 items to 32 mental health care professionals, to assess the degree to which each of the individual items tapped one of nine dimensions: Psychical surroundings, Support staff, Kind/type of service, Quality of service, Amount, Length or quantity of service, Outcome of service, General satisfaction and Procedures. After a further reduction a scale with 31 items, with a four-point anchored answer without the neutral position, was administered to 248, exclusively outpatient, mental health clients or ex-clients. Principal-components factor analysis of their response produced one factor explaining 75% of the common variance. It was concluded that only one salient dimension emerged

<sup>7</sup> Larsen et al., 1979; see note 4.

from the scale that was constructed. This dimension was called general satisfaction with services. Eight items were selected that loaded highly on the unrotated first factor, and exhibited good inter-item correlation. Cronbach's alpha was found to be .93. In another study the alpha coefficient for the CSQ-8 was .90 [31]. Also an 18-item version of the CSQ was developed, based on the original pool of 31 items [43]. Alpha coefficients of .91 [43] and .84 [30] were reported. In addition a CSQ-7 was reported on with an alpha of .73 [111], a CSQ-3 with an alpha of .83 and .82 [45], and a CSQ-4 with an alpha of .85 and .88 [45].

The questionnaire has been used in several populations. Larsen started off with outpatient mental health clients or ex-clients. Several studies repeatedly relied on the patients coming to an urban public health centre [30,31,52,53]. The questionnaire was also used among older HMO patients [120], psychiatric patients [43], clients receiving psychotherapy [44,46], clients visiting a rehabilitation centre [111] and university counselling services [45].

The relationship between CSQ scores and clients' characteristics has been studied. Larsen et al. found women to give more polarized answers, unemployed clients were less satisfied compared to others, clients still in treatment were more satisfied whereas clients with a previous treatment were less satisfied.<sup>8</sup> Clients who paid an additional fee were more satisfied, according to their CSQ score. Ethnicity and Socio-Economic Status were also related to CSQ scores [52], whereas women were reported to be more satisfied with the care they received than men [45].

Clients having psychiatric symptoms [43], or high discomfort at intake [44], were more satisfied. This finding was not replicated in another study. In this study no relationship was found between the severity of symptoms prior to counselling and patient satisfaction [45]. In the same study, however, another relationship with CSQ scores was found: students with anxiety or depression symptoms were less satisfied than students with problems of self-concept and esteem issues [45].

Clients dropping out of the treatment early were less satisfied, according to Larsen. The same goes for clients missing appointments. This finding, however, was not substantiated in another study [44]. Clients having many sessions were more satisfied [45]. Client ratings of improvement were positively related to CSQ scores [44], as well as therapist's satisfaction and therapist's assessed counselling outcome [45].

A positive relationship between general life satisfaction and CSQ scores was reported in two studies [43,31]. Contradictory results were reported for the relationship between well-being and CSQ scores [31,43,111].

No prospective studies of the effect of CSQ scores on subsequent visits to a health-care provider were found.

Criticism on the CSQ is scarce. Hays and Ware [35] tested the influence of a socially desirable response set on the response of the phrasing of a satisfaction questionnaire in two ways. They compared phrasings with a personal referent (such as: "There are things about the medical care I receive that could be better") or a general referent (such as: "Most people receive medical care that could be better"). They found phrasing with a personal referent to be highly

<sup>8</sup> Larsen et al., 1979; see footnote 4.

influenced by a socially desirable response set. According to Hays and Ware this phenomenon may explain the highly skewed results of questionnaires containing items with a personal referent. The CSQ consists of items with a personal referent. Lemmens and Donker [163] criticize the validity of the CSQ. As circumstantial evidence they present the sometimes contradictory results of the studies in the relationship between CSQ-scores and other client-characteristics, which is also described above. They also state that high reliability and a high validity are not the same. In their point of view, high reliability scores may indicate low validity.

### 3.3 The Satisfaction with Physician and Primary Care Scale (SPPCS)

The first publication on this questionnaire dates back to 1970.<sup>9</sup> Lay and scientific literature was reviewed to determine areas relevant for assessing patient satisfaction with and their attitudes towards medical care. Three areas were encountered frequently: professional competence, personal qualities and cost/convenience. To start with, a total of 300 items were devised. After editing, 149 statements remained. These items were presented to three groups of judges: physicians, social workers and members of the Chapel Hill Women's Club. They were asked to score each item on a scale of favourableness or unfavourableness. These scores were used as a basis for determining the relevance of an item to the realm of patient satisfaction. For each item a median favourableness-score was calculated, together with a measure of variance. Items being scored as either favourable or unfavourable were selected for inclusion in two distinct scales. In a pilot-study (N=17,17,15 for each dimension) parallel form reliability was tested. Parallel reliability for the cost/convenience dimension was low. For the other dimension parallel reliability was higher. After this pretest the questionnaire was once more edited, resulting in a 41-item questionnaire with response categories: agree/disagree. Satisfaction scores could be calculated on the basis of the median scores of those items on which a respondent agrees. In 1974 the authors of the questionnaire reported certain inadequacies of the scales.<sup>10</sup> Designation of items to each dimension did not seem to be valid. To solve this inadequacy 39 experienced public health nurses were asked to allocate the 149 items to the three scales. This finally resulted in a new set of 42 items. The response format was also reconsidered, introducing a five-point Likert method of scoring. A new scoring scheme was also selected: the Scale Product method. A respondent's score was calculated as a product of the response on the Likert scale and a scale value for each item based on the judges' judgements. In a pretest the Scale Product method yielded higher split-half reliability coefficients than the earlier scoring method. Also, reliability for the three scales was highest using the Scale Product method. Again the Cost/convenience scale was the least reliable.

<sup>9</sup> Hulka et al., 1970; see footnote 4.

<sup>10</sup> Zyzanski, S.J., Hulka, B.S., Cassel, J.C. Scale for the measurement of "satisfaction" with medical care: modification in content, format and scoring. *Medical Care*; 12, 1974, no. 7, pp. 611-620.

The questionnaire has been used in several study populations: post-myocardial infarction patients [37], women or married women, post partum [16,50], households [47], patients on a waiting list [47], outpatient clinic patients [47], ambulatory care patients [49], and patients of a multi-specialty primary care centre [51].

Six empirical studies using the SPPCS questionnaire are included in this bibliography. Only one study presented a reliability measure, this being applicable to only three items from the questionnaire ( $\alpha = .71$ ). Test-retest reliability was reported to be good: no significant difference in satisfaction scores between two assessment periods was found, with a correlation of .59 (Pearson's  $r$ ) [37]. Validity was tested by comparing a three-item score against the response to open ended questions. The comparison showed a favourable agreement [16]. Concurrent validity was also tested by comparing scores on the SPPCS questionnaire with PSQ scores. No difference in percentage dissatisfaction or mean scores between the two questionnaires was found. Correlation between the questionnaires was high: .75 and .81 (for two distinct periods) and the ranking of dimensions was identical for both questionnaires [37].

The influence has been studied of several variables on the satisfaction scores assessed with the SPPCS. Scores of younger people were lower for the personal qualities and cost/convenience dimensions [49]. Provider continuity in one study was associated with higher scores [16], but in another study no significant relationship was found [50]. Severity of condition, miles living away from hospital and number of clinic visits were negatively associated with satisfaction scores [49]. A positive relationship was found between satisfaction scores and attendance at birth classes [16]. Less satisfied were patients who had changed physicians [51]. Systematically satisfaction scores for the cost/convenience dimension were lowest, followed by the personal qualities dimension, subsequently followed by the professional competence dimension [37,50,47]. In a prospective study compliance was found to be related to an earlier assessment of patient satisfaction among older respondents (average age 69) (Pearson's  $r=0.41$ ) but not for younger respondents (average age 49). Criticism of the SPPCS was ventilated by Stamps et al. [47]. According to them the validity of the questionnaire was restricted to only face validity and testing of validity by relating satisfaction scores to socio-demographic variables and use of medical care. In their article they used multivariate tests for an analysis of the scale. Guttman scalogram analysis showed subscales not to be measuring one dimension, with the possible exception of the Professional Competence scale. Factor analysis of the total scale did not reproduce the three subscales. In a comment from Hulka and Zyzanski [48] on this publication they discuss this criticism. They question the need for a scale to be one-dimensional in order to be valid. Furthermore, they considered Guttman scalogram analysis not to be relevant when items cover a broad range of subject-matter, as is the case. Lastly, they feel ignored in their attempts to increase sensitivity by developing the Scale Product technique. Stamps et al. used the agree/disagree response categories. It is the opinion of Hulka and Zyzanski that their list "worked well", and therefore is a valid instrument, although they agree with the necessity to continue developing and improving upon new questionnaires.

### 3.4 The Evaluation Ranking Scale (ERS)

The Evaluation Ranking Scale (ERS) is the most recent instrument for assessing patient satisfaction among the ones we discuss in this section. Inclusion in this section is largely due to three publications (all in one issue of *Evaluation and Program Planning*) by the authors who developed the instrument. Only one publication from other authors using the ERS is contained in this bibliography. The first publication on the ERS starts off with describing the limitations of assessing patient satisfaction with the methods available. The multidimensional character of patient satisfaction is not usually demonstrated. The lack of differentiation among patient responses is also a common problem leading to a lack of power to differentiate between different health care characteristics or patients, and the existence of an acquiescent response set may contribute to the undifferentiated quality of satisfaction results. Finally, they considered that the cause of the failure of the existing methods to extract more dimensions also might have partly caused the undifferentiated response. It is concluded that "commonly used patient satisfaction measures pull for a general, congratulatory reaction" [52]. As an alternative to the traditional questionnaires a ranking task was developed. Six service environment dimensions were defined: Clinic location & appointments, Clinic building, offices & waiting time, Clinic assistant & helpers, Nurses and doctors, My needs versus clinic services (later stated as: health services offered [30,53]), and Service results. From the literature several concepts of health care were selected. These were used to provide subpoints to the six service environment dimensions. Public health clinicians, administrators and patients contributed to further defining these dimensions and selecting subpoints to each dimension. This resulted in a total of 23 subpoints. Each dimension was printed on a separate card. Patients ranked these cards according to what was most important in determining their reaction to the health centre. The second task was based on the ranking of the six services on a vertical line anchored at the bottom with the mark "0" and the label Worst Possible Health Centre and at the top with the mark "100" and the label Best Possible Health Centre. The ERS score was calculated by multiplying ranking numbers of the first sorting test by the scores for each dimension from the second sorting test.

The ERS has been used among outpatients from public health clinics [52,30,53], staff members at a health centre [52] and HMO clients attending a clinic [54]. Only limited data on validity [30,52] and no data on reliability were found. Ethnicity (whites higher) and socioeconomic status (higher associated with higher) were significantly related to ERS scores [52]. In another study, with more ethnic and socioeconomic variety, no relationship between these variables and ERS scores was found [54]. More frequent use of health centre services was correlated with lower satisfaction according to ERS scores [52].

The ranking of the six dimensions according to their importance was as follows (starting from most important) Nurses & doctors, Service results, Needs versus services, Clinic assistants & helpers, Clinic location & appointments, Clinic building, offices & waiting time [52]. In other studies quite comparable ranking was found [30,53]. Clinic staff gave the same ranking [52]. In a study by another group a different ranking was found: Physicians - the nurses were omitted, Services offered, Assistance and helpers, Building, office and waiting

time, Location and appointments and Service results.

In contrast with the CSQ, ERS scores are more normally distributed [52]. Compared with the PSQ, ERS scores have a smaller range, with a lower standard deviation [30], in this study CSQ data were more normally distributed in comparison with ERS-scores. ERS-scores were significantly related to the response on a question assessing overall satisfaction [30]. The claim of the ERS to provide specific information on several aspects of an HMO was somewhat attenuated by remarking that an open ended question contributed additional useful information [54].

The ERS has not been extensively used. Not much criticism was found. The psychometric qualities of the ERS have been questioned because little experience exists with ranking tasks in this line of research [156]. Furthermore, we want to remark that only one item is presented for a whole dimension of care, thus violating one of the fundamental principles of scale development, in which the necessity is shown of using more items to operationalize one concept.

Two studies used a method comparable with the ERS. One study aimed at assessing satisfaction with sheltered housing for psychiatric patients. They asked respondents to rank six types of housing according to their preference. Subsequently these respondents were asked to indicate the rank number of the facility they inhabited. To tackle the problem of lower cognitive faculties of the respondent, icons were used to represent the various housing types [125]. Another study [126] aimed at assessing the relative importance that individuals (individuals attending psychiatric services and individuals with no psychiatric history) attribute to needs. It consists of 10 areas of need, derived from the literature. For each of the 10 categories six statements were made, and put on a card. In six trials respondents ranked the 10 categories of needs to their relative importance. Factor analysis failed to replicate this 10-factor solution. Six of the 10 dimensions could be retained in a six-factor solution: Recreation, Finances, Household, Occupational role, Safety and Accommodation. It was reported that the ranking task was easy to perform, even attractive. In this study for each dimension several items were generated. A confirmatory factor analysis failed to confirm the a priori dimensions. Such a confirmatory factor analysis was not possible for the ERS, casting doubt on the validity of the dimensions that were selected.

### **3.5 The Medical Interview Satisfaction Scale (MISS)**

The development of the Medical Interview Satisfaction Scale (MISS) is described in a publication in 1978.<sup>11</sup> The MISS was developed to assess patient satisfaction with a medical consultation. Sixty-three items were generated from interviews with patients, observations of consultations and a review of the literature. These items covered three categories: cognitive, affective and behavioural. In three stages the final format of the MISS was generated, with a total of 150 patients being involved. This resulted in a 26-item scale: a cognitive subscale with nine items, an affective subscale with nine items and a behaviour-

<sup>11</sup> Wolf et al., 1978; see footnote 5.

al subscale with eight items. The response-format was a five-point Likert scale. Scales were not balanced with an equal number of negative and positive items, because respondents found it difficult to understand and respond to negatively worded statements. Results of a last field-try are published. Cronbach's alpha for the whole scale was 0.93, and 0.87, 0.86 and 0.87 for the cognitive, affective and behavioural subscales respectively. Interscale correlations ranged from 0.62 to 0.76. Distribution of the scores is skewed, with about half of the cases falling in the last point interval of the scale.

Four publications of studies that in some way employ the MISS are included in this bibliography. One is a study among clients of general practitioners [57]. In another study items of the MISS were combined with items from the PSQ for a study among family practice clients [24]. In yet another study a modified version of the MISS was used among respondents attending genetic counselling [55], with 29 items and a seven-point Likert scale, producing scores on four dimensions: Distress relief, The affective domain, Communication behaviour and Intent to comply. A scale with 15-items and two dimensions, the affective and cognitive subscales, was used in a study among men attending a patient education session [56].

Reliability of a 15-item version of the MISS was 0.62 and 0.52 for the affective and the cognitive subscale respectively [56]. In a study among clients attending genetic counselling the three dimensions could not be clearly distinguished [55]. Only distress relief came out as a distinguishable factor.

A relationship between affective and cognitive satisfaction scores and the degree of participation in an educational setting was found [56]. No difference was found in patient satisfaction for clients who did and clients who did not discuss health promotion with their doctor [57]. No relationship with patient satisfaction as assessed with the instrument with mixed items [24] was found for socioeconomic status, the seriousness of illness or gender. Older patients were more generally satisfied as well as patients who had been coming to a physician for a longer time or had had longer consultations. No prospective study of the effects of patient satisfaction as assessed with the MISS were found.

## **4 Questionnaires used incidentally**

In this chapter the majority of the publications are discussed. They share one characteristic: in none of the questionnaires that were used did we encounter more than three references.

### **4.1 Primary care and home care**

The studies can be divided into two categories: those with an apparent methodological interest and those focusing on "results".

McCusker [59] developed a scale to measure satisfaction and preferences regarding long-term and terminal care. Based on the literature nine dimensions were selected as bearing relevance to the assessment of satisfaction with long-term home care. A further three dimensions were added for assessing satisfaction with terminal care. The PSQ and the SPPCS were used to provide items to be included in the new questionnaire. Additional items were suggested by



project investigators and staff. A five-point Likert-type response was used. Face validity was checked among project investigators. A pretest caused deletion of several items. Finally three questionnaires were developed: a patient version, a caretaker version and a postbereavement version. These were applied. Cronbach's alpha for the separate dimensions ranged from .10 to .87. Only one dimension completely satisfied the criterion of discriminant validity in the three questionnaires: preference for home care.

Raatikainen [146] presented an elaborated model for patient satisfaction and the feeling of security in the care situation. In contrast with this elaboration, the method of assessing satisfaction and security is described meagrely as: "questions about satisfaction (...) and feelings of security (...) were asked". The tabulation of the results shows that two questions were posed: general satisfaction and "general security". King et al. [60] also posed only one question on patient satisfaction. Scarpaci [63] reported high levels of perceived quality. However, no description of the measurement instrument could be found in this publication. Similarly Spikin et al. [58] report mothers as expressing high levels of satisfaction. Again no information on the assessment instrument could be located in the publication.

## **4.2 Physicians**

### **4.2.1 Doctor-patient communication**

Falvo et al. [86] developed a 17-item questionnaire to assess patient satisfaction with physicians' behaviour, on a five-point Likert scale. Open interviews were conducted with patients to provide relevant items. The lack of such a procedure as a basis for other questionnaires was the main reason for Falvo et al. to start anew. Convergent validity with the MISS was high ( $r = .74$ ). Test-retest reliability was .76, internal reliability was .85. No discrimination between technical and interpersonal aspects of care could be established. Scores on this questionnaire were found to correlate with patients' rating of resident information-giving and patient's recall of instructions [96]. In another study [94] satisfaction scores were highly skewed, failing to permit discrimination between good and poor interviews.

Two more studies report in a more or less elaborated way on the process of developing a questionnaire to assess patient satisfaction. The first was developed to assess satisfaction with genetic counselling [102]. Items were based on an inventory among 20 genetic counselees. Items selected covered three health care aspects: Instrumental, Affective and Procedural, plus items referring to satisfaction in general and one item about satisfaction with information. Response format was a four-point Likert format. Reliability was high ( $\alpha = .90$ ; for the subscales ranging from .65 - .79). Factor analysis demonstrated only slightly different dimensions: Instrumental, Affective-instrumental and Procedural. All factors were significantly related to a direct measure of general satisfaction. The second questionnaire was developed to assess patient satisfaction with consultation in general practice [103]. The response format is a five-point Likert-type scale. Items were generated on the basis of a literature review, discussion with general practitioners and personal (a general practitioner's) experiences with patients' comments on their care. This sample was

supplemented by patients' comments. Discussions, field tests and principal components analysis guided the further development of the questionnaire. Version six was field-tested among 239 patients. Three factors were unearthed: Professional care, Depth of relationship and Perceived time. Cronbach's alpha was .91 for the whole scale and ranged from .67 to .83 for the three subscales. Coefficients of variation for the items ranged from 36% to 48%, indicating an "encouraging" range. Also, mean scores differed for different doctors, suggesting discriminative power of the instrument.

Linn et al. [87] constructed a questionnaire to assess the satisfaction with physician behaviour. It contains four dimensions: Technical quality, Psychosocial concern, Courtesy and Mutual participation. No reason for not using an earlier-developed questionnaire is given, other than that the authors consider mutual participation to be a vital dimension of the doctor-patient relationship. A videotape recording of one consultation was shown to 227 volunteers. In spite of this single source of information, satisfaction scores were very heterogeneous.

Roter [91] used an 11-item questionnaire with items derived from the literature (Cronbach's alpha .92). Two dimensions were identified: a task factor and a socio-emotional factor (humaneness). A global satisfaction item was also included in this study. On the basis of the observations of simulated patient visits to physicians providing services to mine workers with pulmonary disease it was found that physician's socio-emotional behaviour had weaker relationships to the role player's satisfaction than did task behaviours. In a later study among chronic patients this satisfaction measure was elaborated upon. It subsequently contained 43 items with five dimensions derived from a post hoc factor analysis: Task-directed skill, Interpersonal skill, Attentiveness, Partnership and Emotional support. Task-directed satisfaction reflected the highest satisfaction scores and the most limited range, while partnership had the lowest relative satisfaction and the widest range of responses. The relationship between the Task-directed skill and the scores of a global satisfaction item was significantly stronger than the other relationships. The results of this study are in contrast with the above-described study: e.g. physician question-asking about and physicians counselling for psychosocial issues were positively related to satisfaction [104].

The effect of the practitioner's consulting style on patients' satisfaction is the subject of a few more studies in this bibliography. Buller and Buller [92] refer to a 16-item interpersonal communication satisfaction scale that they adapted to the physician-patient context. This scale employs a five-point Likert-type response format. Alpha reliability was .94. We found no other references to this questionnaire. Bensing [106] used a scale with six items with a five-point Likert-format reflecting the dimension of humaneness. Alpha reliability was .72. Unidimensionality was confirmed using factor analyses in which the first factor accounted for 46% of the total variance. The study shows the relevance of doctor's non-verbal behaviour to patient satisfaction.

Hull and Hull [88] developed a questionnaire to assess patient's views about a consultation, with one item on general satisfaction and another item asking whether the patient felt able to tell the doctor about the problem. Thus only two questions were included to assess satisfaction. The time-constraint of an interview was most felt by the patients when a psychosocial component was part of the problem. Anderson and Mattsson [97] translated the "Hull questionnaire" into Swedish. Consultations on psychosocial problems tended to take

longer. Doctors generally considered the time spent on a psychosocial problem too short. This opinion was not found among patients. The satisfaction scores they found were comparable to the scores that Hull and Hull found. This is remarkable, since Hull and Hull studied satisfaction with most of the consultations taking less than eight minutes, whereas Anderson and Mattson studied with consultations taking 21 minutes on average.

Wolley et al. [98] interviewed families of children with a life-threatening illness on their ability to cope. According to these families the most important determinant of their ability to cope was how the diagnosis had been communicated. Based on this finding a questionnaire was constructed with five items on the communication process and an overall satisfaction item. No information on reliability or validity is provided.

Meyboom [93] reported on the use of a structured open interview to generate patients' complaints with their general practitioner. Complaints were ventilated by 15% of the respondents. Owing to the questionnaire's structure, complaints were restricted to the instrumental dimension.

Bird et al. [95], Steptoe et al. [105], Morrel et al. [90], Savage and Armstrong [101], Thomas et al. [62] all developed a questionnaire themselves. No references to psychometric quality or sources in the literature are made. Vu et al. [100] also refer to an apparently self-developed questionnaire to assess the quality of consultations of students. They state that standardized patients can reliably assess the quality of a consultation. In another study with a self-developed questionnaire the only information provided is that the questionnaire was based on the initiative of the Royal College of General Practitioners. No reliability tests or validity tests are provided [99].

To conclude, we noted that many authors presented instruments for the assessment of satisfaction with doctor-patient communication: in this section we mentioned 18 different instruments. Many of the authors seem just to think up a suitable questionnaire, without providing much if any information on its quality. Most of these studies provide no reasons for not using another, earlier developed, questionnaire. Only some publications with a special interest in one aspect of communication or a special type of consultation use this special position as a legitimation for self-developing a new questionnaire.

Since so much experience has been gained in this field it would be a good and feasible thing to start working on a more widely accepted instrument to assess patient satisfaction with doctor-patient communication. As applies, in our opinion, to all questionnaires for assessing patient satisfaction, item generation should be based on open interviews with patients. Only few studies reported such a start. Subsequently it should be aimed at identifying more than one dimension. This is a prerequisite for validity; a consultation consists of several aspects about which the patient judgement may be assessed. It also will render the instrument more universal and such an instrument may be used with a broad range of research questions, in a variety of field situations. Also, since most research is on the aspects of a specific encounter, the questionnaire should contain references to this specific encounter.

#### 4.2.2 General practice organization

Under this heading some studies are found explicitly referring to either the unearthing of relevant dimensions of patient satisfaction or the methodological issues concerned with the assessment of patient satisfaction. In other studies the effects of certain types or aspects of practice organization are the major issue. We start with the first type of studies.

In a study, using a questionnaire that was neither designed nor validated for this purpose, a large number of aspects of the practice organization were presented to 150 patients. Extremely high levels of satisfaction were reported with The doctor, The receptionists, The appointment system, Encounters with professionals, Willingness to visit and Speed of referral. Extremely low levels were reported with Difficulty in seeing the doctor, Delay before appointment requested by receptionists, Time spent in waiting room, Getting advice by telephone and Doctor hurried and brusque [70]. It is remarkable to note that mainly negatively worded items are contained in the low satisfaction category, whereas neutral or positively worded items are contained in the high satisfaction category.

Applying this questionnaire in a study in 60 practices four factors were identified [79]. One factor had to do with the accessibility of the doctor, a second factor with the receptionist, a third factor with facilities, getting tests done and referrals, whereas the fourth factor related to the consultation itself. Lowest satisfaction scores were found in two-person practices. Higher scores were found in single and multi-person practices.

Williams and Calnan [85] designed their own questionnaire based on dimensions that they found in the literature. They employed a four or five-point scale. They found that questions of a more detailed and specific nature revealed greater levels of dissatisfaction than the scores on a question about general satisfaction. Smith and Armstrong compared the criteria of good health care in practice from patients with those of government and doctors [80]. Items were derived from government sources and interviews with patients. Criteria that originated from patients as a group were given the highest "importance" scores by another group of patients. The top three was formed by Having a doctor who listens, Having a doctor who sorts out problems and Usually seeing the same doctor. The bottom three items were Health education, Being able to change doctor easily, and Well-decorated premises. Partly similar results were reported by Baker [84]. Baker developed a Surgery Satisfaction Questionnaire. Items were derived from personal experience, the literature and comments of patients. The questionnaire underwent many changes before being finally field-tested. Factor analysis and discussions with colleagues were applied to yield a final version. Validity was tested against two criteria: the views of doctors about their surgery and the view of an external general practitioner. Five dimensions were identified: Continuity, Access, Availability, Medical care and Premises. Cronbach's alpha for the whole scale was .82. Coefficients of variation varied between 31% and 51%. Patients' scores hardly agreed with the doctor's assessment. Better correlations were found between patients' score and the external assessor's score.

Five studies bear on the issue of access, waiting time and out-of-hours services. Bestvater et al. [78] recorded real waiting time, the patient's perception of the waiting time and whether they considered this waiting time "about right", "too

long" or "much too long". The relationship between perceived waiting time and real waiting time was not perfect: patients tended to underestimate waiting time. Waiting times up to 45 minutes hardly met with a negative rating. Perceived waiting times over 60 virtually all met with a negative rating. Allen et al. [77] self-developed a questionnaire to assess patients' perceptions of accessibility to general practitioners. No information on how this questionnaire was developed is given. Harrison [73] assessed satisfaction with only one question: do you like this type of appointment system? Bollam et al. [74] based a new developed questionnaire on the quality of out-of-hours care on exploratory interviews with patients. A five-point positive to negative scale was used. Reliability of interviews was checked against tape recordings of these interviews. Satisfaction was assessed for various aspects of the consultation: e.g. examination, treatment, reassurance, doctor's manner. No reliability or validity test is reported. Dixon and Williams [76] presented a large scale study on patient satisfaction with general practitioner deputizing services without any reference to the quality or structure of their assessment instrument.

Rethans et al. [75] developed a questionnaire to explore the patients' opinion about their contacts with a general practitioner when a computer was present in the consulting room. Items were based on open interviews with 6 patients. Response format was a 4-point Likert scale. No psychometric characteristics were reported.

Ross et al. introduced a questionnaire on satisfaction with pediatric practice [69]. They sum up a list of items making up the satisfaction-assessment instrument. Ross et al. used this questionnaire to study satisfaction with paediatric care. They focused particularly upon the effects of physician's socio-demographic characteristics on satisfaction. They showed that in large prepaid multispecialty groups, where the physician is assigned to the client, lower satisfaction is found for female, Catholic, older and low-status-background physicians. In smaller practices, where the physician is selected by patients themselves, such effects were not found.

Somewhat exceptional is the questionnaire developed by Roghmann et al.<sup>12</sup> It consists of two parts: one on satisfaction with doctors in general and the other part referring to specified experiences with "doctors". Response-format is mixed: sometimes a three-point scale, sometimes a two-point scale is used. In a "follow-up" publication discussing the results of five separate studies using this questionnaire, different versions of this questionnaire were used [6]. In another study [67] a relationship was found between satisfaction and use of medical services for a fraction of the provider's subsamples, but not in all. Weis [65] specially focused upon the relationship between sociodemographic factors and satisfaction. He presents a review of the literature demonstrating the lack of consistency of the relationship between these variables. He suggests that these inconsistencies should be attributed to predisposing variables like: the confidence in community medical care system, having a regular source of care and general life satisfaction.

Drury et al. [17] interviewed 126 patients from a general practice on their attitude towards a nurse practitioner using open-ended questions. The top 5

<sup>12</sup> Roghmann, K.J., Hengst, A., Zastowny, T.R. Satisfaction with medical care: its measurement and relation to utilization. *Medical Care*; 17, 1979, no. 5, pp. 461-479.

most desired qualities of either a general practitioner or a nurse practitioner were: treating as an individual, understanding, can answer questions, listens carefully and is patient.

Williamson [81] developed a questionnaire based on 16 pilot interviews. The questionnaire focuses on various facets of general practice. No information on psychometric characteristics of this questionnaire is provided. Field [82] asked her patients "how satisfied are you that the drugs you are taking are doing you good". Response to this question was presented as patients' satisfaction with the drugs they were taking. Curtis [71] asked 896 respondents about their preferences regarding group practices or single-handed practices and about the qualities they appreciated in their doctor, using a self-developed questionnaire. No information on the whereabouts of the questionnaire is given, nor is any information given on reliability and validity. Nicol [72] assessed patient satisfaction with job-sharing using a single item on general satisfaction with a linear analogue scale from 0-10. No differences in satisfaction scores with the availability of job-sharing partners compared to full-timers were found. Gerace and Sangster [134] also developed a satisfaction questionnaire with 37 items that were used to assess one dimension of satisfaction. The only information on the whereabouts of this questionnaire is that it was constructed by the authors. Highest correlation with patient satisfaction was found for the adequacy of the time spent with their identified ("own") family physician followed by clarity of physicians' instructions and education, being able to express concern about teaching programme and the availability of an identified physician.

To conclude: Again we counted a fair number (19) of questionnaires aiming at assessing patient satisfaction with general practice organization. Again very often no reason was provided for not employing an already developed questionnaire. And again not much information is provided on validity or reliability. Some remarkable findings, however, should be highlighted. In one study items that were positively worded met with more satisfaction than negatively worded items [70]. Williams and Calnan [85] showed that questions of a more detailed nature were met with less satisfaction, resulting in a greater response variability. Also, a difference was demonstrated between the official policy outlook or a general practitioner's outlook on satisfaction and the patient's view [84,80].

This field too has been extensively studied, like patient satisfaction with doctor-patient communication. In our view it is also in this field that the possibility lies of developing a broadly accepted questionnaire. It should again cover various dimensions, be based on an inventory among patients, and should contain questions of a detailed nature.

### **4.3 Methods in other types of health care**

In this section publications are brought together among users of types of care that are more or less remotely related to the central theme of this bibliography. Therefore, we shall mainly discuss those publications that provide methodological insight into their assessment methods.

#### 4.3.1 Nursing

Two publications refer to a questionnaire developed by Risser. According to Risser the most important dimensions of patient satisfaction with nursing care are Interpersonal relationships, Personality and Professional competence of the provider.<sup>13</sup> Hinshaw and Atwood [107] modified the Risser questionnaire to make it applicable to evaluating inpatient nurses and nursing care. Psychometric characteristics were tested in various populations. Cronbach's alpha for each of the three subscale ranged from .44 to .97. Inter-item and item-subscale correlations paralleled these findings. The three subscales showed a relatively high intercorrelation (all higher than .55).

Ventura et al. used the Risser questionnaire with minor modifications to test the effects of primary nursing [108]. Reliability for each of the three subscales was .76. Subscale intercorrelations were high (.65 - .93). Ventura et al. doubt the discriminative validity: all scales appear to measure one general dimension. No significant differences in satisfaction scores were found comparing a traditional nursing system with primary nursing. Guzman et al. [109] describe the refinement of a patient satisfaction questionnaire. Unfortunately this publication does not give exact information on the original source of the questionnaire that they painstakingly revised, nor did they provide any information on psychometric characteristics or contents of the new questionnaire.

#### 4.3.2 Hospital Care

Cleary et al. [114] started with a pool of 40-45 items on patient satisfaction referring to eight care-domains. Factor analysis resulted in a questionnaire referring to four domains: physician satisfaction, nursing satisfaction, room satisfaction and food satisfaction with internal consistency from .80 to .90. In three different studies high satisfaction rates were found, with food satisfaction being rated lowest. They reported the use of a special response format ranging from "excellent" to "poor", in contrast with "very satisfied" to "very dissatisfied". Nelson et al. [115] describe the development of a Patient Judgement System (PJS) to generate information for monitoring long-term trends in hospital quality. Questions of the PJS were derived from the literature, focus groups and content analysis of patient's reactions to questions about hospital quality. After a pilot test a 68-item instrument was constructed with the following sections: background information on hospital stay and client, 41 items on quality, 8 items on overall satisfaction and suggestions for improvement. The format of the 41 items was special. Each item consisted of a sign-post followed by a descriptor (e.g. attention of nurses to your condition: how often nurses checked on you to keep track of how you were doing). Response format was as with Cleary et al. [114]: excellent, very good, good, fair or poor. The questionnaire results in scores on 11 scales: admission, daily care, information, nursing care, physician care, auxiliary staff, living arrangements, discharge, billing, total process and allegiance. Standard deviations were relatively large (about 20 points on a 100-point scale). Alpha reliability ranged from .86 to .97. Changes of average scores

<sup>13</sup> Risser, N. Development of an instrument to measure patient satisfaction with nurses and nursing care in primary care. *Nursing Research*; 24, 1975, pp. 45-52.

for each hospital over time were small (just two points from a scale of 100 over a period of three months). On the other hand considerable variability between hospitals was found (between-hospital variance significantly differed from within-hospital variance). The first nine scales correlated significantly with the last two "overall scales": global quality and allegiance. Correlations of items within scales significantly exceeded correlations of items with other scales without exception. Very much in line with these developments and impressive are the endeavours of the developers of the Patient Judgement of Hospital Quality (PJHQ) questionnaire [117]. In an extensive and well-documented review of the literature they sum up problems that were encountered in recent years with assessing patient satisfaction. They point to validity as the major problem. Furthermore, they draw up five minimal psychometric criteria for an instrument: (1) A questionnaire should contain subscales representing each of the major components of hospital care derived from studies using open-ended patient interviews or questionnaires. (2) Internal consistency of a subscale should be at least 0.70. (3) The subscales should measure distinct concepts. (4) Subscales should be related to at least one other measure of quality of care. (5) Subscale scores should differentiate between different populations. With regard to the response format it is remarked that a scale ranging from "excellent" to "poor" is superior to a scale ranging from "very satisfied" to "not at all satisfied". This information was obtained from a study by Ware and Hays [113], who demonstrated a greater response variability and better prediction whether patients intended to return to the same doctor and compliance with the "excellent" to "poor" subscale. Subsequently they analysed verbatim written comments on patient satisfaction from patients and they conducted three focus group discussions. The contents of these sources were analyzed. This resulted in a questionnaire with 106 items, of which 46 key items. These 46 items followed the "natural path" in the hospital: Admission (4 items), Daily care (14), Nursing care (5), Medical care (5), Other hospital staff (3), Living arrangement and the hospital environment (10), Discharge (3) and Billing (2). Items consisted of a signpost followed by a descriptor, as with Cleary et al. [114]. An exploratory factor analysis with six factors explained 68% of the total variance, with one large unrotated first factor. These factors are: Nursing & daily care, Hospital environment & ancillary staff, Medical care, Admissions, Discharge & billing. One factor was difficult to interpret: it is referred to as Information. Correlations between items within a scale virtually always exceeded correlations between items from different scales. All scales but one had an alpha  $>.70$ . The one other scale was "Overall health outcomes" with only two items and an alpha  $>.50$ . Correlations of scales with questions bearing the same dimensions were high, higher than correlations between different scales. Differences between hospitals were also reported, demonstrating a discriminating power of the questionnaire.

Davis and Hobbs [116] developed a questionnaire to assess outpatient satisfaction with rehabilitation services. They define satisfaction as the extent to which their department fulfils outpatients' treatment expectations. Department staff defined three dimensions of satisfaction: access to care, physical environment, care received. No information is given on the whereabouts of the questions that were generated. Response format ranged from "very dissatisfied" to "very satisfied". Glasser and Bazuin [112] assessed patient views on the quality of care and medical students in a medical education centre. No



information on questionnaire development or its psychometric properties are reported.

Daly and Flynn [111] constructed an instrument to assess patient feedback on inpatient rehabilitation programmes. They started off with a 19-item Patient Feedback questionnaire. Each separate item was validated against a CSQ score. A refinement process delivered a five-point scale with Cronbach's alpha of .72. Surprisingly, they combined this five-point scale together with seven items of the CSQ.

#### **4.3.3 Health maintenance organizations**

Cryns et al. provided much information on an instrument that they developed to assess older patients' satisfaction with an HMO [120]. They started with four focused group interviews among 24 persons 65 years of age or older. The contents of the group discussions were thoroughly analysed. A total of 472 topics were noticed, with 173 distinct ideas. The doctor was the subject most mentioned, followed by finances and appointments. On the basis of this inventory a 60-item questionnaire (OPPS) was constructed. Statements were provided with a five-point Likert-type scale. Factor analysis using ortho-oblique cluster-oriented rotation led to 14 factors, accounting for 62% of the total variance. Since several of these factors intercorrelated, higher-order factors were sought. Two second-order factors were identified: general positive attitude and general negative attitude. This suggests that positive and negative attitudes are not just two extremes of one dimension, but different dimensions. The OPPS scores were also correlated with CSQ and PSQ scores. The correlation of the third-order general OPPS factor with the CSQ was .40. Several OPPS scales correlated well with PSQ dimensions. But some OPPS scales were not correlated to any PSQ dimension, suggesting that the PSQ does not fully cover the relevant realm of patient satisfaction items that is covered by the OPPS.

Weiss and Senf [122] also self developed a questionnaire on patient satisfaction. The final version of this questionnaire should predict whether or not a client wants to change health plans. This questionnaire contained three dimensions: satisfaction with medical care in general, satisfaction with patient's own individual health care and satisfaction with patients' most recent encounter with their health care provider. The final questionnaire consisted of 90 variables. It was pretested for understandability. Results of a study with a prospective design showed that 10 of these 90 variables related to change in health plan. These 10 items were selected to form a new scale. Cronbach's alpha for this scale was .84. The predictive value of this questionnaire was not tested again in another population, as far as we know. In our view this would be a necessary step to take to provide real information on the validity of this scale, which was after all only the result of a fishing expedition in a pond filled with many variables.

Ward assessed patient satisfaction with an HMO among recent enrollees [118]. The only information on the construction of the instrument to assess satisfaction are the dimensions it contains: humaneness, costs and payment mechanisms, convenience, competence of staff and verbal-instrumental behaviour of staff. Rossiter et al. [119] constructed a questionnaire to assess satisfaction with technical quality and accessibility. They used 7 items with a 4-point scale running from "very dissatisfied" to "very satisfied". They applied a confirmatory

factor analysis of which no data are presented. Hall et al. [121] also developed a 12-item questionnaire to assess patient satisfaction with medical care, based on items presented in the literature, covering overall satisfaction, amount of contact with providers, communication behaviour of providers, humaneness of providers, technical competence and relief of worry.

#### **4.3.4 Dentistry**

Johnson et al. [123] describe the development and validation of an instrument for assessing consumer quality assessment with dentistry. Items were based on a literature review. Selection was done on consensus bases among the authors. Eleven scales, containing a total of 78 items, were defined. Scales were balanced with regard to positive and negative wordings. Response format was a five point Likert-type scale. Factor analysis was used to reduce the total number of items to 35, in seven factors accounting for 63.5% of total variance. Scales were: Art of care, Technical aspects of care, Access to care, Cost of care, General satisfaction, Pain, Interpersonal relations with staff. Overall item correlations within a scale were higher than item correlations between scales. Alpha reliability for the seven scales ranged from .65 to .90.

#### **4.3.5 Mental health care**

Apart from the CSQ that has been used in the field of mental health care, other questionnaires have been developed. Slater et al. [124] developed a questionnaire with items that were suggested by staff members. After pretesting, a 50-item questionnaire was administered to 170 outpatient mental health clinic patients. Test retest-reliability within one week for 32 items was higher than .50. Validity was assessed by correlating the test score with the therapist's view of the patient's level of satisfaction. Correlation was 0.13. Clients who showed up more often at appointments had higher test scores than clients who showed up less often at appointments. Factor analysis resulted in four factors: Overall care, Therapeutic relationship, Prevention and Access. In another study [126] described earlier with the ERS, a ranking method for needs of chronic psychiatric patients was developed. Again items were not based on patient interviews, but on a literature review. Six dimensions could be identified: Recreation, Finances, Household, Occupational role, Safety and Accommodation.

Kooi en Donker [127] extensively interviewed eight ex-clients on any evaluative remark about the care they had received. This resulted in 50 different evaluative remarks. Subsequently these remarks were discussed in a group discussion with five of these clients and two clients' representatives. New remarks were added and grouped into six areas of interest: Treatment of problems, Information and participation, Relationship with care provider, Felt respect, Procedures, Access and building. In a third round these items were discussed with professionals and managers working in the mental health care sector. They added one area of interest: Treatment effects. Questionnaire items were arranged in the questionnaire from intake to the last session. The response format was a five-point Likert-type scale. Factor analysis revealed five factors accounting for 64% of the total variance: Treatment effect, Treatment of

problems, Respectful approach during intake, Respectful approach during treatment, Information. Cronbach's alpha for these items ranged from .77 to .94.

#### **4.3.6 Alternative medicine**

Fleuren et al. [128] describe a study in satisfaction with "alternative" medicine. They refer to the development of a 19-item questionnaire to assess satisfaction with contact with the alternative curer. It is one-dimensional, with Cronbach's alpha of .93 and consisting of items based on the literature: e.g. satisfaction with diagnoses, treatment, medication, results, clarity of treatment and effects of medication.

#### **4.3.7 Physical therapy**

Patient opinions about direct access to physical therapists have been studied by Durant et al. [129]. They used a 15-item questionnaire to assess patient opinion. This questionnaire was pilot-tested on its understandability. No psychometric characteristics are published.

### **4.4 Remainder**

#### **4.4.1 Patient education**

Oermann et al. [132] developed an instrument to assess satisfaction with teaching, consisting of an 11-item Likert-type scale, developed by the investigators, with an alpha reliability of 0.87. Gorman et al. [137] also developed a questionnaire to assess satisfaction with a diabetes teaching programme. In this questionnaire items were included like: comfort in class, patients' perception regarding treatment as individuals, satisfaction with life in general and influence of recommendations on future health. Alpha reliability was 0.93.

#### **4.4.2 Care for children**

Hatcher and Richtsmeier [143] assessed the parent's perception of a paediatric visit using a questionnaire with ten items with a five-point Likert-type scale. No further information on the questionnaire is given. Dutton et al. [145] also asked respondents how satisfied they were with their child's care: the providers' personal care, competence, friendliness, atmosphere, speed of service and cost. Smith et al. [135] compared satisfaction with care for asthmatic children among two groups: one control group and one group exposed to procedures to enhance compliance. Satisfaction was assessed with an instrument with questions on waiting time, length of consultation, friendliness of doctor, doctor's understanding of worries and businesslike style of doctor. Virtually all satisfaction items correlated positively with compliance assessed at follow-up.

#### **4.4.3 Diabetes care**

In a study [68] on the most preferred care-provider among non-insulin-dependent diabetic patients a preference for the general practitioner over the hospital

doctor was found, in spite of the fact that the majority of the diabetic patients were currently receiving hospital care. The diabetic's judgement did not differ for both professionals regarding the two most valued aspects of diabetes care: Giving clear information on how to manage the diabetes and knowledge about the problems that diabetic patients experience. This preference for the general practitioner over the hospital doctor was related to the lower judgement of the hospital doctor's abilities for communication, convenience and accessibility, although the majority of these patients were currently receiving hospital-based care. In another study [137] the concept of patient satisfaction is mixed up with other constructs like life satisfaction, patients' perception of understanding their condition and treatment and demographics. In our opinion only few items really related to the issues of patient satisfaction: patients' perception regarding treatment as individuals. For this questionnaire one Cronbach's alpha was calculated:  $r=0.93$ .

#### **4.4.4 Palliative care**

Higginson et al. [144] assessed "current problems" among terminally ill patients living at home and a family member. Based on previous research, eight items were selected to be included in the questionnaire. Items were: Pain control, Symptom control, Patient anxiety, Family anxiety, Practical, Wasted time, Communication from support team and Communication from other professionals. These items were rated on a five-point scale from best (0) to worst (4). Most problems occurred with the first four items; however only low scores were found (0-2). Family member and patient ratings were correlated (Pearson's  $r=0.71$ ) but family scores were higher. Respondents were also urged to give additional comments. Negative comments concerned communication with doctors and nurses, usually related to previous experiences.

## **5 Reviews and meta-analyses**

This bibliography contains 18 reviews or meta-analyses. These are concentrated in two blips: one around 1983 with 9 publications and a later one, around 1989.

### **5.1 The first blip: reviews around 1983**

Lebow reviewed the literature on patient satisfaction with mental health care [147,148,150,151,154]. For Lebow a narrow definition of consumer satisfaction is: the felt adequacy of the mental health treatment and of the surrounding milieu: cost, continuity, availability, accessibility of care, the reaction to supporting services and satisfaction with process and outcome [154]. He noticed a flood of research in consumer satisfaction with mental health care. This research is very often poor, from a methodological point of view [150,154]. He singles out the work of Larsen et al. in the development of the CSQ as very promising, and a hope for the future [147]. In a review concentrating on methodological issues Lebow describes the following issues [147,154]. Selection of items can be problematic: items may be included that are not related to consumer satisfaction, not enough items may be included to probe areas of

possible dissatisfaction, or consumers are not consulted in item selection. Measurement problems may arise because of the ambiguity or oversimplification of response alternatives, because a neutral response is not dealt with in a correct way, or problems may arise because of lacking psychometric quality. Most of all measurement problems arise because of the practice of quickly assembling new scales. Also sampling problems may occur: early drop-outs are very often not included, whereas response-rates are very often low. Furthermore, the high satisfaction rates found in many studies may be caused by several distorting sources of response bias: acquiescence, social desirability, Hawthorne effects, experimenter bias and reactivity. Also, other factors like cognitive dissonance reduction or life satisfaction may influence a satisfaction rating. Lebow concludes that a satisfaction rating is a rating of much more than only the assessment of the quality of care. The generally reported high satisfaction rates are problematic: other indicators like drop-out rates tell a different story, whereas statistical analysis of relationships of satisfaction with other variables becomes impossible. According to Lebow the field of satisfaction research is ripe for further research [150], with a need for research on the validation of instruments and the effects of co-varying conditions on satisfaction. Lebow suggests always using a well-developed scale, such as the CSQ, and supplementing it with extra items to tailor the questionnaire to the specific situation [148]. Some of the issues raised by Lebow were also mentioned by El-Guebaly et al. [153]. In a comparison of consumer satisfaction research in the area of mental health care with the area of health care in general Lebow categorizes the research into generations. In the first generation methodological errors are commonplace: no definition of what is meant by consumer satisfaction, lacking good psychometric practice, insufficient probing for sources of dissatisfaction, consumers were not included in scale development, each study used a different measure, poor procedures for gathering the data, biased samples, biased response, primitive data analysis and poorly written reports. Lebow identifies a trend toward better research with the work of groups around Hulka, Ware and Larsen and Attkisson, suggesting the rise of a second generation of better research.

Lehman and Zastowny [152] did a meta-analysis of the literature in order to establish norms for different types of care. They establish a standardized measure for the deviation of an observed score from the numerical midpoint of a satisfaction scale. They conclude that much information is lacking for arriving at reliable norms for different settings.

Lochman [155] reviewed publications on patients' satisfaction after specific identifiable visits to their physician. He remarks upon the methodological weakness of reviewed studies: sampling problems, and measurement issues concerning validity and reliability. Lochman advises studying satisfaction shortly after a specific visit, but focusing upon the patient's broad sense of satisfaction. In this way patient's attention is not drawn to specific aspects of an encounter, thus preventing the extra attention this aspect might get from distorting the patient's own judgement.

Pascoe [149] introduces the concept of direct and indirect approaches to assessing satisfaction. The direct approach refers to specific encounters, the indirect approach to health care in general. Pascoe reports alpha reliability to be around 0.50 for most of the questionnaires that he studied. In contrast with Lochman, Pascoe states that general measures may not adequately tap aspects

of care responsible for relative dissatisfaction, leading to inflated reports of satisfaction. Multidimensional measures are less prone to such problems. Unfortunately, Pascoe continues, no direct approaches using multidimensional measures exist. Pascoe also points to the lack of a theoretical fundament for the concept of patient satisfaction.

## 5.2 The second blip: publications around 1989

In this sub-collection three Dutch publications appear: pointing to a somewhat belated but growing Dutch interest in the subject of patient satisfaction with reviews on satisfaction among hospital-patients, mental health care and general practitioners' care. Furthermore, one author (Hall) appears in four titles, of which three in one journal. In the publications in this second blip the term meta-analysis or meta-study is used frequently.

Hall et al. [157] meta-analysed 41 studies on medical encounters. Information-giving during a consultation and patient satisfaction are highly significantly associated. Perceived provider's competence (technical and interpersonal), partnership building, greater length of interview and positive talk are also related to patient satisfaction. Question-asking (information-seeking) was not related to patient satisfaction. In another publication Hall and Dornan [158] report on another meta-analysis on satisfaction with medical care in general, with 221 studies included. Satisfaction instruments were characterised using four factors: Directness (whether they were asked about their satisfaction or only to describe or evaluate their care), Specificity (the degree to which questions refer to a specific event), Type of care and Dimensionality (referring to the different aspects of medical care). Aspects are (in descending order of prevalence): humaneness, informativeness, overall quality, overall technical competence, bureaucratic procedures, access or availability, cost, physical facilities, continuity, outcome, handling of non-medical problems. Most questionnaires (nearly 3/4) were home-made by the investigators. Average satisfaction levels were around 80%. Highest satisfaction scores were found for the Overall quality, Humaneness, Competence and Outcome. Lowest scores were found for Attention to psychosocial problems, Bureaucracy, Cost, Informativeness and Access [159]. Within-study analysis [158] showed the following significant relationships: higher satisfaction goes together with less experienced physicians, higher specificity of the event, and is found in client samples from a health care system as contrasted with the general population. Higher satisfaction rates are found when fewer items are employed to assess satisfaction. The same goes for satisfaction scores based on selfmade questionnaires as contrasted with earlier-published questionnaires. In another publication [162], based on a subset of 110 titles from the earlier-mentioned bibliography [158], Hall and Dornan assessed the influence of socio-demographic variables on satisfaction scores. They falsified the pertaining view of higher satisfaction among women compared to men. In contrast they found men to be more satisfied in studies among black or Hispanic respondents, whereas this phenomenon did not exist in studies with white respondents. Systematically older people are more satisfied than younger people. But Hall and Dornan note a considerable variability among studies, indicating that relationships between satisfaction and sociodemographic variables are not universal, but vary among study populations and other study characteristics.

Ley [11, chapter 1] discusses the literature on satisfaction with communication up to the year 1985. He states that no general improvement in satisfaction with communication can be established in spite of the already long period of attention to the subject. He concludes that, in contrast with satisfaction studies in other areas, high levels of dissatisfaction are encountered.

Visser edited a book on patient satisfaction with hospital care [156]. Very much in line with the publication on the PJHQ a questionnaire is presented that systematically introduces several aspects of a hospital stay. The response format differs from the PJHQ: patients are asked to rate their experiences from 1 to 10. Rather unique is a piece of research that is presented on the effect on satisfaction scores of the interviewer's relationship with the hospital that provided care. No significant differences were found in satisfaction scores that were gathered by interviewers who were linked to an independent university compared to interviewers who were operating on behalf of the hospital. Socially desirability response set and expressing feelings of gratitude were related to higher satisfaction scores.

Lemmens and Donker [163] present a meta-study on research on patient satisfaction with mental health care. The conclusions of this meta-study (actually a theme-oriented review) are quite radical: most of the studies on patient satisfaction have not been valid and therefore did not produce valid results. It is the issue of validity that is time and again focused upon by these authors. They attribute the high satisfaction-rates to this lack of validity. These high satisfaction scores do not reflect true high levels of satisfaction. They point to the relatively high drop-out rates as evidence of dissatisfaction. Furthermore most questionnaires (e.g. the CSQ) have been constructed without hearing clients. This also hampers validity. Corrigan [161] likewise reviewed the literature on satisfaction with mental health care. He tried to compare inpatient with outpatient care, and found this hard to do, mainly because of the lack of sufficient data on outpatient care. He points to the relationship between symptoms and satisfaction: low levels of psychiatric symptoms or overall improvement are positively related to satisfaction.

Wensing et al. [83] reviewed 102 publications that they considered relevant to the subject of patient satisfaction with the general practitioner. In 80% of the studies on the general practitioner a home-made questionnaire was used. Often information on methodology is missing from a publication. Reliability tests are also scarce. They conclude that the studies that have been published very often lack essential methodological quality.

McDaniel and Nash [160] did an extensive search for instruments to assess satisfaction with nursing care. They found 21 instruments. In the majority of cases instruments had only one or two references. Only eight instruments contained subscales. Reliability data were available for 9 instruments; validity was not established.

## 6 Discussion

### 6.1 Back to the research questions

In this chapter we go back to the two questions that were to be answered by compiling this bibliography.

*Is there already a good questionnaire for assessing patient satisfaction with home-care and primary care?*

It is safe to conclude that no suitable instrument is as yet available for assessing patient satisfaction with home care. In section 4.1 five publications are mentioned assessing patient satisfaction with home care or primary care. Four of these questionnaires hardly deserve to be called a questionnaire: no information on the development of the questionnaire is given, no tests for reliability or validity are provided, or the questionnaire consists of only one or two questions. The questionnaire developed by McCusker [59] was reported to meet the criterion of discriminant validity only for one dimension: preference for home care. This dimension can hardly be called a satisfaction measure. Another methodological weakness of the questionnaire of McCusker is the generation of questionnaire items. Generation is based on the literature and comments of investigators and staff. No patient was involved in the process of developing the questionnaire. This is a serious drawback for this questionnaire. However, the development of questionnaires on satisfaction with other aspects of care provides much information on the possibilities and impossibilities of assessing patient satisfaction with home care. This certainly applies to the reports of the development of the PJS [115], and the PJHQ [117] and the questionnaire constructed by Kooi en Donker [127].

*What can be learned from the experiences reported by the authors in this bibliography?*

The first thing that can be learned is to be very cautious. In 1982 Lebow [147] recognised a trend towards a second generation of better research with the questionnaires of Hulka, Ware and Larsen. This bibliography demonstrates the limited validity of this remark: since then many new questionnaires have been constructed, used once and never again. Somehow many researchers seemed not to be as impressed as Lebow was with this "second generation of better research methods". Also, the questionnaires that Lebow mentioned have met serious criticism. In a way it would seem that we are in more or less the same situation as was Lebow, but now other questionnaires like the PJS and the PJHQ seem to be promising.

### 6.2 The unsolved problem

#### 6.2.1 Patient satisfaction is still an undefined concept

Throughout the literature on patient satisfaction one issue reappears: what is a theoretically sound definition of patient satisfaction? Looking at the theories on patient satisfaction in the last decades it is obvious that the theoretical development is minimal compared with the development of instruments.



Furthermore, there seems to be more contradiction than consensus among the few formulated theories (see Ch. 1).

It is our opinion that this failure to define the concept of patient satisfaction properly and base it on a theoretical foundation is the main reason for the unsatisfactory development of this area.

The definition of patient satisfaction most often contains two elements: expectation and the degree to which this is fulfilled. But patient satisfaction has also been described as a judgement, a belief, a feeling, an attitude, an expectation, a fulfilment of wants, an evaluation, an opinion etc. (see Ch. 1). All researchers claim that their instruments assess patient satisfaction. Evidently there is no consensus on what they are assessing. This might result from the following theoretical problem. Patient satisfaction is a psychological concept, not an observable feature, which necessarily has to be constructed theoretically before it can be assessed. When patient satisfaction is assumed to be a belief, an attitude, an expectation or an opinion, it is necessary to explain psychologically how these are formed (and work) in the patient's mind. And how they are supposed to be related to factors in the social and clinical environment. In most studies an implicit concept of expectation is used to assess patient satisfaction. Explicitly formulated theoretical accounts of how the concept was constructed are normally absent from research articles. More theoretical explication of the concepts used would provide insight into the way the concept of patient satisfaction is defined and operationalized. Comparison and evaluation of these theoretical accounts would open possibilities for more consensus on the definition of patient satisfaction. Eventually this may lead to more convergence in instrument development.

As with concepts of patient satisfaction, researchers produced a large variety of dimensions or aspects of patient satisfaction [e.g. 158,159]. Often the selection of dimensions is data-driven. Dimensions are produced by factor analyses of the item results. Although factor analysis provides insight in the statistical structure of data, it does not necessarily provide conceptual structures. Statistical structures and conceptual structures are not the same. Conceptual structures stem from theories. Theories explain how dimensions are related internally and predict how they are related to other variables, making the testing of predictive validity possible. The frequent practice in patient satisfaction research of sticking concepts (dimensions) on statistical results without theoretical account leads to a system of statistically well-ordered but conceptually confused variation of dimensions. On statistical grounds one cannot explain theoretically or methodologically how dimensions are related and how valid they are. The construction of a theoretical framework is required to order the dimensions logically and to make their validation possible.

The lack of a theoretically sound foundation for the concept of patient satisfaction is the cause of a major problem: the impossibility of establishing validity. A valid instrument would imply that the response to this instrument is a true representation of the values of something that exists independently of this questionnaire: patient satisfaction. With the lack of a good definition no "gold standard" is available. Lack of a gold standard is a main cause of stagnation of progress in the development of valid and reliable instruments. Rather than converging to one common point, research seem to diverge in different directions.

## 6.2.2 How have authors tried to solve the problem of validity?

Several authors have tried to solve this problem by validating their questionnaire against the response to one question: "how satisfied are you?" (as if this were the gold standard) It is clear that such an approach is no solution. If this gold standard were a true gold standard, one may wonder about the reasons for even trying to develop another, inferior, or perhaps equally good, assessment method. Only if the response to the one question on patient satisfaction is considered inferior to the questionnaire that is being developed, does a development process seem to be rational. But testing an instrument against an inferior measure can hardly be called validation.

It is a fact that quite some evidence exists demonstrating that a general measure of satisfaction is not valid. Assessing a common satisfaction score is like pulling for a congratulatory reaction [52]. Asking for general satisfaction leads to higher satisfaction scores compared to more specific questions [85]. Other authors followed another route to arrive at a valid instrument. They devoted much energy to talking to patients or analysing their response to open ended questionnaires asking about aspects of quality of care and satisfaction with care. In such endeavours validity is aimed at by having patients select the relevant items and dimensions for their judgement. Item selection is data-driven. This method seems to be at least better than using other sources as obscure as "analysing the literature, without further specifications" or "discussions with staff" or "our own experiences". Questionnaires that are based on such sources certainly are not valid. A comparison of the ranking of criteria of good health between patients and "official rankings" showed no relationship [80]. Another example is the failure to agree on the quality of care provided in a doctor's surgery between the doctor and the patient [84]. Or the very poor relationship between the assessment of the patient's satisfaction by the patient or a medical specialist [124]. Questionnaires that are based on open interviews and discussions with patients at least seem to bear content validity.

The two frequently encountered elements in patient satisfaction, expectation and degree of fulfilment, acquire some evidence. In two studies in England and Sweden, with the same instrument, on patient's satisfaction with consultation-time similar satisfaction and dissatisfaction ratings were found. But consultation times differed substantially: about 8 versus 21 minutes. Thus satisfaction ratings on the length of a consultation do not necessarily vary with the true length of the consultation. The differing expectations in both countries of what can be considered to be a decent length of a consultation could offer an explanation. On the other hand, expectations seem to be influenced by the actual experience [5], the same experiences on which the satisfaction judgement is based. Hence satisfaction seems to be the difference between two components that are interdependent: expectations and care provided. On the strength of the results of many studies it seems that this difference is relatively stable: usually about 15% of the respondents seem to be dissatisfied. Perhaps this figure tells us more about the fraction of patients capable of expressing criticism about health care than about the quality of health care. Circumstantial evidence for this point comes from studies with the ERS. These studies [52,53] demonstrated high satisfaction scores for those items that were considered important, and lower satisfaction scores that were considered less important. Demonstrating dissatisfaction with matters that really matter seems to be "not done", whereas

demonstrating dissatisfaction with matters that do not matter may be acceptable. One study even demonstrated a strong positive relationship between expectations and satisfaction [42]. Such a finding was not replicated in another study [40].

With this we are back to our major problem in the field of assessing patient satisfaction: the issue of defining the concept. A good definition of a concept, is a prerequisite of validity. If no clear definition exists of a concept it is not possible to test whether an instrument assesses the concept in a correct way: the gold standard is lacking against which validity can be tested. However, it is not likely that the concept of patient satisfaction will be well defined in the near future. Many authors have tried to get a grip on the concept, without success.

On the other hand, the concept of patient satisfaction remains on the political agenda. Thus satisfaction will continue to be studied. And, although the concept of satisfaction cannot be fully understood, looking at differences in satisfaction scores between institutions or aspects of care may remain a fruitful source of information in order to improve health care delivery systems according to the consumer's view.

Therefore, we turn to a more pragmatic approach, because of the political agenda with interest in the patient's judgement of health care. We present some research findings that we encountered in making this bibliography that may be useful for constructing a questionnaire on patient satisfaction.

### **6.3 Common lessons from the literature**

#### **6.3.1 Relationship with outcome measures**

The relationship between satisfaction scores and outcome measures is a relationship with mixed emotions. From a theoretical point of view both issues should in general be related. A cured patient should be more satisfied with the care received than a patient who was not cured. This positive although not perfect relationship is also found in empirical studies [44,45]. But, for example in a qualitative inventory among mental health care clients on the aspects of care they received considered relevant by them, the outcome was not included as relevant to their judgement [127]. Therefore the outcome measures should play only a minor role in an instrument for assessing the patient's judgement of health care.

#### **6.3.2 Response categories and item phrasing**

A variety of response categories have been used. The SPPCS started with a Thurston scaling technique, developing into a Likert-type scale. This, five-point, Likert-type scale has been used most frequently. Response categories varied. A major type ranged from "very satisfied" to "very dissatisfied" or from "totally disagree" to "totally agree". Another type was used by the authors of the PJS [115] and the PJHQ [117]. They asked their respondents to rate certain aspects of care using response categories ranging from "excellent" to "poor" care. They consider this type of response category superior to the "very satisfied" - "not at all satisfied" response categories: it demonstrated greater variability and

better predictability of patients intentions to return [113,117]. With the PJS and the PJHQ the authors seem to have changed not only their response categories but also the name of the central theme. The concept of patient satisfaction is replaced by the concept of patient judgement. Patients are asked to judge several aspects of the care delivered to them. Would this be more than only a linguistic difference?

In the item phrasing three aspects can be distinguished. Items with (1) a personal referent versus a general referent, (2) items referring to care in general versus a specific experience and (3) items with a negative or a positive wording. Items with a personal referent (about "my" care) are associated with higher satisfaction scores [35]. Items referring to health care in general seem to be more related to personality characteristics than items referring to specific experiences [30,31]. The greater the detail in which items are worded, the more negative responses are obtained [85]. Items with a negative wording meet with lower satisfaction scores than items with a positive wording [70,114]. Negatively worded and positively worded items may even end up in two separate factors when factor analysis is performed [120].

On the strength of these findings one may conclude that response categories asking for the patient's judgement are perhaps superior to response categories asking for satisfaction ratings. Items should be worded in terms of specific aspects of the care provided to increase response variability and to minimize the effect of personality characteristics on the response. Two issues remain. The first issue is the one related to the positive or negative wording of the items. It would seem reasonable to balance the number of positively and negatively worded items. But, the danger is that the response to the negatively worded items is systematically lower than the response to the positively worded items. In this case factor analysis may point to the existence of two factors: such a conclusion would be totally invalid. It would only point to the existence of two response sets: one response set for positively worded items and one for negatively worded items. This problem, however, is evaded by introducing patient-judgement response categories. In this case items are formulated in a neutral way. The second issue is the one related to whether or not a personal referent should be included in the items. Including a personal referent has the advantage that a clear coupling can be made with a specific encounter. Including a general referent solves the non-response problem: one can always answer, even for instance if the respondent did not attend a clinic. One may, however, wonder about the reliability of such a response. Not on the basis of empirical results, but on the basis of these considerations, a personal referent would be preferred to a general referent.

### 6.3.3 Drop-out rates

In many studies drop-out rates are reported. Drop-out clients are not usually included in a study population. Drop-out can be considered a consequence of dissatisfaction. In one study clients dropping out early demonstrated lower satisfaction scores.<sup>14</sup> This finding was not substantiated in other studies.

<sup>14</sup> Larsen et al., 1979, op. cit.

#### **6.3.4 Dimensions**

In the earlier studies on patient satisfaction the dimensionality of patient satisfaction is already reported. The dimensionality is presented as an intrinsic dimension of one concept: satisfaction. Factor analysis is used to distinguish between different factors or dimensions. Another approach would be to consider patient satisfaction to relate to different aspects of care. Depending on the degree of specificity required by the research questions, various degrees of specific aspects can be introduced. Consider a research project into the satisfaction with home care. Aspects of home care may be the care provided by the general practitioner, nurses, home helps and their coordination. If we have a look at the general practitioner, again several aspects can be distinguished: the quality of the consultation, access, costs, and the general practitioner's readiness to come at night. Again the consultation itself can be looked at in detail: the humaneness, information-giving, technical competence, affective behaviour, duration, environment and waiting time. Of course it will only be relevant to ask clients about a certain aspect when this aspect is recognized by these clients.

#### **6.4 Conclusion and recommendations**

Patient satisfaction is still a poorly defined concept. A good theory is lacking in which the concept is embedded in relation to other constructs. The conceptualization of patient satisfaction is often implicit and the operationalization has to manage without a firm base. In spite of the inclusion of the Psychological Abstract database, the bulk of the literature stems from an applied social research tradition in which immediate results are more important than true knowledge in remote perspective. Patient satisfaction suffers from a paucity of sound theoretical academic work.

Yet, the emphasis on patient autonomy and independence urges those who are in charge of health policy to attend to the wishes and perceptions of patients. Evaluation of the quality of care has to include the patient perspective.<sup>15</sup> Although our review does not provide a clear definition or a sound operationalization, some recommendations can be made. These recommendations amount to a methodology for developing an instruments without making the mistakes of earlier researchers (to whom we should be thankful at this point).

##### **6.4.1 Client's Home Care Evaluation Questionnaire (CHEQ)**

To develop a Client's Home Care Evaluation Questionnaire (CHEQ) it is necessary to start with a close and comprehensive inspection of the client's needs and wishes by open-ended interviews among different types of clients. Home care is provided to a very heterogeneous population such as: geriatric patients, patients in the terminal phase of cancer, diabetics and so forth. All these clients are very likely to have different needs and wishes, although some

<sup>15</sup> Ministerie van WVC, Kwaliteit van Zorg. The Hague: SDU Publishers, 1991. (Tweede Kamer, 1990-1991, Z1113, nos. 1-2).

common components can also be recognized. Then the results of this inventory should be formulated into a pool of relevant items. The items cannot always be naturally arranged according to the process of care, from intake to dismissal, because the different functions (caring, nursing, medicine) are delivered from different disciplines. In this respect a wide variety of care arrangements are possibly suited to the personal need of the patient. Therefore, the CHEQ should consist of a central core of items relevant to the entire group of clients. The inclusion of a central core is a vital prerequisite for the comparison of different studies. In addition independent modules for different types of home care arrangements can complete the questionnaire to meet the need of specific research questions.

All the items, including those of the central core, have to be phrased with a personal referent instead of a general referent ("my nurse" instead of "nurses"). The same applies to personal experience instead of general experience. Items referring to general health care seem to be more related to personal characteristics than specific experiences. Moreover, the latter can be more easily used in the feedback process of improving home care arrangements from the patient's perspective.

The wording of items in combination with response categories should, in our opinion, relate to the evaluation or judgement of care, instead of the rating of satisfaction. This implies, however, an emphasis on cognitive processes rather than on emotional processes. Thus this is largely a matter of taste. Items should be phrased in a neutral sense. Response categories should differentiate more on the positive side than on the negative side.

These recommendations are a synthesis that we made of more than a decade of empirical research into the subject of patient satisfaction. Let us hope that in the next decade opportunities will be found to study the concept from a more theoretical perspective.

**Part II**

**Bibliography**





## 1 General

1

FOX, J.G., STORMS, D.M.

A different approach to sociodemographic predictors of satisfaction with health care.

Social Science and Medicine; 15a, 1981, pp. 557-564.

variables: satisfaction with health care, sociodemographic characteristics, orientation toward care and conditions of care.  
methods: theory, hypothetico-deductive test, self-developed satisfaction rating scale.  
reliability test: no.  
validity test: no.  
population: 2582 respondents.  
dimensions: item: "If a score of ten represents the best possible medical care available and one represents a very poor quality of medical care, how would you rate the medical care you have received in the past?"

The current literature reports greatly inconsistent relationships of sociodemographic variables to satisfaction with health care, so much so that attention has turned away from sociodemographic prediction of satisfaction. In this exploratory article, the authors propose that two intervening variables, orientation toward care and conditions of care, should produce consistency and refine the role of sociodemographic variables. When an individual's conditions of care match his orientations toward care, satisfaction results. Lack of comparability of expectations and experience thus alter the sociodemographic satisfaction correlations between studies. The model's predictions are supported with data from a community survey. If this model is further validated, it may redefine the importance of the current methodological search for dimensions of satisfaction.

Author.

2

LEY, P.

Satisfaction, compliance and communication.

British Journal of Clinical Psychology; 21, 1982, pp. 241-254.

nivel (C 2407)

variables: patient satisfaction, compliance, communication.  
methods: literature review, theory on patient satisfaction, communication and compliance.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

The literature on communication, compliance, and patient satisfaction is selectively reviewed. As in earlier reviews, it is concluded that dissatisfaction with communication remains widespread, as does lack of compliance with medical advice. Related factors include poor transmission of information from patient to doctor, low understandability of communications addressed to the patient, and low levels of recall of information by patients. There does not appear to be any evidence that provision of additional information leads to adverse reactions by patients. Theoretical approaches to communication and compliance are described, and it is concluded that these should be used to direct future research.

Author.

3

LINDER-PELZ, S.

Toward a theory of patient satisfaction.

Social Science & Medicine; 16, 1982, pp. 577-582.

nivel (C 2903)

variables: patient satisfaction.  
methods: theoretical analysis, review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Despite the widespread concern in health care literature with patients' (or clients') satisfaction, there has been no explicit definition of that concept nor systematic consideration of its determinants and consequences. The definition of satisfaction proposed here is derived from Fishbein and Azjen's attitude theory and from job satisfaction research. Among the various probable determinants of a patient's satisfaction with health care are his/her attitudes and perceptions prior to experiencing that care; after reviewing relevant social science theories, the author hypothesizes five such social psychological variables which affect satisfaction ratings. The present attempt to define the concept patient satisfaction and to hypothesize some of its determinants can be regarded as first steps in building a theory of patient satisfaction.

Author.

4

LINDER-PELZ, S.

Social psychological determinants of patient satisfaction: a test of five hypotheses.

Social Science & Medicine; 16, 1982, pp. 583-589.

nivel (C 2904)

variables: patient satisfaction, patient expectations, values, entitlement and perceived occurrences.  
methods: test of 5 hypotheses, self-developed questionnaire.  
reliability test: no.  
validity test: yes.  
population: 125 primary care clinic patients.  
dimensions: doctor conduct, convenience and general satisfaction.

Five hypotheses regarding the social psychological determinants of patient satisfaction were tested among patients attending the primary care clinics of a university medical centre in Manhattan. The social psychological variables operationalized here were expectations, values, entitlement and perceived occurrences; the three dimensions of satisfaction studied were doctor conduct, convenience and general satisfaction. The social psychological variables together were found to explain only a small proportion of the variance in satisfaction, although their contribution varied with the dimension of satisfaction. Expectations consistently explained most of the variance in satisfaction ratings; particularly noteworthy was the direct effect of prior expectations of the doctor's conduct on subsequent satisfaction with that dimensions of the care received. Values had little independent effect on satisfaction, and the combination of values and expectations (their interaction) was unrelated to satisfaction. Feelings of entitlement were also unrelated to satisfaction ratings. There was some support for the discrepancy model, which holds that the greater the discrepancy between perceived occurrences and prior expectations the less the satisfaction. The importance of carrying out further methodological studies aimed at developing reliable measures of these constructs is stressed.

Author.

5

FITZPATRICK, R., HOPKINS, A.

Problems in the conceptual frame work of patient satisfaction research: an empirical exploration.

Sociology of Health and Illness; 5, 1983, no. 3, pp. 297-311.

nivel

variables: patient satisfaction, patient perspective.  
methods: conceptual comparison of patient satisfaction research versus patient perspective research, non-schedule standardized interviews (Brown & Mutter, 1966).  
reliability test: no.  
validity test: yes.  
population: 95 outpatients of neurological clinics.  
dimensions: expectations, evaluations.

Survey research into patient satisfaction has been responsible for developing a number of related concepts concerning the ways in which patients evaluate the health care they receive. Recently doubts have been expressed as to the adequacy of this approach for understanding how patients anticipate and

respond to medical encounters. This paper reports a study of patients attending neurological outpatient clinics. The results suggest that the conceptual framework deriving from patient satisfaction research provides only partial and sometimes misleading insights into the perspectives of the patients studied. The paper concludes that patients' varying concerns with regard to their illness need to be more directly considered in explaining different responses to medical consultations. This approach enables a more sensitive evaluation of health care from the patient's point of view.

Author.

6

ZASTOWNY, T.R., ROGHMANN, K.J., HENGST, A.

Satisfaction with medical care: replications and theoretic reevaluation.

Medical care; 21, 1983, no. 3, pp. 294-322.

nivel

variables: patient satisfaction, patient preferences, sociodemographic factors, utilization, physician-patient interaction, provider characteristics.

methods: review, meta-analysis, conceptual analysis, model making.

reliability test: -

validity test: -

population: -

dimensions: -

Satisfaction with medical care is frequently measured in health services research but for many different reasons. The widening conceptualizations and uses of satisfaction reported make comparisons between studies difficult. Questions regarding the structure and dimensionality of satisfaction remain. The relation of satisfaction with utilization still requires theoretic and empiric clarification. This article reports on several measures of satisfaction conducted in a research program in community paediatrics. Using multidimensional scaling techniques, the stability of the structure of satisfaction and patients' preferences for care is examined across several samples. The different structures that emerged seem to reflect unique patient experience. Several multivariate approaches were applied to study the relation between satisfaction and utilization. A regulatory self-equilibrating model was offered. Satisfaction is seen as a multifaceted concept related to short-term and long-term processes. Specific models are required to link satisfaction to the various health and illness behaviours.

Author.

7

ELBEIK, M.A.

Developing and administering a patient satisfaction survey.

Health Marketing Quarterly; 2, 1984-85, no. 2-3, pp. 185-197.

nivel (C 3403)

variables: patient satisfaction.  
methods: methodological analysis, developing a patient satisfaction questionnaire.  
reliability test: -  
validity test: -  
population: -

Discusses generating information to create a questionnaire, evaluating questionnaire responses, and implementing results to improve patient hospital care. It is suggested that patient satisfaction programs are usually placed in the context of a hospital's quality assurance program, which in turn is a subset of the management's information system. These three elements are inextricably linked to the overall operational efficiency and effectiveness of the hospital.

Author.

8

Gauthier, B.

Client satisfaction in program evaluation.

Social Indicators Research; 19, 1987, no. 2, pp. 229-254.

nivel (C 3410)

variables: client satisfaction, program evaluation.  
methods: theoretical analysis, review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This paper uses the basics of the Multiple Discrepancies Theory to analyze the level of satisfaction of clients participating in a government residential rehabilitation program. Satisfaction is modeled as being dependent on various subjective discrepancies and not being related to objective conditions. Objective conditions cover the effects of the program as measured through a set of variables that require no judgement on the part of the client. Results support the weakness of the relationship between satisfaction and objective indicators. Data also support the hypothesis of an erosion of subjective satisfaction over time. Expectation indicators are three times as powerful in explaining satisfaction than objective conditions. In conclusion, the paper questions the usefulness of client satisfaction measurement in evaluation research.

Author.

9

ELBECK, M.

An approach to client satisfaction measurement as an attribute of health service quality.

Health Care Management Review; 12, 1987, no. 3, pp. 47-52.

nivel (C 3109)

variables: patient satisfaction, quality of health services.  
methods: theoretical analysis, methodological analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Client satisfaction plays an important role in the assessment of health services quality used to establish institutional loyalty, usage patterns, word-of-mouth communications, and presumably to enhance the rate by which clients attain satisfactory levels of health. The make-up of attitude, its measurement, and a methodology for the production of a relevant health service-specific client satisfaction survey are presented.

Author.

10

CALNAN, M.

Towards a conceptual framework of lay evaluation of health care.

Social Science & Medicine; 27, 1988, no. 8, pp. 927-933.

nivel

variables: patients' perceptions, adequacy of health care.  
methods: theoretical analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

It is argued in this paper that much of the empirical research into the public's and patients' perceptions of the adequacy of health care has suffered from conceptual weaknesses. In addition, and maybe as a result of these weaknesses, a contradictory pattern of findings has emerged from this research. To overcome some of these problems it is suggested that an investigation of lay evaluation of health care should be carried out within a conceptual framework which incorporates the following elements: 1) the goals of those seeking health care in each specific instance. 2) The level of experience of use of health care. 3) The sociopolitical values upon which the particular health care system is based. 4) The images of health held by the lay population. Each of these elements interrelates with the others and their influence will be mediated through sociodemographic characteristics of the service users.

Author.

11

LEY, P.

Communicating with patients: improving communication, satisfaction and compliance.

London etc.: Chapman & Hall, 1990.  
nivel (B 2287)

variables: satisfaction, communication, compliance.  
methods: literature review, theoretical analysis, methodological analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This book is concerned with the problem of how best to provide health-related information to patients and clients. The literature on this subject has grown immensely over the last decades. Empirical research in the overlapping fields of patient satisfaction, communication and compliance is reviewed with special attention to the practical implications. Some attention is given to methodological problems.

Some of the main findings about satisfaction with communications are: 1) Substantial numbers of patients feel dissatisfied with the communications aspect of their clinical encounters. This contrasts with usually high levels of satisfaction with other aspects of the clinician-patient interaction. 2) This dissatisfaction does not seem to be reduced by clinicians trying (in untutored ways) to see that patients are fully informed. 3) The increase in educational and research concern with the problem does not seem to have led to a reduction in levels of patients' satisfaction.

Book chapters: 1. Patient satisfaction, 2. Patients' understanding of what they are told, 3. Memory for medical information, 4. The problem of patients' non-compliance, 5. Relationships between understanding, memory, satisfaction and compliance, 6. Techniques for increasing patients' recall and understanding, 7. Another problem: non-compliance by health care professionals, 8. The use of written information for patients, 9. The improvement of written information, 10. Selecting the content of communications, 11. The benefits of improved communications, 12. A summary and some practical conclusions.

12

SQUIER, R.W.

A model of empathic understanding and adherence to treatment regimens in practitioner-patient relationships.

Social Science & Medicine; 30, 1990, pp. 325-339.

nivel

variables: patient satisfaction, perception of empathic understanding.  
methods: literature review, model including patient satisfaction and patient adherence.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Empathic understanding in practitioner relationships is postulated as necessary for adherence to therapeutic regimens. It is considered to be one of the most important practitioner relationship skills leading ultimately to patient health benefit. Research literature from a wide-range of health disciplines including personality theory, social psychology, psychotherapy, psycho-analysis, and practitioner-patient communication highlights the key role of empathic processes in personal health care. A model of empathic understanding is described which attempts to integrate the substantive findings in the research literature and seeks to generate new ideas for further investigation. The model addresses theoretical relationships between practitioners' empathic understanding, patients' knowledge of their illness and motivation to get better, adherence to treatment advice, and outcome. Recent work on the selection and training of medical and nursing staff in empathic skills is reviewed. A number of areas for future research are outlined including the effect of individual practitioner differences in the components of empathy, empathic compatibility in practitioner-patient dyads, fluctuations in levels of practitioner empathy during long-term care, specific practitioner behaviours which communicate empathy, and the relationship between factors of patient satisfaction and the perception of empathic understanding.

Author.

13

HUGHES, T.E., LARSON, L.N.

Patient involvement in health care: a procedural justice viewpoint.

Medical Care; 29, 1991, no. 3, pp. 297-303.

nivel

variables: procedural justice, outcome satisfaction, physician competence.

methods: theoretical analysis, outcome satisfaction was measured by one question.

reliability test: no.

validity test: no.

population: 100 students.

dimensions: -

Although the call for increased patient involvement in health care is common, no theoretical basis has been developed to support it. In this research procedural justice is introduced as a theoretical basis to support the call for patient involvement in health care. Procedural justice posits that the fairness of the procedures in a decision-making process will influence an individual's reaction to the decision. Patient participation was found to increase the individual's procedural justice evaluation. No significant effect of participation was found on outcome measures, physician competence and outcome satisfaction.



14

VUORI, H.

Patient satisfaction - does it matter?

Quality Assurance in Health Care; 3, 1991, no. 3, pp. 183-189.

nivel

variables: patient satisfaction, quality of care.  
methods: theoretical analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

The paper aims at answering the question: Has the measurement of patient satisfaction improved the quality of care? After concluding that there is no evidence in the literature, the paper proceeds to look at why the evidence is lacking. Four factors seem to explain it: the objectives, the focus and the originator of the patients satisfaction studies and measurements and difficulties related to the interpretation of the findings. The last part of the paper analyses why patient satisfaction should be taken seriously although we do not know whether its measurement improves the quality of care. They include the fact that the patients are partners in health care; they literally feel in their skin whether care is good or bad. They are also the best judges of certain aspects of care, such as amenities and interpersonal relations. The second reason is the transformation of health care from a sellers' market to a consumers' market where the satisfaction of the patients' needs is part of the definition of quality. Finally, there is the ideological reason that, in a democratic society, the patients should have the right to influence decisions and activities influencing them. Measurement of patient satisfaction realizes the principle of community participation in health care.

Author.

15

FITZPATRICK, R.

Surveys of patient satisfaction I: important general considerations.

BMJ; 302, 1991, pp. 887-889.

nivel (C 3518)

Surveys of patient satisfaction II: designing a questionnaire and conducting a survey.

BMJ; 302, 1991, pp. 1129-1132.

nivel (C 3519)

variables: patient satisfaction.  
methods: review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

The first article considers potential problems and strategic questions involved in surveys of patient satisfaction. The author discusses goals of patient satisfaction research, negative prejudices regarding values of patient satisfaction surveys, their reliability and validity, the use of dimensions and subscales, and the advantages of self-completed versus interview questionnaires.

The second considers issues in designing a survey of patient satisfaction, particularly developing or selecting a questionnaire and conducting and analyzing a survey. The author discusses the use of episode specific or general questions, direct and indirect measures, examples of response formats, the inclusion of sociodemographic background variables, the pilot study, the survey sample, the conduct of the survey, and the analysis of the results.

## 2 Qualitative inventories of patient satisfaction items

16

ZWEIG, S., KRUSE, J., LEFEVRE, M.

Patient satisfaction with obstetric care.

Journal of Family Practice; 23, 1986, no. 2, pp. 131-136.

nivel

variables: patient satisfaction, obstetric care.

methods: indirect measure (rating scale)\* (Hulka, Zyzanski et al., 1970, 1974, 1982); and a direct measure (open-ended questions)\*\*.

reliability test: \* yes, \*\* no.

validity test: \* yes, \*\* no.

population: 255 married women.

dimensions: \* 6 items on dimensions: professional competence, personal qualities, cost or convenience.

\*\* 3 questions on feelings, wants and needs.

Patient satisfaction with obstetric care was studied in a cohort of postpartum women from a rural midwestern county. Birth certificate data defined the population, and satisfaction data were acquired through a mailed questionnaire. An indirect measure (satisfaction scale) was derived with acceptable construct validity and internal consistency. A direct measure (open-ended questions) elicited specific comments about each woman's recent experience with obstetric care. Satisfied women, as described by the scale, were more likely to have had good physician continuity and to have attended childbirth classes. The open-ended responses most frequently described problems relating to the physician-patient relationship. In comparing the indirect and direct measures, women with high satisfaction scores were more likely to make no critical comments about their obstetric care ( $\chi^2 = 9.16$ ,  $P$  less than .003). The patient's perception of the physician's attitude of concern emerged as an important issue in both measures. The data demonstrate that perceived physician concern is an important component of patient satisfaction with obstetric care.

Author.

17

DRURY, M., GREENFIELD, S., STILWELL, B., HULL, F.M.

A nurse practitioner in general practice: patient perceptions and expectations.

Journal of the Royal College of General Practitioners; 38, 1988, no. 316, pp. 503-505.

nivel

variables: patient perceptions and expectations, role of nurse practitioner.

methods: self-developed questionnaire (including open-ended questions) on patient perceptions and expectations.

reliability test: no.

validity test: no.  
population: 126 general practice patients.  
dimensions: items on "expectations": treats you as an individual, is understanding, can answer your questions, listens carefully, is patient, is capable, has medical qualifications, has common sense, is calm, takes a genuine interest in you.

A study exploring the acceptability of a nurse practitioner to a random sample of 126 patients is reported. 60% of patients either approved of the concept and expressed willingness to consult the nurse or held no strong views. 53% of the 61 patients who had seen her already were prepared to see her again. 54% of patients had difficulty in differentiating between the role of the nurse practitioner and the doctor, and the perceived differences included qualifications, ability to prescribe drugs and the severity of the condition dealt with. Women were nearly three times more likely than men to consult a nurse practitioner. Good communication skills were reported to be among the most sought after qualities of those whom patients consult about their health problems.

18

MANSFIELD, S.J., SINGH, S.

The general practitioner and human immunodeficiency virus infections: an insight into patient's attitudes.

Journal of the Royal College of General Practitioners; 39, 1988, no. 317, pp. 104-105.

nivel

variables: most important aspects valued in general practitioner.  
methods: open-ended, semi structured interviews.  
reliability test: no.  
validity test: no.  
population: 100 patients with AIDS.  
dimensions: general, confidentiality, sympathy, knowledge, skills, interest.

In a study of 100 patients with the acquired immune deficiency syndrome (AIDS), 77% were registered with a general practitioner and a further 14% wished to register. Of those 77 who were registered with a general practitioner, only 47 doctors knew their diagnosis; 19 of the 77 did not want their general practitioner to know. Of this small group of 19, a proportion would visit their general practitioner with symptoms, some of which may be related to AIDS. The main difficulty for patients in telling a general practitioner about their illness was a perceived lack of confidentiality and lack of sympathy. Patients valued understanding and expertise as most important in a general practitioner. This study provides an analysis of why general practice is not seen as a significant resource for many patients with AIDS in the London area and suggests some initiatives to enhance appropriate use of primary care services.

Author.

19

BLYTH, A.C.

Audit of terminal care in a general practice.

BMJ; 300, 1990, no. 6730, pp. 983-986.

nivel

variables: satisfaction of relatives, terminal care in general practice.  
methods: open-ended, semi structured interviews; self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 34 relatives of patients.  
dimensions: items on general satisfaction, opportunity to talk with general practitioner, and preference for more help.

Objective: To determine satisfaction of relatives and general practitioners with care of patients during terminal illness and make recommendations on improving terminal care in general practice. Design: Interviews with available relatives of patients who had terminal illnesses and died in 1987, supplemented by questionnaires; questionnaire survey of general practitioners after review of case notes of all their patients who had died of terminal illnesses in 1987. Setting: One urban general practice. Subjects: 34 Relatives of patients with terminal illnesses who died in 1987; five general practitioners from one practice. Results: In six cases relatives were dissatisfied, mainly because of lack of communication; in eight cases doctors were dissatisfied because of communication, poor symptom control, and inadequate care. Implications: There is a need for improved communication between relatives and the health professionals involved in terminal care as well as better advice on services and benefits available to both patients and relatives. Bereavement counselling should be better organised.

Author.

20

STOTT, N.C., PILL, R.M.

'Advise yes, dictate no'. Patients' views on health promotion in the consultation.

Family Practice; 7, 1990, no. 2, pp. 125-131.

nivel

variables: patient views, health promotion in consultation.  
methods: self-developed questionnaire with open en fixed-response questions.  
reliability test: no.  
validity test: no.  
population: 130 mothers.  
dimensions: items on attitudes to general practitioner's interest in specific lifestyle problems, and doctor-patient relationship.

Interviews with 130 mothers of lower social class provided the basis for studying their views on the desirability of general practitioner intervention in

their lifestyle habits; the study used both quantitative (questionnaire) and qualitative (interview) techniques. The majority of women were in favour of counselling on specific topics by the general practitioner but the qualitative data also revealed that most respondents expected the issues to be relevant to their presenting problem. Moreover they were keen to assert their right to accept or reject the advice given. The same picture was obtained whether specific or general approaches were used. The results highlight the need for qualitative methods to amplify and clarify the results of quantitative techniques when views or attitudes are being explored. The practical implications of the conclusions touch on both the ethical and clinical dimensions of health promotion.

Author.

21

KORSCH, B.M., GOZZI, E.K., FRANCIS, V.

Gaps in doctor-patient communication (1): doctor-patient interaction and patient satisfaction.

Paediatrics; 42, 1990, no. 5, pp. 855-871.

nivel (C 3112)

variables: patient satisfaction, patient perceptions, doctor-patient communication.  
methods: semi-structured interviews.  
reliability test: no.  
validity test: no.  
population: 800 patient visits of paediatrician.  
dimensions: questions on parent's perception of illness, expectation of medical visit, perception of interaction with physician, satisfaction with the visit, and extent of follow through on medical advice.

Eight hundred patient visits to the walk-in clinic of the Children Hospital of Los Angeles were studied by means of tape recording the doctor-patient interaction and by follow-up interview. 76% of the patient visits resulted in satisfaction on the part of the patient's mother; in 24% there was dissatisfaction. A number of communication barriers between paediatrician and patient's mother were found to contribute significantly to patient dissatisfaction: notably lack of warmth and friendliness on the part of the doctor, failure to take into account the patient's concerns and expectations from the medical visit, lack of clearcut explanation concerning diagnosis and causation of illness, and use of medical jargon.

Author.

22

ELBECK, M., FECTEAU, G.

Improving the validity of measures of patient satisfaction with psychiatric care and treatment.

Hospital Community Psychiatry; 41, 1990, no. 9, pp. 998-1001.

nivel (C 3097)

variables: consumer satisfaction, psychiatric care.  
methods: methodological analysis, development of questionnaire (based on focus group discussions).  
reliability test: no.  
validity test: no.  
population: 21 psychiatric patients (focus group), 40 psychiatric patients (questionnaire population).  
dimensions: 7 items on friendliness, genuine interest, helpfulness, consulting time, doctor's communication, doctor's explanation, doctor's information.

Surveys of consumer satisfaction with psychiatric services are frequently included in program evaluations, ostensibly providing the patient's perspective. However, the consistently high levels of satisfaction reported, despite a wide variety of measures, suggest that these surveys may be of questionable validity. Recognizing that most surveys ask patients to rate aspects of care that professionals feel are important, the authors used a focus-group method to generate attributes of ideal care from the patient's viewpoint. A pool of 50 patient-generated items were rated for importance by a second group of inpatients on locked units of a provincial psychiatric hospital. A factor analysis and mean importance ratings identified interpersonal relations with staff as a key factor of patient satisfaction. The authors designed a seven-item measure of satisfaction based on this key factor.

Author.

23

KRAKAU, I.

Satisfaction with health care in a Swedish primary care district: a ten years perspective.

Scandinavian Journal of Primary Health Care; 9, 1991, no. 1, pp. 59-64.

nivel

variables: patient satisfaction, primary health care services.  
methods: one open-end question.  
reliability test: -  
validity test: -  
population: 3,780 respondents.  
dimensions: -

In a study that covers ten years, a questionnaire about use of health care facilities and satisfaction with care was mailed out each autumn to 1/60 representative samples of the population in Sollentuna, a Swedish primary care district with three health centres. An open-ended question concerning "what is good and what is bad in the health service today?" was used to measure the respondents' attitudes. The health centres attracted most comment and were considered on the whole to function better in terms of service and care than the hospitals. The latter were heavily criticized for long queues and poor availability. The continuity, however, was considered fairly poor in both the primary care and the hospitals. The few comments on

private practitioners were almost without exception positive. The attributes of (all types of) care to which the respondents attached the greatest importance were closely connected with the orientation and objectives which have been stated internationally for primary care, viz. availability, continuity, quality/safety, primary responsibility, and coordination. Improvement of resources and reorganization in small health care teams at one of the three health centres prompted a significant increase of positive attitudes to primary care.  
Author.



### 3 Five relatively frequently used questionnaires

#### 3.1 The Patient Satisfaction Questionnaire (PSQ)

24

DIMATTEO, M.R., HAYS, R.

The significance of patients' perceptions of physician conduct: a study of patient satisfaction in a family practice centre.

Journal of Community Health; 6, 1980, no. 1, pp. 18-34.

nivel (C 3114)

variables: patient satisfaction, patient perceptions, physician behaviours.  
methods: self-developed questionnaire (based on Ware et al., 1978; Wolf et al., 1979).  
reliability test: no.  
validity test: no.  
population: 329 family practice patients.  
dimensions: general satisfaction, communicate, affective, technical, family & job.

The provision of high quality medical care and the insurance of patient satisfaction depend in part upon ability and willingness of physicians to establish rapport with their patients and to develop effective physician-patient communication. In this study, patients' overall satisfaction with their physicians' care was assessed in relation to their perceptions of their physicians' 1) proficiency at communicating and listening to details of the illness and medical treatment, 2) capability of providing affective care, 3) technical competence. Perception of physician behaviours were measured by a questionnaire administered to 329 patients of 54 residents in a family practice centre. The relationship between the perceptions of patients and their satisfaction with medical care was examined both for the entire sample and among groups of patients with differing demographic characteristics. Results indicate an important link between patients' perceptions of socio-emotional aspects of the physician-patient relationship and their reported satisfaction with medical care. Noticeable differences were found to exist in the importance that patients with different demographic characteristics placed on various aspects of their physicians' conduct.

Author.

25

WARE, J.E.

How to survey patient satisfaction.

Drug intelligence and Clinical Pharmacy; 15, 1981, november, pp. 892-899.

nivel (C 3111)

variables: patient satisfaction.  
methods: methodological discussion of construction of PSQ (Ware et al., 1976).  
reliability test: discussed.  
validity test: discussed.  
population: -  
dimensions: PSQ dimensions: interpersonal manner, technical quality, accessibility/convenience, finances, efficacy/outcomes, continuity, physical environment, and availability.

This article presents an overview of how one might approach the construction of a patient satisfaction survey. The author offers some specific suggestions about how to determine the content, how to construct and test multi-item scales, and makes recommendations regarding reliability, validity etc. These comments are based on the experiences in designing the Patient Satisfaction Questionnaire (PSQ), developed by Ware, Snyder and Wright. The PSQ is used as an example of the application of standard psychological measurement procedures to the design of a satisfaction survey instrument.

26

LINN, S.L., GREENFIELD, S.

Patient suffering and patient satisfaction among the chronically ill.

Medical Care; 20, 1982, no. 4, pp. 425-431.

nivel

variables: patient satisfaction, health perception, social circumstances.  
methods: self-developed questionnaire (based on Ware et al., 1978).  
reliability test: yes.  
validity test: no.  
population: 519 chronically ill.  
dimensions: art of care, technical quality, efficacy.

In a patient population with serious, debilitating chronic disease, the present study tested the hypothesis that a significant amount of variance in patient satisfaction ratings of provider behaviour would be explained by patients' current assessment of their health and their social circumstances. More favourable patient ratings of the art, technical quality and efficacy of their care givers were found to be significantly associated with more positive general health perceptions, fewer days spent in bed due to health problems and lower scores on a widely used depression scale, as well as with age and ethnic background. These data provide evidence indicating that patient satisfaction measures are sensitive to and confounded by patients' perceived health, view of life and social circumstances. It is suggested that if patient satisfaction ratings are to be used as indicators of the quality of health care delivery, there is a need to account for the variance attributable to measurable psychological, social and demographic factors.

Author.

27

MARQUIS, M.S., DAVIES, A.R., WARE, J.E.

Patient satisfaction and change in medical care provider: a longitudinal study.

Medical Care; 21, 1983, no. 8, pp. 821-829.

nivel

variables: patient satisfaction, change in medical care provider.  
methods: longitudinal study, 4-item general satisfaction scale (Ware et al., 1976).  
reliability test: yes.  
validity test: no.  
population: 279 adults.  
dimensions: items not published.

Longitudinal data from the Rand Corporation's Health Insurance Experiment were used to test the hypothesis that provider continuity can be modeled as one behavioural consequence of patient satisfaction. Bivariate and multivariate analyses (controlling for sociodemographic characteristics, prior use of services, health status, and health insurance plan) supported the hypotheses. A multivariate linear probability function indicated that a 1-point decrease on a general satisfaction scale was associated with a 3.4 percentage-point increase in the probability of provider change. The relationship between satisfaction scores and continuity during the following year appears to be roughly linear; the authors observed no "threshold" satisfaction level at which the probability of provider change increased markedly. The authors discuss needed improvements in the measurement of provider continuity and the need for further study of other behavioural consequences of patient satisfaction.

Author.

28

WARE, J.E., SNYDER, M.K., WRIGHT, W.R., DAVIES, A.R.

Defining and measuring patient satisfaction with medical care.

Evaluation and Program Planning; 6, 1983, pp. 247-263.

nivel (C 2905)

variables: patient satisfaction.  
methods: development of PSQ (form II) questionnaire.  
reliability test: yes.  
validity test: yes.  
population: 4 samples ranging from 323 to 640 respondents, 3 x household survey, 1 x family practice survey.  
dimensions: PSQ dimensions.

This paper describes the development of form II of the Patient Satisfaction Questionnaire (PSQ), a self-administered survey instrument designed for use in general population studies. The PSQ contains 55 Likert-type items that measure attitudes toward the more salient characteristics of doctors and medical care services (technical and interpersonal skills of providers, waiting

time for appointments, office waits, emergency care, costs of care, insurance coverage, availability of hospitals, and other resources) and satisfaction with care in general. Scales are balanced to control for acquiescent response set. Scoring rules for 18 multi-item subscales and eight global scales were standardized following replication of item analyses in four field tests. Internal consistency and test-retest estimates indicate satisfactory reliability for studies involving group comparisons. The PSQ well represents the content of characteristics of providers and services described most often in the literature and in response to open-ended questions. Empirical tests of validity have also produced generally favourable results.

Author.

29

WARE, J.E., DAVIES, A.R.

Behavioural consequences of consumer dissatisfaction with medical care.

Evaluation and Program Planning; 6, 1983, no. 3, pp. 291-297.

nivel (C 3155)

variables: consumer dissatisfaction, intentions to seek care, care-seeking behaviour.

methods: meta-analysis of four population studies, using the PSQ (Ware et al., 1976).

reliability test: -

validity test: -

population: two household populations (n=323, n= 432), 279 patients, 1,314 respondents in survey of prepaid health plans.

dimensions: PSQ dimensions.

The effects of consumer dissatisfaction with doctors and medical care services on intentions to seek care and subsequent behaviour were estimated using data from four population studies. Satisfaction was linked to reported intentions regarding care-seeking behaviour (choices between self-care and seeking care from a regular doctor or emergency room) in response to both minor and serious medical problems. These results were replicated in two populations with diverse sociodemographic characteristics. Satisfaction scales also predicted subsequent changes in medical care providers and disenrollments from prepaid health plans in independent field tests. These results suggest that the behavioural consequences of individual differences in satisfaction with doctors and health care services are noteworthy from both clinical and social perspectives.

Author.

30

PASCOE, G.C., ATTKISSON, C.C., ROBERTS, R.E.

Comparison of indirect and direct approaches to measuring patient satisfaction.

Evaluation & Program Planning; 6, 1983, no. 3, pp. 359-371.

nivel (C 2908)

variables: patient satisfaction.  
methods: methodological comparison of PSQ questionnaire\* (Ware et al., 1975, 1976), CSQ-18B questionnaire\*\* (LeVois et al., 1981) and ERS questionnaire\*\*\* (Attkisson et al., 1983).  
reliability test: yes.  
validity test: yes.  
population: 147 health centre patients.  
dimensions: \* convenience of services, availability of services, financing care, humaneness of doctors, quality of care, continuity of care, facilities, and general satisfaction.  
\*\* no dimensions or items reported.  
\*\*\* accessibility, availability, physical environment, informational resources, interpersonal quality of patient-staff exchanges, technical skill of providers, service relevance, and the outcome or effectiveness of services.

Compared the Patient Satisfaction Questionnaire (PSQ) and two direct measures of patient satisfaction - the Client Satisfaction Questionnaire (CSQ) and Evaluation Ranking Scale (ERS) - across a series of psychometric, acceptability, and concurrent validity criteria. The CSQ and the ERS were significant predictors of patient-rated indices of global service satisfaction, whereas the PSQ was unrelated to these indices. It is concluded that the direct and indirect approaches measure different satisfaction domains, and the PSQ assesses more generalized attitudes about health services, while the CSQ - 18B and the ERS efficiently reflect opinions about the specific setting in which they are administered.

Author.

31

ROBERTS, R.E., PASCOE, G.C., ATTKISSON, C.C.  
Relationship of service satisfaction to life satisfaction and perceived well-being.  
Evaluation and Program Planning; 6, 1983, no. 3, pp. 373-383.  
nivel (C 3132)

variables: patient satisfaction, life satisfaction, perceived well-being.  
methods: comparison of 43-item PSQ\* (Ware et al., 1975, 1976, 1983) and 18-item CSQ\*\* (Larsen et al., 1979, Attkisson, 1981).  
reliability test: yes.  
validity test: no.  
population: 148 health centre patients.  
dimensions: \* convenience of services, availability of services, financing care, humaneness of doctors, quality of care, continuity of care, facilities, and general satisfaction.  
\*\* no dimensions or items reported.

Two procedures for gaining patients' evaluations of health services were compared: a) the Client Satisfaction Questionnaire (CSQ-18B), a direct approach assessing the setting and services actually encountered, and b) the

Patient Satisfaction Questionnaire (PSQ), an approach that indirectly assesses satisfaction with service by inquiring about general health care attitudes. Results from 148 public health patients indicated that the PSQ produced the most acceptability problems and was tapping aspects of life satisfaction other than service satisfaction. However, the PSQ produced significantly lower reports of satisfaction. Additional comparison and interpretation of typical responses generated from the two approaches suggested, on the whole, that the CSQ-18B data provided clearer, more efficient, and more useful information for program planning and evaluation. In this study, service satisfaction measured by the CSQ-18B did not have any significant relationship to global or multidimensional (LDQ-30) measures of life satisfaction and well-being. In contrast, over a third of the variance in PSQ scores was accounted for by measures of life satisfaction. It appears that the PSQ elicits attitudes toward the more generalized health care delivery system as well as aspects of life satisfaction rather than reactions to specific services actually received.  
Author.

32

WALKER, A.H., RESTUCCIA, J.D.

Obtaining information on patient satisfaction with hospital care: mail versus telephone.

Health Services Research; 19, 1984, no. 3, pp. 292-306.

nivel

variables: patient satisfaction, patient perceptions, selection of hospital and admitting procedures, room accommodations, food, nursing care, medical care, care provided by others, discharge instructions.

methods: development of questionnaire based on (Ware et al., 1975, 1976), methodological comparison of mail versus telephone survey.

reliability test: -

validity test: -

population: 355 telephone respondents, 172 mail respondents.

dimensions: PSQ dimensions.

Major objectives of the study examined here were (1) to develop a questionnaire useful in eliciting the perceptions of patients regarding their hospital care, (2) to compare the methodologic and substantive differences between a mail survey and a telephone survey of patients done approximately a week post discharge, and (3) to develop methods allowing the questionnaire to be administered by an organization other than the hospital. Two independent surveys were conducted at the same hospital - a telephone survey with a telephone follow-up, and a mail survey with a telephone follow-up. The study demonstrated that an organization external to the hospital can economically conduct a patient satisfaction survey of a representative patient sample while ensuring confidentiality and producing potentially useful results. The mail survey was preferred over the telephone survey due to lower cost, lower

chance of biased responses, and complete assurance of confidentiality. The aspects of hospital care most influencing patient satisfaction related to nursing services.

Author.

33

KANE, R.L.

Hospice role in alleviating the emotional stress of terminal patients and their families.

Medical Care; 23, 1985, no. 3, pp. 189-197.

nivel

variables: hospice versus conventional care, patient satisfaction.  
methods: control-group experiment, interviews including three satisfaction scales (Ware et al., 1979\*; McCaffree et al., 1976\*\*; Baker, 1981\*\*\*).  
reliability test: no.  
validity test: no.  
population: 25 terminal cancer patients.  
dimensions: \* humaneness, technical competency, general satisfaction.  
\*\* physical environment satisfaction.  
\*\*\* satisfaction with involvement in care.

Terminally ill cancer patients in a Veterans Administration Hospital were randomly assigned to receive hospice care. Follow-up evaluation through time of death revealed no significant differences in anxiety or depression between hospice or control patients, but hospice patients exhibited significantly greater improvement in two of three measures of satisfaction (interpersonal care and involvement in care decisions). Hospice patients' significant others (SOs) showed some decrease in anxiety and greater satisfaction with involvement in care than did control SOs. The differences were attributable in part to hospice staff better meeting SOs' perceived needs.

Author.

34

FLYNN, S.P.

Continuity of care during pregnancy: the effect of provider continuity on outcome.

Journal of Family Practice; 21, 1985, no. 5, pp. 375-380.

nivel (C 1825)

variables: patient satisfaction, continuity of care, waiting time, physician at delivery.  
methods: Patient Satisfaction Questionnaire (Ware et al., 1976).  
reliability test: no.  
validity test: no.  
population: 61 pregnant women.  
dimensions: PSQ dimensions.

Continuity of care during pregnancy was examined in a family practice residency setting. The effect of provider continuity on the rate of pregnancy complications and patient satisfaction was studied prospectively in a sample of 61 patients. Patients in this study placed relatively low value on continuity of care. Pregnancy complications were predicted by traditional prenatal risk factors. Perceived waiting time in the office had the greatest effect on patient satisfaction. Provider continuity had no significant effect on either outcome.  
Author.

35

HAYS, R.D., WARE, J.R.

My medical care is better than yours: social desirability and patient satisfaction ratings.

Medical Care; 24, 1986, no. 6, pp. 519-524.

nivel

variables: patient satisfaction, desirable response set.

methods: methodological analysis, test of desirable response set in a personal referent form and general referent form of the 43-item PSQ (Ware et al., 1975, 1976).

reliability test: no.

validity test: no.

population: 3,918 respondents.

dimensions: PSQ dimensions.

It is well-documented that ratings of medical care received personally (personal referent) yield more favourable responses than ratings of care received by people in general (general referent). Hence general items are useful in achieving greater variation in responses to satisfaction surveys. However, the validity of general items relative to personal items is being debated currently. It has been hypothesized that bias due to socially desirable response set (SDRS) would be greatest for items with a personal referent. To test this hypothesis, the authors compared both kinds of satisfaction ratings for adults ( $n = 3,918$ ) who scored high and low on SDRS during Rand's Health Insurance Experiment. Across sites and years of the experiment, the rating item with a personal referent was consistently biased upward for those manifesting SDRS. The rating item with a general referent was not. Further, the correlation between SDRS and the difference between ratings on the personal and general referent items was statistically significant, suggesting that more favourable ratings of medical care received personally compared with ratings of care received by people in general are in part due to SDRS bias. Results are discussed in terms of implications for constructing a valid satisfaction survey.

Author.



36

COHEN, D.I., BRESLAU, D., PORTER, D.K., HERSHEY, CH.O., GOLDBERG, H.I.,  
DAWSON, N.V., LEE, J.CH., MCLAREN, CH.E.

Academic group practice: the patient's perspective.

Medical Care; 24, 1986, no. 11, pp. 990-998.

nivel

variables: organization clinic and practice, access, waiting time, lag time,  
patient views, patient satisfaction.  
methods: control-group pretest-posttest experiment, PSQ (Ware et al.,  
1975; Ware et al., 1976).  
reliability test: no.  
validity test: no.  
population: 2,299 clinical patients.  
dimensions: PSQ dimensions.

The effect upon patient satisfaction of a reorganization of a traditional medical clinic into a group practice model was examined in a controlled trial in which both patients and physicians were randomized. The group practice model, unlike the traditional clinic, provided decentralized registration, five days/week clinic coverage, and night/weekend phone coverage. Residents worked in small groups with an attending physician, a nurse practitioner, and a receptionist. This reorganization resulted in a substantial decrease in charges and utilization for patients in the experimental group. A panel of 302 patients was interviewed prior to the organization and one year later. Patients in the experimental groups perceived improvements in access to their physicians as well as decreases in clinic waiting time and decreases in the lag time between requesting and obtaining an appointment. General health perceptions and other satisfaction measures were unchanged. The authors conclude that a group practice organization can result in decreased patient charges without substantially altering patient satisfaction.

Author.

37

ROBERTS, J.G., TUGWELL, P.

Comparison of questionnaires determining patient satisfaction with medical care.

Health Services Research; 22, 1987, no. 5, pp. 637-643.

nivel

variables: patient satisfaction.  
methods: comparison of the SPPCS\* (Hulka, 1975) and the PSQ\*\* (Ware  
et al., 1976).  
reliability test: yes.  
validity test: yes.  
population: 59 intensive care patients.  
dimensions: \* professional competence, personal qualities, cost/convenience.  
\*\* PSQ dimensions.

This study compares the results of previously developed patient satisfaction questionnaires which quantitatively assessed the personal attitudes of 59 patients toward their medical care. These patients, hospitalized for acute myocardial infarction, were admitted to the intensive care unit of a community hospital in southern Ontario, Canada. The questionnaires were completed by these patients at four and six months post-myocardial infarction. This quantitative assessment of patient satisfaction, as indicated by Hulka and Ware questionnaires, provided data to compare the relative effectiveness of these questionnaires in measuring satisfaction. Generally, these questionnaires were reliable ( $r=.64$ ,  $r=.59$ ) and evidence of criterion concurrent validity was noted ( $r=.75-.81$ ). Both questionnaires have comparable results concerning the prevalence of dissatisfaction (0-7 percent). Author.

38

CHERKIN, D.C., HART, L.G.K, ROSENBLATT, R.A.

Patient satisfaction with family physicians and general internists: is there a difference?

Journal of Family Practice; 26, 1988, no. 5, pp. 543-551.

nivel

variables: patient satisfaction, family physician versus general internist.

methods: PSQ (Ware et al., 1976, 1978).

reliability test: yes.

validity test: no.

population: 213 patients of family physicians and 218 patients of general internists.

dimensions: PSQ dimensions.

Although general internists and family physicians see similar types of patients, they have been found to have different styles of practice. It is not known whether these differences in practice style are associated with differences in outcome of care such as patient satisfaction. This study examined whether patients of family physicians and general internists have different perceptions of the care they receive. National samples of recently trained family physicians and general internists were asked to complete questionnaires about their practices and to record information on all patient encounters during a three-day period. Three patients were randomly sampled from among those seen by each physician during the study period and were sent questionnaires that included questions about their satisfaction with the medical care they were receiving from the physician. Two hundred thirteen adult patients who saw 124 family physicians and 218 adult patients who saw 98 general internists participated in this study. Patients of general internists and of family physicians reported similar levels of satisfaction on all four dimensions measured (access, humaneness, quality, and general satisfaction) even after controlling for the effects of a variety of patient, practice, physician, and encounter characteristics. It is concluded that the fundamental differences in practice style that have been reported between family physicians and general internists do not seem to be associated with differences in patient satisfaction.

Author.

39

MACKEIGAN, L.D., LARSON, L.N.

Development and validation of an instrument to measure patient satisfaction with pharmacy services.

Medical Care; 27, 1989, no. 5, pp. 522-536.

nivel

variables: patient satisfaction, pharmacy services.  
methods: adapted PSQ (Ware et al., 1976).  
reliability test: yes.  
validity test: no.  
population: family practice patients (phase 1, n=30; 2, 313; 3, 489).  
dimensions: interpersonal, technical competence, accessibility, urgency, financial aspects, efficacy of medications, continuity with the pharmacy, general satisfaction (44 items).

A research program was undertaken to develop and validate a multidimensional measure of patient satisfaction with pharmacy services. A self-administered questionnaire consisting of 44 Likert-type attitudinal items was adapted from the Patient Satisfaction Questionnaire by Ware et al. In an iterative scale development process, the adapted questionnaire and its revisions were evaluated in three successive studies conducted on convenience samples (n=30, 313, 489) of individuals in attendance at family practice clinics in a southwestern city. Methods to construct multi-item scales measuring separate dimensions of service included principal components factor analysis and item analyses. Acquiescent response set (ARS), the tendency to agree with statements of opinion regardless of content, was measured by the method of matched pairs of items. A partial correlation matrix which controlled for ARS was used as the data in principal components factor analysis in an effort to reduce biasing effect of ARS on factor analytic outcomes. Dimensions of satisfaction identified were Explanation, Consideration, Technical Competence, Financial Aspects, Accessibility, Drug Efficacy, OTC (over-the-counter) Product Availability, and Quality of the Drug Product. Questionnaire revision is suggested to confirm the validity of the latter two dimensions. Future research should examine the relationship between separate dimensions of satisfaction and other patient attitudes and behaviours, and the convergence between this instrument and other measures of patient satisfaction with pharmacy services.

Author.

40

BRODY, D.S., MILLER, S.M., LERMAN, C.E., SMITH, D.G., LAZARO, C.G., BLUM, M.J.

The relationship between patients' satisfaction with their physicians and perceptions about interventions they desired and received.

Medical Care; 27, 1989, no. 11, pp. 1027-1035.

nivel (C 3521)

variables: patient satisfaction, physician, types of intervention.  
methods: 10 item version of PSQ (Ware et al., 1976).  
reliability test: no.  
validity test: no.  
population: 118 symptomatic adult primary care patients.  
dimensions: technical interventions, nontechnical interventions.

This study was designed to determine the relationship between patients' satisfaction with their physician, the types of intervention that patients reported they received, and the congruence between those interventions and the types of interventions they desired. One hundred eighteen symptomatic adult primary-care patients completed questionnaires before and after their respective medical visits. Patients who indicated they received any one of the three nontechnical interventions: education ( $P < 0.001$ ), stress counselling ( $P < 0.05$ ), and negotiation ( $P < 0.01$ ), were significantly more satisfied than those who had not received these interventions. Patient perceptions about receiving technical interventions, i.e., examination, tests, and nondrug therapy, were not related to patient satisfaction. The congruence between patient-intervention desires and perceptions about interventions received generally were not significantly related to satisfaction except for the interaction between receiving a medication and postvisit-medication desires ( $P < 0.001$ ). A series of multiple regression analyses revealed that, in general, perceptions about nontechnical interventions were better predictors of patient satisfaction than perceptions about technical interventions.

Author.

41

KELLEY, M.A., ALEXANDER, C.S., MORRIS, N.M.

Maternal satisfaction with primary care for children with selected chronic conditions.

Journal of Community Health; 16, 1991, no. 4, pp. 213-224.

nivel

variables: maternal satisfaction, paediatric primary care arrangements.  
methods: PSQ (shortform) (Ware et al., 1978).  
reliability test: yes.  
validity test: no.  
population: 140 mothers.  
dimensions: three scales of the PSQ were used: general satisfaction, satisfaction with access to care, satisfaction with doctor conduct.

One hundred forty mothers of children with chronic illnesses seen in two paediatric specialty clinics of a major urban teaching hospital were surveyed regarding their primary care arrangements and satisfaction with care received. Three dimensions of maternal satisfaction were measured: general satisfaction, satisfaction with access to care, satisfaction with doctor conduct (physician humaneness and technical quality). Results of multivariate analyses indicate that receipt of anticipatory guidance, access to care during evening hours and having a child in excellent reported health status were significantly

associated with at least two of the three dimensions of maternal satisfaction. Findings have implications for organizing comprehensive, accessible primary care in the community, which is consistent with recent trends in child health policy. Results supported the need for enrichment of primary care for children with chronic illnesses to allow for physician continuity, provision of information and advice to families and extended office hours.

Author.

42

HSIEH, M., KAGLE, J.D.

Understanding patient satisfaction and dissatisfaction with health care.

Health and Social Work; 16, 1991, no. 4, pp. 281-290.

nivel

variables: patient satisfaction, patient expectation, health status, personal characteristics, health system characteristics.

methods: adapted PSQ (Ware et al., 1976).

reliability test: yes.

validity test: no.

population: 401 university employees.

dimensions: PSQ dimensions.

Patient satisfaction or dissatisfaction is a complicated phenomenon that is linked to patients' expectations, health status, and personal characteristics, as well as health system characteristics. This article presents a cross-sectional study of the relationship among these factors using data collected from a large sample of university employees. The primary hypothesis, that patients' expectations would be the best predictor of satisfaction, was supported by the data. Health status, personal characteristics, and health system characteristics were not strong predictors. The findings suggest that patients may base their evaluations on sophisticated expectations and those expectations vary from one sociodemographic group to another. Implications for social work practice in health care are highlighted.

Author.

### 3.2 The Client Satisfaction Questionnaire (CSQ)

43

LEVOIS, M., NGUYEN, T.D., ATTKISSON, C.C.

Artifact in client satisfaction assessment: experiences in community mental health settings.

Evaluation and Program Planning; 4, 1981, pp. 139-150.

nivel (C 3156)

variables: client satisfaction.

methods: evaluation of 31-item CSQ (Attkisson et al., 1978; Larsen et al., 1979), two adapted 18-item parallel forms of CSQ.

reliability test: no.

validity test: no.

population: 92 psychiatric patients.

dimensions: 18 items of parallel forms published on pages 144 & 145.

Artifact in client satisfaction assessment is discussed and the results of a study of three factors thought to mediate client satisfaction ratings. General life satisfaction, mode of administration, and psychological symptomatology, are reported. A standard client satisfaction questionnaire (CSQ) was modified to yield parallel forms and was administered orally and in writing to 92 clients in two mental health day treatment programs. Satisfaction ratings obtained from these clients were quite similar to out-patient ratings obtained in previous studies conducted in this setting and using the same measures. Oral administration of the CSQ produced 10% higher satisfaction ratings than written administration ( $p < .05$ ) and less missing data ( $p < .01$ ). Satisfaction ratings were also obtained using a simple graphic instrument. Graphic ratings were comparable to CSQ ratings. Satisfaction with life in general and level of psychiatric symptoms together accounted for 25% of CSQ variance. The implication of these findings for future client satisfaction research is discussed.

Author.

44

ATTKISSON, C.C., ZWICK, R.

The client satisfaction questionnaire: psychometric properties and correlations with service utilization and psychotherapy outcome.

Evaluation and Program Planning; 5, 1983, pp. 233-237.

nivel (C 3154)

variables: client satisfaction.

methods: methodological analysis CSQ-18 (Larsen et al., 1979).

reliability test: yes.

validity test: yes.

population: 46 clients of urban community mental health centre.

dimensions: items not reported.

An 18-item version of the Client Satisfaction Questionnaire (CSQ-18) was included in an experimental study of the effects of pretherapy orientation on psychotherapy outcome. The psychometric properties of the CSQ-18 in this study were compared with earlier findings. In addition, the correlations of the CSQ-18 with service utilization and psychotherapy outcome measures were examined. Results indicated that the CSQ-18 had high internal consistency (coefficient  $\alpha = .91$ ) and was substantially correlated with remainder-terminator status ( $r_s = .61$ ) and with number of therapy sessions attended in one month ( $r = .54$ ). The CSQ-18 was also correlated with change in client-reported symptoms ( $r = -.35$ ). Results also demonstrated that a subset of items from the scale (the CSQ-8) performed as well as the CSQ-18 and often better. The excellent performance of the CSQ-8, coupled with its brevity, suggests that it may be especially useful as a brief global measure of client satisfaction.

Author.

45

GREENFIELD, T.K.

The role of client satisfaction in evaluating university counselling services.

Evaluation & Program Planning; 6, 1983, no. 3-4, pp. 315-327.

nivel (C 3421)

variables: consumer satisfaction, university counselling services.

methods: review, adapted CSQ-3/4 (Larsen et al., 1979).

reliability test: yes.

validity test: yes.

population: 166 students.

dimensions: items not reported.

Reports the systematic use of a short form of the Client Satisfaction Questionnaire (CSQ) in a university counselling centre over a 5-year period, with strategies to ensure maximal accuracy and utilization of results, to investigate further the role of client satisfaction in evaluation of university counselling services. It is noted that client satisfaction assessment has been hampered by inadequate instrumentation. In the present study, several method factors were also investigated. Results indicate that optional respondent identification did not reduce response rate or increase reported satisfaction compared to anonymity, while a substudy obtaining high response suggested that bias from non-response to the routine survey was not great. The CSQ was found to have advantages for use in student-service settings. Relationships between satisfaction and other variables (i.e., demographics, precounselling expectancies, problem type and severity, counsellor differences, duration of counselling) are reported. The ways in which such findings were incorporated in service planning are briefly discussed.

See also

52

PASCOE, G.C., ATTKISSON, C.C.

The evaluation ranking scale: a new methodology for assessing satisfaction.  
Evaluation & Program Planning; 6, 1983, no. 3-4, pp. 335-347.

See also

53

ATTKISSON, C.C., ROBERTS, R.E., PASCOE, G.C.

The evaluation ranking scale: clarification of methodological and procedural issues.

Evaluation and Program Planning; 6, 1983, pp. 349-358.

See also

30

PASCOE, G.C., ATTKISSON, C.C., ROBERTS, R.E.

Comparison of indirect and direct approaches to measuring patient satisfaction.  
Evaluation & Program Planning; 6, 1983, no. 3-4, pp. 359-371.

See also

31

ROBERTS, R.E., PASCOE, G.C., ATTKISSON, C.C.

Relationship of service satisfaction to life satisfaction and perceived well-being.  
Evaluation and Program Planning; 6, 1983, no. 3, pp. 373-383.

See also

37

ROBERTS, J.G., TUGWELL, P.

Comparison of questionnaires determining patient satisfaction with medical care.  
Health Services Research; 22, 1987, no. 5, pp. 637-643.

46

SABOURIN, S., LAFERRIERE, N., SICURO, F., COALLIER, J.C.

Social desirability, psychological distress, and consumer satisfaction with mental health treatment.

Journal of Counselling Psychology; 36, 1989, no. 3, pp. 352-356.

nivel (C 3409)

variables: social desirability, psychological distress, consumer satisfaction, mental health treatment.

methods: CSQ-8 questionnaire (Larsen et al., 1979).

reliability test: yes.

validity test: yes.

population: 82 clients.

dimensions: items on physical surroundings; kind or type of service;



treatment staff; quality of service; amount, length, or quantity of service; outcome of service; general satisfaction; procedures.

The purpose of the present study was to determine the strength of the relationship between social desirability, psychological distress, and consumer satisfaction with mental health treatment. More specifically, the goal was to assess whether socially desirable responding accounts for much more variance in reports of client satisfaction than in self-reports of psychological distress. The sample consisted of 82 clients in therapy at the Centre for Eclectic Psychology, a clinic affiliated with a large francophone university. Subjects completed the Balanced Inventory of Desirable Responding, the Symptom Checklist-10, and the Client Satisfaction Questionnaire. Correlational analyses revealed that both consumer satisfaction reports and psychological distress scores were contaminated by socially desirable responding. These findings are discussed in terms of the validity of client satisfaction measures.

Author.

### 3.3 The Satisfaction with Physicians and Primary Care Scale (SPPCS)

47

STAMPS, P.L., FINKELSTEIN, J.B.

Statistical analysis of an attitude scale to measure patient satisfaction with medical care.

Medical Care; 19, 1981, no. 11, pp. 1108-1135.

nivel

variables: patient satisfaction.  
methods: statistical analysis, SPPCS (Hulka et al. 1970).  
reliability test: yes.  
validity test: yes.  
population: 1) 49 mothers, 2) 254 respondents, 3) 1, 112 respondents.  
dimensions: professional competence, patient-physician relationship, cost and convenience.

Patient satisfaction with medical care is a concept that is viewed as important to consider but difficult to measure. The purpose of this article is first to present the results of three separate administrations of the scale developed by Hulka et al. and, second, to detail the statistical analysis performed using these data sets.

The results of these three administrations show remarkably similarity of results, thus leading to an inference of high reliability. Through the statistical analysis of the validity of the scale, however, it is demonstrated that further work is needed before the attitude scale can be generally used. The three phases of the statistical analysis include an item analysis, a Guttman scalogram analysis and a factor analysis. The results of these three validity analyses do not support the attitude scale in its current form.

The result of this work leads the authors to conclude that this attitude scale is not ready to be used in a community setting for predictive purposes, as has been suggested. The results indicate that further revision and analysis are necessary before one can approach a valid as well as reliable attitude scale to measure patient satisfaction with medical care. Although this suggests the need for extensive theoretical research, the effort is clearly worthwhile, as a valid and reliable measurement of patient satisfaction will provide us with invaluable insights into the process of health care delivery.  
Author.

48

HULKA, B.S., ZYZANSKI, S.J.

Validation of a patient satisfaction scale.

Medical Care; 20, 1982, no. 6, pp. 649-653.

nivel

variables: patient satisfaction.  
methods: methodological review.  
reliability test: -

validity test: -  
population: -  
dimensions: -

This communication discusses more than a decade of developments in the measurement of attitudes toward physicians and medical care. Particular emphasis is given to a scale first reported in 1970 and to a 1981 publication (see Stamps & Finkelstein above) attempting to validate this scale. The analytic strategies proposed as validation techniques are reviewed with respect to their technical properties, underlying assumptions and interpretability. Constraints on each of these features are noted. The most restrictive feature of these analyses is the presumption that validity can be achieved only through a unidimensional framework. Attitudes toward medical care are based on a diversity of substantive issues, and they are influenced by individual experiences and psychological characteristics as well as the circumstances surrounding scale administration. The authors propose that validation of patient attitudes scales be based on a more generous conceptualization of their content and some consideration of their purpose and uses.

Author.

49

LINN, M.W., LINN, B.S., STEIN, S.R.

Satisfaction with ambulatory care and compliance in older patients.

Medical care; 20, 1982, no. 6, pp. 606-614.

nivel

variables: patient satisfaction, compliance, ambulatory care.  
methods: 45-item SPPCS (Hulka et al., 1970).  
reliability test: no.  
validity test: no.  
population: 267 older and 581 younger ambulatory clinic patients.  
dimensions: professional competence, patient-physician relationship, cost and convenience.

Predictors of satisfaction with ambulatory care and compliance in 267 older and 581 younger patients were determined. Each patient rated a 45-item satisfaction-with-care-scale. Race, SES, marital status, distance from clinic, severity of illness (as measured by physician ratings, self-health assessment, number of medications, number of diagnosis, and number of clinic visits and hospitalization in the prior year), and physician expectations of improvement were entered as predictors into stepwise multiple regression analyses for the elderly and the young. Predictors of better satisfaction in the young were less severe conditions, being nearer to the clinic and having fewer prior clinic visits over the year. In the elderly, having fewer visits in the clinic, more expectation of improvement by the physician and less severe conditions were associated with better satisfaction. Severity and clinic visits were predictors in each age group. The young, however, were also influenced by distance from the clinic. The elderly were influenced separately

by the physician's prognosis. Thus, when the more impaired elderly are seen frequently without expecting a benefit, their satisfaction with care is poor. Further, satisfaction with care was correlated significantly with compliance in the elderly but not in the young. Findings suggest that improving satisfaction with care might also improve rates of compliance with the medical regimen in older patients.

Author.

50

SHEAR, C.L.

Provider continuity and quality of medical care: a retrospective analysis of prenatal and perinatal outcome.

Medical Care; 21, 1983, no. 12, pp. 1204-1210.

nivel

variables: family practice versus obstetric clinic, continuity of care, quality of care, patient satisfaction.

methods: Hulka-Zyzanski questionnaire (Zyzanski et al., 1974).

reliability test: yes.

validity test: no.

population: 160 pregnant women.

dimensions: physician competence, personal qualities of the physician, cost/convenience of care.

It is often assumed that family physicians are able to provide a higher quality of medical care because of the greater degree of continuity inherent in their practices. The authors attempted to measure the association between continuity and quality of medical care using pregnancy as a tracer condition. Using a retrospective cohort study design, two groups of pregnant women were identified - those cared for in the family practice (FP) centres and those cared for in obstetric (OB) clinics. Process and outcome of medical care were measured along with patient satisfaction. Provider continuity, as measured by the SECON value, was much higher in the FP group, and was highly correlated with the presence of an "attitudinal contract" between patient and physician. Although not statistically significant, four times as many newborns from the OB group were admitted to the neonatal intensive care unit. FP group newborn weight averaged 220 grams more than the OB group ( $p < 0.05$ ). This difference remained after control for covariates. While not reaching statistical significance, patient satisfaction scores tended to be higher for the FP group in two of three categories measured. The results suggest that continuity of care was associated with better patient outcome and satisfaction. Directions for causal interpretations and future research are discussed.

Author.

See also

16

ZWEIG, S., KRUSE, J., LEFEVRE, M.

Patient satisfaction with obstetric care.

Journal of Family Practice; 23, 1986, no. 2, pp. 131-136.

51

MERENSTEIN, J.H., HIRSCH, R.P.

Non-returning patients: a survey of inactive patients in a suburban practice.

Family Medicine; 21, 1989, no. 3, pp. 206-210.

nivel (C 3107)

variables: patient attitude regarding physician(s), social economic status, physician change, dropout.  
methods: adapted questionnaire (Hulka et al., 1970).  
reliability test: no.  
validity test: no.  
population: 109 inactive (general practice) patients, 180 active (general practice) patients, 313 geographic controls.  
dimensions: dimensions or items not published.

Maintaining an adequate patient volume is a new concern for primary care physicians. Retaining active patients may be as important as recruiting new patients. A mail survey was conducted using a random sample of patients not returning for care over a three-year period in a primary care office. Over half of the inactive patients were transient, never having established themselves with the practice. One third of regular attending inactive patients had changed physicians, whereas the others had simply not returned for care. Patients who had changed physicians were more likely users of emergency rooms or drop-in clinics, had more negative feelings while in physicians' offices, were less satisfied with their own present physicians, and had less positive attitudes toward physicians in general. Inactive patients who had not changed physicians were as satisfied with their own physicians and with physicians in general as the active patient control subjects, even though they used services infrequently, usually for acute care. Investigating transient patients and those who are inactive but remain with a practice would positively affect patient volume and would likely benefit these patients as well. Primary care physicians should survey their own inactive files before embarking on other marketing techniques.

Author.

### 3.4 The Evaluation Ranking Scale (ERS)

52

PASCOE, G.C., ATKISSON, C.C.

The evaluation ranking scale: a new methodology for assessing satisfaction. *Evaluation & Program Planning*; 6, 1983, no. 3-4, pp. 335-347. nivel (C 3377)

variables: patient satisfaction.  
methods: methodological comparison of the CSQ-8 questionnaire\* (Attkisson & Zwick, 1982, Larsen, 1979; etc.) and ERS questionnaire\*\*.  
reliability test: no.  
validity test: no.  
population: 246 public health centre patients.  
dimensions: \* CSQ-items.  
\*\* accessibility, availability, physical environment, informational resources, interpersonal quality of patient-staff exchanges, technical skill of providers, service relevance, and the outcome or effectiveness of services.

Most patient satisfaction scales produce high, undifferentiated levels of reported satisfaction that fail to detect program areas that consumers do not like. Methodological problems apparently contribute to these results. An alternative procedure, the Evaluation Ranking Scale (ERS) was formulated and tested. A 2 x 3 design was employed with 246 public health centre patients randomly assigned to one of two measurement techniques (ERS versus a global measure) and one of three informational sets. A secondary group of subjects was a convenience sample of 26 staff members, which allowed comparisons of staff evaluations of the health centre to patients' evaluations of the health centre. Compared to the global measure, the ERS provided more specific information about particular program components, was more discriminating, and resulted in mean satisfaction scores that were significantly lower than the global measure. This new approach may be a more effective technique for assessing the psychosocial effectiveness of human service programs.

Author.

53

ATTKISSON, C.C., ROBERTS, R.E., PASCOE, G.C.

The evaluation ranking scale: clarification of methodological and procedural issues.

*Evaluation and Program Planning*; 6, 1983, pp. 349-358. nivel (C 3138)

variables: patient satisfaction.  
methods: methodological comparison of CSQ-8 questionnaire\* (Larsen et al., 1979) and ERS questionnaire\*\*.

reliability test: no.  
validity test: no.  
population: 145 public health centre patients.  
dimensions: \* CSQ-items.  
\*\* accessibility, availability, physical environment, informational resources, interpersonal quality of patient-staff exchanges, technical skill of providers, service relevance, and the outcome or effectiveness of services.

Compared with the CSQ-8, a typical questionnaire approach to assessing global patient satisfaction, the Evaluation Ranking Scale (ERS) had equally good acceptability, yielded more normally distributed satisfaction scores, and results allowed comparative information about patients' evaluations of specific service dimensions. The study also addressed key questions that have emerged about the ERS procedure. Patients apparently do not distinguish conceptually between "importance" of dimensions and "satisfaction" with dimensions in the first phase (ranking) of the ERS. Results did confirm that the ERS sequence of ranking and then rating the dimensions is essential to achieving optimal utility of results. The ranking task seems to have an organizing effect on patients' approach to the rating task. This effect does not work to dictate results in the rating phase but rather seems to familiarize patients with the dimensions to be rated thereby yielding greater potential discriminative capacity for the ERS. Finally, results indicate that the ERS can be administered in a flexible fashion that yields additional information about the absolute importance of the six dimensions without loss of desired operating characteristics for the measure.

Author.

See also

30

PASCOE, G.C., ATTKISSON, C.C., ROBERTS, R.E.

Comparison of indirect and direct approaches to measuring patient satisfaction. *Evaluation & Program Planning*; 6, 1983, no. 3-4, pp. 359-371.

54

ELLIOTT, T.E., DUNAYE, T.M., JOHNSON, P.M.

Determining patient satisfaction in a Medicare Health Maintenance Organization. *Journal of Ambulatory Care Management*; 14, 1991, no. 1, pp. 34-46.

nivel

variables: patient satisfaction, HMOs.  
methods: test of ERS (Pascoe & Attkisson, 1983; Attkisson et al., 1983).  
reliability test: no.  
validity test: no.  
population: 56 HMO enrollees.  
dimensions: accessibility, availability, physical environment, informational resources, interpersonal quality of patient-staff exchanges, technical skill of providers, service relevance, and the outcome or effectiveness of services.

The results of the initial studies by Pascoe and Attkisson (1983) and Attkisson et al. (1983) indicated that the ERS performed a global patient satisfaction questionnaire. The purpose of this study is to determine whether these findings could be replicated with a patient sample and clinic setting that differed from those in the original research. This clinic is located in a central urban area and provides services to members of a federally qualified HMO.

The results corroborated the ERS ability to produce information about different programme dimensions. A major difference in the findings compared to those of Pascoe and Attkisson was the patients' importance rankings of the dimensions. Further there were, unlike the original results, no differences in the satisfaction index due to ethnicity or income. For future use, the authors suggest updating the ERS with dimensions like travel difficulty, special care for serious problems, and prompt feedback on test results.



### 3.5 The Medical Interview Satisfaction Scale (MISS)

55

WOLRAICH, M.L., ALBANESE, M., STONE, G., NESBITT, D., THOMSON, E., SHYMANSKY, J., BARTLEY, J., HANSON, J.

Medical Communication Behaviour System: an interactional analysis system for medical interactions.

Medical Care; 24, 1986, no. 10, pp. 891-903.

nivel

variables: patient satisfaction, physician-patient interaction, patient knowledge.

methods: MISS (Wolf et al., 1981).

reliability test: yes.

validity test: yes.

population: 101 genetic counselling patients.

dimensions: distress relief (cognitive domain), rapport (affective domain), communication comfort (communication behaviour), and compliance (behaviour intent).

The study assessed the psychometric properties of the Medical Communication Behaviour System. This observation system records time spent by the physicians and patients on specific behaviours in the categories of informational, relational, and negative situation behaviours by using hand-held electronic devices. The study included observations of 101 genetic counselling sessions and also assessed the outcome measures of patient knowledge and satisfaction. In addition, 41 of the sessions were rated using the Roter Interactional Analysis System, and 20 additional control subjects completed the post-counselling information without being observed to examine the effects of recording the session. Results showed good interobserver reliability, and evidence of concurrent, construct, and predictive validity. No differences were found between the observed and unobserved groups of any of the outcome measures.

Author.

56

ANDERSON, L.A., MCEVOY DEVELLIS, B., DEVELLIS, R.F.

Effects of modelling on patient communication, satisfaction, and knowledge.

Medical Care; 25, 1987, no. 11, pp. 1044-1056.

nivel

variables: patient education, communication, patient satisfaction.

methods: control-group pretest-posttest experiment, MISS (Wolf, 1978).

reliability test: no.

validity test: no.

population: 150 hypertension patients.

dimensions: dimensions or items not reported.

This experimental study investigated the efficacy of two modelling procedures on enhancing patient communication. A pretreatment interview assessed knowledge, assertiveness, and other concomitant variables. A total of 150 subjects were randomly assigned to one of three treatment conditions. The two modelling conditions were presentations of a health educator interacting with a patient (i.e., model) who either asked questions or revealed problems. The control videotape included only the educator's presentation; no patient was shown. A subsequent standardized face-to-face patient education session was used to assess the impact of the intervention on patient communicative behaviours. A posttreatment interview assessed knowledge and satisfaction. Subjects who viewed a modelling videotape spoke more than subjects who viewed a control videotape. The bulk of the findings indicated that a question-asking model was generally more effective than a disclosive model in eliciting communicative behaviours. Knowledge scores were found to increase after the intervention, regardless of subjects' verbal participation. Subjects in either of the modelling conditions who spoke more indicated higher affective satisfaction.  
Author.

57

SULLIVAN, D.

Opportunistic health promotion: do patients like it?

Journal of the Royal College of General Practitioners; 38, 1988, no. 306, pp. 24-25.

nivel

variables: health promotion in consultation, patient satisfaction.  
methods: MISS (Wolf et al., 1978).  
reliability test: no.  
validity test: no.  
population: 86 general practice patients.  
dimensions: dimensions or items not reported.

In a five doctor general practice 100 adults attending routine surgery were given questionnaire to assess the influence of discussing health promotion on their satisfaction with the consultation. Health promotion topics were discussed in 74% of the 86 consultations analyzed. Of these consultations, blood pressure was mentioned in the largest number (48%) and breast self-examination in the smallest (6%). Patient satisfaction was not significantly influenced by the inclusion or omission of such topics. The highest mean satisfaction score was for those discussing smoking and the lowest for those discussing alcohol. Most patients (84%) found discussion of health promotion helpful and felt comfortable (62%); only two patients felt uncomfortable doing so.  
Author.

## 4 Questionnaires used incidentally

### 4.1 Primary care and home care

58

ZIPKIN, A., LEBIUSH, M., FURST, A.L.

A rural primary health care clinic in Israel: some measures of utilization and satisfaction.

Public Health Reports; 99, 1984, no. 6, pp. 566-572.

nivel (C 1749)

variables: patient satisfaction.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 110 mothers.  
dimensions: visits to the clinic, awareness of the range of medical services, accessibility, satisfaction with personnel.

Measures of use and satisfaction within a rural health service in Israel were surveyed in a study of the anonymous responses to a questionnaire from 110 mothers of children 14 years of age and younger in two agricultural villages. The majority of mothers expressed satisfaction with the health service, although there were notable reservations about the availability of certain services. Differences were detected between the reasons mothers recorded for initiating contacts with the medical team and the actual day-to-day experience of the health team members. Satisfaction with service was associated with the length of the waiting time to see the physician, the perceived sufficiency of time the physician spent on the examination, and awareness that the physician was on call after clinic hours for the survey population. It was also found that the combined hospital use for the populations of 10 surrounding villages was almost twice that of the study villages.

Author.

59

McCUSKER, J.

Development of scales to measure satisfaction and preferences regarding long-term and terminal care.

Medical Care; 22, 1984, pp. 476-493.

nivel

variables: patient satisfaction, long-term and terminal care.  
methods: self-developed questionnaire.  
reliability test: yes.  
validity test: yes.

population: 104 home care patients, 90 relatives of terminal patients.  
dimensions: general satisfaction, availability of care, continuity of care, physician availability, physician competence, personal qualities of physician, involvement of patient and family in treatment decisions, freedom from pain, and pain control.

This report describes efforts to develop and test scales for measuring attitudes toward medical care of chronically ill and terminally ill patients and their families. The following satisfaction scales were developed: general satisfaction, availability of care, continuity of care, physician availability, physician competence, personal qualities of physician, involvement of patient and family in treatment decisions, freedom from pain, and pain control. Preference scales were developed to measure preference for home care and preference for physician decisions. These scales were tested in two independent study samples: home care study subjects - patients and their caretakers enrolled in a trial to evaluate a new method of home care for chronically and terminally ill homebound patients; and terminal care study subjects - surviving relatives of a random sample of cancer patients who died. The internal consistency, discriminant validity, and convergent validity of each scale were assessed by means of item-total correlations, Cronbach's alpha, and comparison with other questionnaire items. The results supported the use of several scales in their original form. Recommendations are made for appropriate modifications in the remaining scales.  
Author.

60

KING, F.E., FIGGE, J., JARMAN, P.

The elderly coping at home: a study of continuity of nursing care.

Journal of Advanced Nursing; 11, 1986, no. 1, pp. 41-46.

nivel (C 1987)

variables: perceived level of health, patient satisfaction, continuity of nursing care, certainty/uncertainty.  
methods: self-developed Satisfaction with Services Scale.  
reliability test: no.  
validity test: no.  
population: 33 elderly patients.  
dimensions: no dimensions or items reported.

Thirty-three elderly clients who had been hospitalized and required continued care at home were studied for 3 months, with 836 visits made. Coping at home was studied in relationship to their certainty/uncertainty scores, perceived level of health, and perceived satisfaction with nursing care services. The relationship between coping and certainty/uncertainty was significant at  $p < 0.001$  and  $p < 0.005$  (first and second visits); the relationship between coping and perceived level of health was significant at  $p < 0.001$  and  $p < 0.05$  (first and second visits); and the relationship between coping and perception of care was not significant. This study presents significant data to contribute to nursing knowledge in the care of elderly people at home.  
Author.

61

MAESENEER, J. DE, DEBUNNE, M.

Wat verwachten patiënten van patiëntenparticipatie?  
(What are patients expecting of patient participation?)  
Huisarts Nu; 15, 1986, no. 8, pp. 429-430 & 433-437.  
nível

variables: patient participation, patient views, expectations.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 200 health centre patients.  
dimensions: no dimensions or items reported.

Patient participation is described in its different appearances and its influence on the process of primary health care. The theory is applied to the daily practice of the community health centre *Wijkgezondheidscentrum Botermarkt* in Ledeborg (Ghent, Belgium). The health centre organised an inquiry among its patient between August 15th and September 15th of 1985 in order to collect research information about the patients' knowledge of its services, the image the patients have of it, their expectations and priorities concerning patient participation. The results of the research are strikingly similar to those of an inquiry in the *Collingham Health Centre* (Nottinghamshire, Great Britain). Although the purpose of the inquiry were restricted, it does bring up some relevant conclusions.

Author.

62

THOMAS, H., DRAPER, J., FIELDS, S., HARE, M.J.

Evaluation of an integrated community antenatal clinic.  
Journal of the Royal College of General Practitioners; 37, 1987, no. 305, pp. 544-547.  
nível

variables: integrated community versus traditional antenatal care, patient's views, patient satisfaction.  
methods: controlled experiment, self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 96 pregnant women attending an antenatal clinic.  
dimensions: no dimensions or items reported.

The obstetric outcome and experience of care of 96 pregnant women attending an integrated community antenatal clinic staffed by general practitioners, a community midwife and an obstetric accredited senior registrar were compared with those of 100 women receiving traditional shared antenatal care. The views of the women and their practitioners were sought; obstetric data were obtained from obstetric notes, hospital records and cooperation cards.

Fewer women attending the community clinic suffered from hypertension than women receiving shared care. The women attending the clinic reported that it had a friendly relaxed and personal atmosphere. They also reported less inconvenience and a shorter waiting time for the obstetrician than women receiving shared care. They received greater continuity of care from the obstetrician but less from the general practitioners and community midwives than the control women. There was greater satisfaction with communication with staff among women attending the clinic, with the exception of the midwife whose role was not sufficiently well delineated. Practitioners in the integrated scheme appreciated the close working arrangements but experienced an increase in administrative tasks.  
Author.

63

SCARPACI, J.L.

Help-seeking behaviour, use, and satisfaction among frequent primary care users in Santiago de Chile.

Journal of Health and Social Behaviour; 29, 1988, no. 3, pp. 199-213.

nivel

variables: patients' help-seeking behaviour, the frequency of clinic use, satisfaction with care.

methods: self-developed questionnaire with patient satisfaction items.

reliability test: no.

validity test: no.

population: 140 primary care clinic patients.

dimensions: no dimensions or items reported.

This research presents the findings of a survey of 140 frequent users of a National Health Service System (SNSS) primary care clinic in Santiago, the Chilean capital. The purpose of the survey was to examine attributes of patients' help-seeking behaviour, the frequency of clinic use, and satisfaction with care. Patients evaluated care in relatively positive terms, thus corroborating unpublished but highly publicized research findings by the military government. Multiple regression analyses identified the best predictors of perceived quality of care and frequency of clinic use. In general, organizational as opposed to demographic variables are the best predictors. Patients cite good chairside manners, clinical tests, and the receipt of medicine as positive aspects of their visits to the clinic. Research findings in this study are then compared to those elsewhere in Chile and in Great Britain, United States, and South American countries other than Chile. It is argued that changes in management practices may increase both use of and satisfaction with medical services. Attitudes about the role of the SNSS in providing primary care to the urban poor suggest that efforts to cut back SNSS services further may be resisted.

Author.

64

CHAO, J.

Continuity of care: incorporating patient perceptions.

Family Medicine; 20, 1988, no. 5, pp. 333-337.

nivel (C 3105)

variables: patient perception of continuity of care, demographic characteristics, patient satisfaction, cost of medical care  
methods: development of instrument assessing patient perceptions of continuity of care.  
reliability test: yes.  
validity test: yes.  
population: 147 family practice patients.  
dimensions: chronologic, geographic, interdisciplinary, interpersonal, informational.

Continuity of medical care has been conceptualized by some researchers as an attitude on the part of the patient and provider rather than as a succession of visits to the same provider. A perception of continuity (PC) scale containing 23 statements was developed to empirically test this conceptualization. A cross-sectional, random sample survey of adult patients in an established suburban family practice utilized a chart review and mailed patient questionnaire to assess the potential value of this scale. The PC scale had a high degree of internal reliability and a greater correlation with patient satisfaction than two commonly used provider continuity measures, even after controlling for demographic variables. The cost of ambulatory primary medical care was not significantly related to any of the continuity measures. The measurement of patient attitudes to define continuity provided information distinct from provider continuity formulas.

Author.

65

WEISS, G.L.

Patient satisfaction with primary medical care: evaluation of sociodemographic and predispositional factors.

Medical Care; 26, 1988, no. 4, pp. 383-392.

nivel

variables: patient satisfaction, sociodemographic factors, life satisfaction, confidence in medical care, locus of control, having regular source of care, health status.  
methods: literature review, 5-item PSS (Roghamann et al., 1979).  
reliability test: yes.  
validity test: yes.  
population: 400 respondents (household survey).  
dimensions: items not reported.

As patient satisfaction has been demonstrated to influence certain health-related behaviours (e.g., compliance with medical regimens and use of

medical services), research has attempted to identify its key determinants. Although the influence of patient characteristics often has been studied, attention has been focused on sociodemographic characteristics (e.g., age and sex) rather than attitudinal or situational factors (e.g., confidence in the medical care system and feelings of internal control) that may predispose one toward satisfaction with care received. Data to test the relative importance of these types of determinants were collected in a general household survey of 400 persons. The patient satisfaction scale developed and tested by Roghmann and his colleagues using nonmetric multidimensional scaling was used. Multiple regression analysis was performed on the data. Results show that certain predispositional factors (confidence in the community's medical care system, having a regular source of care, and being satisfied with life in general) are more important predictors of patient satisfaction than patient's age, sex, race, educational attainment, or income.  
Author.

66

WEISS, G.L., RAMSEY, C.A.

Regular source of primary medical care and patient satisfaction.

Quality Review Bulletin; 15, 1989, no. 6, pp. 180-184.

nivel (C 2735)

variables: patient satisfaction, continuity of physician-patient relationship,

methods: PSS (Roghmann et al., 1979, Zastowny et al., 1983).

reliability test: no.

validity test: no.

population: 400 respondents.

dimensions: 5 items on carefulness of physician routinely seen, concern shown by physician, willingness of physician to listen, willingness of physician to spend time with patient, adequacy of information-giving.

A five-item patient satisfaction scale was administered to 400 respondents to examine the relationship between patient satisfaction and the level of continuity in the physician-patient relationship. As hypothesized, results indicate the greater the degree of continuity in the physician/patient relationship, the higher the level of patient satisfaction. The level of continuity was related to each of the five scale items individually and to the overall patient satisfaction scale. Even when patient background characteristics were controlled, continuity remained a key predictor of satisfaction with primary care received. Important differences in patient satisfaction occur between and among patients who see the same physician for each episode of primary care, who attend a small group of physicians working together, who attend a clinic or medical centre where a different physician may be seen on each occasion, and who do not have a regular source of care.

Author.



67

ZASTOWNY, T.R., ROGHMANN, K.J., CAFFERATA, G.L.

Patient satisfaction and the use of health service: explorations in causality.

Medical Care; 27, 1989, no. 7, pp. 705-723.

nivel

variables: patient satisfaction.

methods: literature review, self-developed questionnaire (based on Roghmann et al., 1979, 1983; Korsch, 1986).

reliability test: no.

validity test: no.

population: 400 families.

dimensions: general satisfaction, specific satisfaction, expressive satisfaction, instrumental satisfaction.

Little research exists that examines the causal relation between patient satisfaction and the use of health services. This study of a representative sample of low income families suggests that a relationship does exist. Furthermore, results reported indicate it is bidirectional and reciprocal in nature, and that is highly related to the provider from which patients seek care. Analysis according to the five major area clinics that were the main sources of medical care for an upstate New York community (two HMOs, two hospital-affiliated teaching clinics, and one continuity-of-care clinic) revealed that, in some providers, the association between use and satisfaction is positive, in others negative. Further evidence for a patient provider interaction hypothesis was found, suggesting that background characteristics, including health status and race, are related to use and a satisfaction in different ways in different clinics. The findings provide evidence for the existence of a causal relationship between use and satisfaction, which is dependent on the context in which medical care is given, and also suggest structural characteristics that might be responsible for these effects. A final conceptual model of satisfaction is offered, permitting reciprocal causation with use and satisfaction with emphasis on patient provider interactions, and this model provides an identification of short- and long-term processes. Progress in this area might require a shift in perspective upward toward structural and systems variables or a shift downward "microanalytic" processes, which detail patient-provider interactions.

Author.

68

KINMONTH, A., MURPHY, E., MARTEU, T.

Diabetes and its care - what do patients expect?

Journal of the Royal College of General Practitioners; 39, 1989, pp. 324-327.

nivel

variables: patient satisfaction, most preferred care provider.

methods: self-developed questionnaire.

reliability test: no.

validity test: no.

population: 55 non insulin-dependent diabetic patients.  
dimensions: site of preferred regular diabetic review, performance of care providers, most valued aspect of care.

A sample of 77% of the non-insulin dependent diabetics aged 30-70 years from two urban practices offering no structured diabetic care were interviewed. The 55 patients (mean age 60 years) were asked about their experiences and expectations of diabetes and the health professionals involved in their care. Twenty six patients attended the hospital diabetic clinic regularly but 13 patients received no review at all; 46 patients wanted their general practitioner to be involved in future care and only six wanted to continue with hospital review alone. Patients gave hospital doctors and general practitioners similar high ratings for knowledge of diabetes and its management by general practitioners and practice nurses were rated more highly for communication and accessibility. The aspect of care valued most was being given clear information about diabetic management. Twenty-two patients thought that diabetes would have a significant impact on their future health and 35 rated regular diabetic review as extremely important in keeping themselves healthy. Most patients felt it likely that they would develop diabetic complications. Little difference was found between the views of clinic attenders and non-attenders, and there was no evidence that non-attenders had actively rejected review. These non-insulin dependent diabetics considered diabetes to be a serious disorder warranting regular care and expressed confidence in the primary care team's ability to provide such care.  
Author.

## 4.2 Physicians

### 4.2.1 General practice organisation

69

ROSS, C.E., MIROWSKY, J., DUFF, R.S.

Physician status characteristics and client satisfaction in two types of medical practice.

Journal of Health and Social Behaviour; 23, 1982, no. 12, pp. 317-329.

nivel

variables: client satisfaction, type of practice.

methods: model, self-developed interview.

reliability test: no.

validity test: no.

population: 376 families.

dimensions: 7 items on recommendation, physician change, availability, opinion, advice, compliance, competence.

The authors developed and tested a model of client satisfaction with medical care in which sociodemographic characteristics of the physician affect client satisfaction under conditions of unmet expectations and a lack of choice. They hypothesized that in small fee-for-service practices such as solo practice, where the client chooses his or her physician, status characteristics of the doctor would be unrelated to client satisfaction. Conversely, in large prepaid group practices where the client is assigned a physician, nonnormative physician status characteristics would create lower client satisfaction. Because expectations are based on situational norms, the authors hypothesized that clients in large prepaid multispecialty groups would be most satisfied with physicians who fit the norm - middle-aged white males from higher status Protestant or Jewish backgrounds. In a sample of paediatricians and their clients, the hypotheses were supported, with one modification - the relationship between client satisfaction and the physician's socioeconomic background is parabolic. Furthermore, the negative effect of nonnormative physician religious status on client satisfaction in large prepaid groups is offset by the client-physician match and by experience with the physician.

Author.

70

SMITH, C.

Patients' opinions on the services provided by a general practice: a community health council survey.

Journal of the Royal College of General Practitioners; 36, 1986, no. 292, pp. 504-505.

nivel

variables: personality of doctor, practice accessibility and availability, attitudes members practice team, special areas (for example screening and minor operations), patient views.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 105 general practice patients.  
dimensions: no dimensions or items reported.

A survey of 105 patients selected from a single general practice was undertaken by the local community health council to determine patients' opinions on the services provided. Although it had not originally been designed for studying individual practices the questionnaire produced much valuable information and complemented the 'What sort of doctor?' assessment.

Author.

71

CURTIS, B.E.

The patient's view of general practice in an urban area.

Family Practice; 4, 1987, no. 3, pp. 200-206.

nivel

variables: patient satisfaction, patient preferences, registration with a general practitioner, accessibility, organization, appointment systems, group versus single-handed practices.  
methods: self developed questionnaire including open questions, explorative study.  
reliability test: no.  
validity test: no.  
population: 896 members of households in a inner city and a suburban area.  
dimensions: no dimensions or items reported.

This paper reviews evidence from the health care professions about quality and accessibility of general practice in London, which suggests that inner London is well served than elsewhere, and recommends changes to the organization and equipment of inner London practice. Results from a community survey in north-east London are presented to show how the views about general practice among residents in a typical inner city district compared with those in a suburban area. The results suggest that while the respondents were generally satisfied with their doctor's practice, a significant minority were dissatisfied, particularly in the inner city. Some of the respondents' views seemed to differ from the model of desirable general practice suggested by the policy literature. In particular, single-handed practice was more popular with patients than group practice. The results reflect the importance to patients of good personal rapport and communication with their doctor, which seemed to them the most significant quality of

general practice. The implications for policies to improve inner city practice are considered.

Author.

72

NICOL, E.F.

Job sharing in general practice.

British Medical Journal; 295, 1987, no. 6603, pp. 888-890.

nivel

variables: patient satisfaction, patient perceptions, availability, part time versus full time partner general practitioners.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 500 general practice patients.  
dimensions: one item on general satisfaction.

A questionnaire survey of 500 consecutive patients consulting their general practitioners was undertaken to compare job sharing part time partners and full time partners in respect of patients' perceptions and satisfaction with the availability of the doctor they wished to consult.

Comparison of linear analogue scales of patients' satisfaction with the availability of their chosen doctor showed no significant difference between job sharing partners and full time partners. Nevertheless, significantly fewer patients were able to see the full time partner of their choice within two days than were able to see the job sharing partner of their choice within the same period.

In this study patients were as satisfied with the availability of job sharing partners as they with that of full time partners; the findings highlight important considerations for practices wishing to appoint partners with a limited commitment.

Author.

73

HARRISON, A.T.

Appointment systems: evaluation of a flexible system offering patients limited choice.

British Medical Journal; 296, 1988, no. 6623, pp. 685-686.

nivel

variables: flexible appointments system, patient perceptions.  
methods: several items in a self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 309 general practice patients.  
dimensions: no dimensions or items reported.

To test the efficiency of a flexible appointments system patients seeing one of the partners in a semirural dispensing practice were asked to choose whether they wanted appointments lasting five 5, 10, or 15 minutes. After seeing the doctor they were asked to fill in a questionnaire that asked, among other questions, how long an appointment they had booked, whether they had felt rushed, whether the doctor had seemed hurried, whether they had seen the doctor on the day they wanted, how long they had to wait in the surgery, and whether they liked the system. Five minute appointments had been chosen by 124 of the 309 patients who returned completed questionnaires, 10 minute appointments by 155, and 15 minute appointments by 30. Mean consultation times were 6.1, 9.2, and 12.9, respectively. Altogether 298 liked the system.

Author.

74

BOLLAM, M.J., McCARTHY, M., MODELL, M.

Patients' assessment of out of hours care in general practice.

British Medical Journal; 296, 1988, no. 6625, pp. 829-832.

nivel

variables: (out of hours) consultations, patient views, patient satisfaction.

methods: self-developed interview schedule (based on interviews).

reliability test: no.

validity test: no.

population: 177 general practice patients.

dimensions: dimensions or items not reported.

A sample of 177 patients drawn from 13 north London practices were interviewed shortly after they had sought help from their practice outside normal surgery hours. Patients were asked to describe the process and outcome of their out of hours call, to comment on specific aspects of the consultation, and to assess their overall satisfaction with the encounter.

Parents seeking consultations for children were least satisfied with consultation: those aged over 60 responded most positively. Visits from general practitioners were more acceptable than visits from deputising doctors for patients aged under 60, but for patients aged over 60 visits from general practitioners and deputising doctors were equally acceptable.

Monitoring of patients' views of out of hours consultation is feasible, and the finding of this study suggest that practices should regularly review the organisation of their out of hours care and discuss strategies for minimising conflict in out of hours calls, particularly those concerning children.

Author.

75

RETHANS, J-J., HOPPENER, P., WOLFS, G., DIEDERIKS, J.

Do personal computers make doctors less personal?

British Medical Journal; 296, 1988, no. 6634, pp. 1446-1448.

nivel

variables: computers and consultation, patient views.  
methods: self-developed questionnaire based on interviews.  
reliability test: no.  
validity test: no.  
population: 390 general practice patients.  
dimensions: dimensions or items not published.

Ten months after the installation of a computer in a general practice surgery a postal survey (piloted questionnaire) was sent to 390 patients. The patients' views of their relationship with their doctor after the computer was introduced were compared with their view of their relationship before the installation of the computer. More than 96% of the patients (n=263) stated that contact with their doctor was as easy and as personal as before. Most stated that the computer did not influence the duration of the consultation. Eighty one (30%) stated, however, that they thought that their privacy was reduced. Unlike studies of patients' attitudes performed before any actual use of a computer in general practice, this study found that patients have little difficulty in accepting the presence of a computer in the consultation room. Nevertheless doctors should inform their patients about any connections between their computer and other, external computers to allay fears about a decrease in privacy.  
Author.

76

DIXON, R.A., WILLIAMS, B.T.

Patient satisfaction with general practitioner deputising services.

British Medical Journal; 297, 1988, no. 6662, pp. 1519-1522.

nivel

variables: patient satisfaction, general practitioner deputising services.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 3887 respondents.  
dimensions: satisfaction items on telephonist, waiting time for visit, and deputy (bedside manner, doctor-patient communication, taking of history, physical examination, explanation of findings).

Proposed increases in the average hours of surgery sessions of general practitioners as part of the government programme for improving primary health care may result in more use of deputising services to provide off duty cover. The satisfaction of patients with such a service was studied during one week of October 1987 at nine of the 29 branches of Air Call Medical Services in urban areas in Britain by means of a postal questionnaire. Of a sample of 4626 callers to the service, 3887 (84%) responded. An estimated 32% of the patients expected that a doctor from their own practice would have attended them, 19% expected that they would be admitted to hospital and 8% were admitted. Over 90% of patients were satisfied with the

telephonist's handling of the call; 79% of those visited were satisfied with the waiting time; and over 80% were satisfied with various aspects of the doctor's handling of the visit (bedside manner, communication, taking of history, physical examination, and explanation of findings), the lowest figure being for explanation of findings (81%). Satisfaction was generally higher during the daytime; among the elderly, especially men; and among patients who did not anticipate that a doctor from their doctor's practice would call. The results suggest that a high proportion of patients were satisfied with the deputising service they received.

Author.

77

ALLEN, D., LEAVEY, R., MARKS, B.

Survey of patients' satisfaction with access to general practitioners.

Journal of the Royal College of General Practitioners; 38, 1988, no. 309, pp. 163-165.

variables: patient satisfaction, accessibility to general practitioners.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 200 general practice patients.  
dimensions: no dimensions or items reported.

The north west England faculty patients' liaison group, supported by community health councils and family practitioner committees, surveyed patients' perceptions of accessibility to general practitioners in seven districts in 1985 and 1986. Findings on appointment systems, telephone access and out of hours calls are compared with those from other surveys. The results show that patients' satisfaction with appointment systems is related to the efficiency of their own general practitioner's system. The result also show higher levels of dissatisfaction with waiting times for out-of-hours visits than in studies 10 years ago and that a large proportion of patients would like direct telephone access to their general practitioner.

Author.

78

BESTVATER, D., DUNN, E.V., TOWNSEND, C., NELSON, W.

Satisfaction and wait time of patients visiting a family practice clinic.

Canadian Family Physician; 34, 1988, no. 1, pp. 67-70.

nivel

variables: perceived and actual wait times, patient satisfaction.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 656 patients of family-practice unit.  
dimensions: no dimensions or items reported.



Data relating to wait times and time spent with nurses and physicians were recorded for 656 patients visiting a large family practice unit. Patients were asked to provide estimates of their wait times and ratings of the acceptability of these wait intervals. Actual wait times were usually longer than those estimated by the patient, and total wait times were considered reasonable. The results of the study show high levels of patient satisfaction and indicate that few patients are dissatisfied until total wait time exceeds forty-five minutes. Different age groups appear to have different expectations, however, and younger patients are more likely to be dissatisfied with their waiting times.

Author.

79

STEVEN, I.D., DOUGLAS, R.M.

Dissatisfaction in general practice: what do patients really want?

Medical Journal of Australia; 148, 1988, pp. 280-282.

nivel (C 2167)

variables: patient dissatisfaction; solo, two, and more person practices.  
methods: questionnaire (Steven & Douglas, 1986).  
reliability test: no.  
validity test: no.  
population: 100 general practice patients.  
dimensions: architecture, receptionists, accessibility, (professional) quality, and communication (21 items).

In 31 general practices in Adelaide, approximately 100 consecutive adult patients aged 15-64 years completed a 21-item questionnaire that related to their dissatisfaction with aspects of the care that was provided in the practice. Fourteen of the practices were "solo" practices, five practices were two-person partnerships and 12 practices involved three or more partners. The 21 item divided naturally into five groups: "architecture", "receptionists", "accessibility", "quality" and "communication". Factor analysis of the responses provided support for the idea that "receptionists", "accessibility" and "communication" were independent issues for the respondents and that "quality" was less discrete and was embedded in a factor which we have labelled "mechanics". For nearly all items, the mean dissatisfaction values for the practices were greatest in the larger practices and least in the two-person practices, with solo practices occupying an intermediate position. The main dissatisfaction related to accessibility and communication. These issues are explored in the light of current trends in the organization of primary medical care.

Author.

80

SMITH, C.H., ARMSTRONG, D.

Comparison of criteria derived by government and patients for evaluating

general practitioner services.  
BMJ; 299, 1989, no. 6697, pp. 494-496.  
nivel

variables: patient evaluations, health care criteria.  
methods: self-developed questionnaire on preferences.  
reliability test: no.  
validity test: no.  
population: 711 patients in a semirural group practice.  
dimensions: list of 20 criteria on page 495.

A study was carried out to see whether patients' criteria of good health care in general practice were different from those of the government and doctors. A total of 711 patients in a semirural group practice evaluated the importance of 20 criteria describing different facets of care. Half the criteria were derived from Promoting Better Health (health education, easy to change doctors, all children vaccinated, health checks for adults and children under 5, regular screening for cancer, woman doctor available, doctor goes on courses, well-decorated premises, convenient surgery times); the other 10 were taken from a preliminary interview study of 24 patients (staff friendly and know me, doctor listens and sorts out problems, same doctor for consultations, nurse on premises, appointments available within 48 hours, waiting time less than 20 minutes, small surgery premises, tests available at surgery). Questionnaires containing 10 pairs of criteria assigned by computer were drawn up and patients asked to give their preference in each pair. The number of times each criterion was preferred was scored and its comparative importance ranked. The three criteria most highly ranked by all patients were having a doctor who listens, having a doctor who sorts out problems, and usually seeing the same doctor (all criteria originated by patients). The three least highly valued were health education, being able to change doctor easily, and well-decorated and convenient premises (all criteria originated by the government). The criteria originated by patients as a group scored significantly more highly than those originated by the government as a group. In a more competitive general practice environment, in which doctors will be more inclined to satisfy the wishes of patients, officially supported indicators of good quality care might not get the encouragement that the government and doctors think that they deserve.

81

WILLIAMSON, V.

Patients' satisfaction with general practitioner services: a survey by a community health council.

Journal of the Royal College of General Practitioners; 39, 1989, no. 328, pp. 452-455.

nivel

variables: patient satisfaction, general practitioner services.  
methods: self-developed semistructured questionnaire (modelled on Cartwright & Anderson, 1981).

reliability test: no.  
validity test: no.  
population: 177 mothers.  
dimensions: structure of general practice, process of doctor-patient interaction, services for women and children, overview of the family doctor service.

Brighton community health council responded to the invitation of five local general practitioners to undertake a patient satisfaction survey of their practices. A total of 177 mothers of children under five years old were interviewed in their own homes. Satisfaction with the services provided by the general practitioners and members of the primary health care team to the respondents and to their young children was high overall, but critical comment reflected a dissatisfaction with professionals' unwillingness to take mothers' concern at face value and to recognize the validity of mothers' own experiential knowledge. Some women were not satisfied with the extent to which they could ask questions or explain their problem. They resented attempts by receptionists to bar access to doctors and the apparent reluctance of doctors and health visitors to make home visits. It is suggested that various strategies such as telephone consultations, written guidelines on childhood ailments and parent support groups within the context of a more interactive partnership between patients and professionals could lead to a more effective service.

Author.

82

FIELD, J.

How do doctors and patients react to the introduction of a practice formulary?

Family Practice; 6, 1989, no. 2, pp. 135-140.

nivel

variables: satisfaction with drugs, formulary practice, drug change, prescription of and information on drugs.  
methods: control-group experiment, interview including one satisfaction-with-drug item.  
reliability test: no.  
validity test: no.  
population: 90-100 general practice patients.  
dimensions: one satisfaction-with-drug item.

A formulary covering 10 drug groups and over 50% of prescribing was devised in a general practice and doctors' attitudes to the idea of a formulary were assessed before and after the study. The prescribing of formulary drugs rose from 72% to 81% over two years, and the general practitioners were significantly more positive towards formularies in the practice that devised the formulary but not in three control practices. A group of patients receiving repeat prescriptions was interviewed in three practices in three consecutive years and there was no difference in satisfaction with drugs between the formulary practice and the two control

practices. However, an association between changing a drug and dissatisfaction was noted, and there was a trend of decreasing satisfaction with prescribing and with information given about drugs over the three years in all the practices. Overall, 15% of patients felt that they had either too little or no information given to them about their drugs. Improving information given to both doctors and patients about drugs may be important in improving prescribing without causing discontent.

83

WENSING, M., GROL, R., SMITS, A.

Patiëntenoordelen over kwaliteit van huisartsenzorg.

(Patient judgements on the quality of general practitioners' care.)

Nijmegen: KUN, 1991.

nivel (R 5029)

variables: patient satisfaction, general practitioners.

methods: literature review.

reliability test: -

validity test: -

population: -

dimensions: -

This is a literature study of research into patient judgements, containing 58 general publications and 44 studies of general practice. The 52 studies of general practice (44 + 8 general publications) are analysed for dimensions of care. The dimensions "zorgvuldigheid, bejegening, informatiebereid en beschikbaarheid" (carefulness, attitude, information provision and availability) were surveyed mostly. Less studied were: "doeltreffendheid, geschiktheid, veiligheid, hygiëne, voeding, voorkomen van overbodige zorg, belasting, vertrouwensrelatie, coöperatie, verantwoordingsbereidheid, zelfstandigheid, continuïteit, doelmatigheid, integrale zorg, materiële privacy, bereikbaarheid en toegankelijkheid" (effectiveness, competence, safety, hygiene, feeding, prevention of superfluous care, burden, confidential relation, cooperation, accountability preparedness, autonomy, continuity, efficacy, integrated care, material privacy, reachability, accessibility). In research it is remarkably rare that patients are asked for what they think are relevant dimensions for research. Further, the instruments for assessing patient judgements of 40 studies were analysed. Most studies used self-developed questionnaires with closed direct questions. Reliability of the instruments was mentioned in only eight publications. Validation of instrument, for example by comparing other findings and instruments, received little attention from researchers. Conceptualization of patient judgement was an equally neglected subject in the studies reviewed.

84

BAKER, R.

The reliability and criterion validity of a measure of patients' satisfaction with their general practice.

Family Practice; 8, 1991, no. 2, pp. 171-177.  
nivel

variables: patient satisfaction, general practitioners.  
methods: self-developed Surgery Satisfaction Questionnaire (SSQ) (based upon professional information and literature).  
reliability test: yes.  
validity test: yes.  
population: 12,000 general practice patients.  
dimensions: continuity, access, medical care, premises, availability (17 items on pages 176 & 177).

The Surgery Satisfaction Questionnaire (SSQ) was developed using the methods of psychological test construction, and designed to determine patients' satisfaction with the services offered to them by their general practitioners. Principal components analysis (PCA) revealed five components distinct from general satisfaction - continuity, accessibility, availability, medical care and premises. Reliability as determined by a split half test (coefficient alpha) was adequate but should be improved in future versions of the questionnaire.

A study of criterion validity was undertaken to test the questionnaire and to develop methods of testing validity of measures of patient satisfaction. The two criteria used were the doctors' self assessment of their own practices and the assessment of an external assessor. The findings supported the validity of components of continuity, accessibility, availability and premises, but the patients' scores correlated better with the external assessors' scores than the doctors' self-assessed scores. SSQ is a useful foundation for the development of measures of patient satisfaction in general practice.

Author.

85

WILLIAMS, S.J., CALNAN, M.

Key determinants of consumer satisfaction with general practice.

Family Practice; 8, 1991, no. 3, pp. 237-242.

nivel

variables: consumer satisfaction, various components of general practice.  
methods: self-developed questionnaire (based on previous research).  
reliability test: no.  
validity test: no.  
population: 454 general practice patients.  
dimensions: accessibility and availability of health care services, the doctor-patient relationship, professional skills and the quality of care, organizational aspects of care.

Consumer satisfaction is an increasingly important issue, both in the evaluation and the shaping of health care, yet the relationship between specific criteria of health care and overall levels of consumer satisfaction with primary care is rarely addressed. The study reported here, based upon the

results of a postal questionnaire of a random sample of adults in the south east of England (response rate 62%, n=545), attempts to address this issue. Whilst general levels of satisfaction were high (95%), questions of a more detailed and specific nature revealed greater levels of dissatisfaction (e.g. 38% felt unable to discuss personal problems with their general practitioner, 26% expressed dissatisfaction with the level of information they received, and 25% were dissatisfied with the length of time spent in consultation). Key dimensions such as communication (0.64;  $P < 0.001$ ), the nature and quality of the doctor-patient relationship (0.61;  $P > 0.001$ ) - *vis a vis* issues such as access, availability and type of service provision - were found to be the criteria which most strongly associated with overall levels of satisfaction with general practice.

Author.

#### 4.2.2 Doctor patient communication

86

FALVO, D.R., SMITH, J.K.

Assessing residents' behavioural science skills: patients' views of physician-patient interaction.

Journal of Family Practice; 17, 1983, no. 3, pp. 479-483.

nivel

variables: patient's perspective, physician-patient interactions.  
methods: 1. explorative interviews, 2. rating of interview-categories, 3. development of Physician-Patient Interaction Scale.  
reliability test: yes.  
validity test: yes.  
population: family practice patients, stage 1. n=22, 2. n=30, 3. n=115.  
dimensions: general health care delivery, inappropriate interpersonal communication

Although residents' interactive skills within the physician-patient relationship are important in behavioural science training, these skills are often difficult to define and even more difficult to evaluate. Evaluation of these skills through direct observation by faculty miss the patient's perspective. Scales that have been developed to obtain the patient's perspective have generally been based on the researcher's definition of what is important in the physician-patient interaction, and few of these studies have adequate reliability and validity information. This study was conducted to identify physician behaviours that patients themselves consider to be important in the physician-patient interaction and then to develop a reliable, valid scale to evaluate residents' ability to perform these skills. Several factors were identified as important to patients in the physician-patient interaction, including being informed about their examination, treatment, and diagnosis, being treated by the physician in a respectful manner, and having the physician listen to their concerns and take their individual needs into consideration when prescribing treatment. A reliable and valid questionnaire was developed that can be used to assist faculty in assessing residents' skills in this area from the patient's perspective.

Author.

87

LINN, L.S., DIMATTEO, M.R., CHANG, B.L., COPE, D.W.

Consumer values and subsequent satisfaction ratings of physician behaviour.

Medical Care; 22, 1984, no. 9, pp. 804-812.

nivel

variables: consumer values, technical quality of care, psychosocial concern, courtesy, and mutual participation style of interacting  
methods: self-developed Medical Preference Survey.  
reliability test: no.

validity test: no.  
populations: 227 students.  
dimensions: technical quality, psychosocial concern, courtesy, mutual participation.

The role of respondents' values in their evaluation of and satisfaction with medical care was explored in four health education settings. Two hundred and twenty-seven nursing, medical, and health psychology students completed a forced-choice instrument designed to measure their value preferences for technical quality of care, psychosocial concern, courtesy, and mutual participation style of interacting in a medical visit. They subsequently watched a standardized 14-minute videotape of a simulated physician-patient interaction and evaluated the physician's behaviour from the patient point of view on the four dimensions using two popular methods for assessing patient satisfaction. Respondents' ratings of the medical encounter were more often significantly influenced by their values when the more subjective satisfaction measure was considered. In addition, respondents who valued technical quality more highly were more satisfied with the other three dimensions of physician behaviour, while respondents who more highly valued psychosocial concerns were less satisfied with these three dimensions. Ratings of satisfaction with technical quality were not affected by respondents' values. The importance of these findings in assessing patient satisfaction is discussed.

Author.

88

HULL, F.M., HULL, F.S.

Time and the general practitioner: the patient's view.

Journal of the Royal College of General Practitioners, 34, 1984, no. 2, pp. 71-75.

nivel

variables: patient satisfaction, consultation length.  
methods: self developed questionnaire, based on two pilot studies.  
reliability test: no.  
validity test: no.  
population: 1,112 general practice consults.  
dimension: general satisfaction, sufficiency of duration of consultation.

Patient satisfaction with the amount of time general practitioners allow them has been questioned. This paper reports the analysis of a questionnaire answered by 1,112 patients in 25 practices in Britain. The questionnaire explored the patients' assessment of the appropriateness of the length of the consultation and their ability to communicate their problem to the doctor. While most patients (91 per cent) felt that the consultation was long enough, there were a number of patients who were dissatisfied with the length of the consultation and their ability to communicate their problem to the doctor; dissatisfaction increased with shorter booked appointment items, with younger patients, when fewer previous visits to the doctor had been made



and when the psychological component of the case was greater. It is particularly disturbing that more than 50 per cent of women between ages 15-44 experienced difficulty in telling the doctor about their problem.  
Author.

89

ROTER, D.L.

Patient question asking in physician-patient interaction.

Health Psychology; 3, 1984, no. 5, pp. 395-409.

nivel (C 1755)

variables: patient satisfaction, patient question-asking.  
methods: recordings of doctor-patient communication, questionnaire (Roter, 1977).  
reliability test: -  
validity test: -  
population: 123 physician (internist) visitors.  
dimensions: no dimensions or items reported.

Patient question asking may be regarded as not only a method of information seeking but as a mechanism of patient participation in the medical dialogue. As such, the study of question asking behaviour provides insight into the physician-patient communication process. Presented is an analysis of data gathered as part of an experimental intervention designed to increase patient question asking during routine medical visits. Audiotape recordings of two physicians in 123 medical visits were content analyzed to identify the number, content, and form of patient questions, as well as a variety of other interaction variables. These measures were then related to patient satisfaction with care. Findings indicate that the experimental intervention had significant effect on increasing the number of direct questions asked and that these were asked outside of their usual interaction pattern. Further, the relationship between question asking and satisfaction differed in the two groups. The study contributes to the understanding of physician-patient communication dynamics and the information seeking process.

Author.

90

MORRELL, D.C., EVANS, M.E., MORRIS, R.W.

The "Five-minute" consultation: effect of time constraint on clinical content and patient satisfaction.

British Medical Journal; 292, 1986, no. 6524, pp. 870-872.

nivel

variables: time constraint, patient satisfaction.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: general practice patients.  
dimensions: no dimensions or items reported.

An experiment was carried out in which patients who were seeking appointments for consultation in a general practice in south London attended consulting sessions booked at 5, 7-5, or 10 minute intervals. The particular session that the patient attended was determined non-systematically. The clinical content of the consultation was recorded on an encounter sheet and on audiotape. At the end of each consultation patients were invited to complete a questionnaire designed to measure satisfaction with the consultation. The stress engendered in doctors carrying out surgery sessions booked at different intervals of time was also measured.

At surgery sessions booked at 5 minute intervals, compared with 7-5 and 10 minute intervals, the doctors spent less time with the patients and identified fewer problems, and the patients were less satisfied with the consultation. Blood pressure was recorded twice as often in surgery sessions that were booked at 10 minute intervals compared with those booked at 5 minute intervals. There was no evidence that patients who attended sessions booked at shorter intervals received more prescriptions, were investigated or referred more often to hospital specialists, or returned more often for further consultations within four weeks. There was no evidence that the doctors experienced more stress in dealing with consultations that were booked at 5 minute intervals than at consultation booked at 7-5 and 10 minute intervals, though they complained of shortage of time more often in surgery sessions that were booked at shorter intervals.

Author.

91

ROTER, D.L., HALL, J.A., KATZ, N.R.

Relations between physicians' behaviours and analogue patients' satisfaction, recall, and impressions.

Medical Care; 25, 1987, no. 5, pp. 437-451.

nivel

variables: patient satisfaction, recall of information, global impressions, physician behaviour.  
methods: self-developed questionnaire.  
reliability test: yes.  
validity test: no.  
population: 258 role-playing patients (students).  
dimensions: 19 satisfaction items, 1 global impression item, 1 item on impressions of the physician, open-ended paragraph on recall of information.

This paper investigates associations between physicians' task-oriented and socioemotional behaviours, on the one hand, and analogue patients' satisfaction, recall of information, and global impressions. The study is based on role-playing subjects' responses to interactions between physicians and simulated patients. Audiotapes of two standardized patient cases presented by trained patient simulators to 43 primary care physicians were rated by role-playing patients (N = 258), and electronically filtered excerpts from the encounters were rated for vocal affect by 37 independent judges. Content

analysis was made of the visits' transcripts to assess interaction process and to identify all medical information communicated. Finally, speech error rate was calculated from a combination of audiotape and transcript. Findings revealed that role-playing patients clearly distinguished task from socio-emotional behaviours of the physicians, and a consistent pattern of association emerged between physicians' task behaviours and role-playing patients' satisfaction, recall, and impressions. Within the task domain, patient-centred skills (i.e., giving information and counselling) were consistently related to patient effects in a positive direction, but physician-centred behaviours (i.e., giving directions and asking questions) demonstrated the opposite relationship. A negative pattern of association was also evident between physicians' socioemotional behaviours and patient effects.  
Author.

92

KLEIN BULLER, M., BULLER, D.B.

Physicians' communication style and patient satisfaction.

Journal of Health and Social Behaviour; 28, 1987, no. 4, pp. 375-388.

nivel

variables: patient satisfaction, physician communication style.  
methods: Interpersonal Communication Satisfaction Scale\* (Hecht, 1978); self-developed questionnaire on satisfaction with treatment\*\*.  
reliability test: \* yes; \*\* yes.  
validity test: \* no; \*\* no.  
population: 219 urban medical clinic patients.  
dimensions: \* no dimensions or items reported.  
\*\* idem.

Research has linked the communication styles of physicians to patients' satisfaction with health care. Recently Ben-Sira offered a social interaction model to explain this relationship; this model however, focused on a single, narrow style of communicating and overlooked the broader spectrum of styles. This survey assessed two general communication styles: affiliation and control. It also examined eight social characteristics of medical interviews as possible mediators of the impact of the physician's communication style on the patients' satisfaction. Patients' evaluations of the physician's communication were associated strongly with patients' evaluations of medical care, suggesting that competence in communication may be a facet of medical competence. Affiliative styles were related positively to patients' satisfaction, whereas dominant/active styles had a negative relationship with satisfaction. Severity of the illness, physician's age, physician's specialty, and the number of prior visits affected the importance of the physician's communication in the patient's evaluations of care.  
Author.

93

MEYBOOM, W.A.

Een onderzoek naar (on)tevredenheid over de zorg van huisartsen.

(A study of (dis)satisfaction with general practitioners' care.)

Medisch Contact; 43, 1988, no. 20, pp. 629-631.

nivel

variables: patient complaints, general practitioners care.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 143 female general practice patients.  
dimensions: dimensions or items not reported.

The relations between dimensions of actions of general practitioners and dimensions of health behaviour, health status and patient complaints were investigated. 1.443 women in the agegroup of 50 to 64, registered with a regional sickness fund, were surveyed. 14% of the patients had complaints about the care given by their general practitioner. Complaining about "shortcomings" was more frequent than complaints about "superfluous acting": 14 versus 2%. 70% of the complaints were not discussed with the general practitioner. The percentage of 14% resembles the general percentages of satisfaction research in general practice: 10-20% dissatisfaction.

94

LEHMAN, F., FONTAINE, D., BOURQUE, A. CÔTÉ, L.

Measurement of patient satisfaction: the Smith-Falvo Patient-Doctor Interaction Scale.

Canadian Family Physician; 34, 1988, pp. 2641-2645.

nivel (C 3520)

variables: patient satisfaction.  
methods: Falvo-Smith Patient-Doctor Interaction Scale (Falvo & Smith, 1983).  
reliability test: no.  
validity test: no.  
population: 28 family practice patients.  
dimensions: 19 items published on page 2643.

This article provides a review of various methods that have been developed to measure patient satisfaction and describes the use of the Smith-Falvo scale in determining patient satisfaction with medical services provided by residents in the Verdun Family Practice Program. In view of the limited range of scores provided by the use of this scale, the authors recommend that further research be done to develop a method of assessment of patient satisfaction that will take into account the duration of patient-physician interviews.

Author.

95

BIRD, A., COBB, J., WALJI, M.T.

Increasing patient participation using an extended consultation: an inner city study.

Journal of the Royal College of General Practitioners; 38, 1988, no. 310, pp. 212-14.

nivel

variables: patient participation, patient evaluations, general practice consults.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 467 consults.  
dimensions: questionnaire assessed patients' and doctors evaluations of three stages of consultation: 1) access to records, 2) doctor/nurse session, 3) self help session with receptionist.

An inner city practice in Birmingham has developed a new style of extended consultations to increase patient participation in primary care, based on previous initiatives in the practice, in particular allowing patients access to medical records, adopting an open reception style, and including consultations with a nurse practitioner. In a three stage consultation lasting approximately 30 minutes patients were offered a session with a receptionist for assisted access to medical records, a session of 15-20 minutes with a doctor or nurse and a self help session with a receptionist. This extended consultation was welcomed by patients, who showed a marked degree of participation, and it also increased the satisfaction and cooperation of project staff. This type of consultation provides a model for increasing patient participation in general practice.

Author.

96

FALVO, D., TIPPY, P.

Communicating information to patients: patient satisfaction and adherence as associated with resident skill.

Journal of Family Practice; 26, 1988, no. 6, pp. 643-647.

nivel

variables: communication of specific information about medications and follow-up appointments, patient recall, patient satisfaction, adherence.  
methods: Patient/Doctor Interaction Scale (Falvo, 1983); observations of physician-patient communication.  
reliability test: yes.  
validity test: yes.  
population: 29 family practice patients.  
dimensions: no dimensions or items reported.

A study investigated the degree to which residents' communication of specific information about medications and follow-up appointments had an impact on patient recall, satisfaction, and adherence. Twenty-nine interactions between patients and residents were taped and analyzed by two trained observers. Patients were interviewed immediately after their interactions with residents to assess their ability to recall instructions and to assess their levels of satisfaction with the visit. Patients' overall global satisfaction with their interactions was highly correlated with their ratings of residents information giving (Pearson  $r = .90$ ,  $P < .001$ ). Patients who expressed higher levels of satisfaction also had higher recall rates (Pearson  $r = .39$ ,  $P < .01$ ), although overall patient recall rate was only slightly above 50 percent. Observers' analysis of residents giving information reveals a mean performance rating of 40 percent. Only 31 percent of patients returned for their follow-up appointments. The study suggests that information itself may not be so important in determining patient satisfaction as are patients' perceptions that physicians attempt to give them information. Such information may, however, have greater impact on patient adherence with physician recommendations.

Author.

97

ANDERSSON, S.O., MATTSSON, B.

Length of consultations in general practice in Sweden: views of doctors and patients.

Family Practice; 6, 1989, no. 2, pp. 130-134.  
nival

variables: patient satisfaction, consultation length.  
methods: translated questionnaire (Hull et al., 1984).  
reliability test: no.  
validity test: no.  
population: 160 general practice consults.  
dimension: general satisfaction, sufficiency of duration of consultation.

In a study in Sweden of 160 consultations, general practitioners and patients separately assessed their satisfaction with the consultation length and the ability of the patient to explain the problem. These assessments were compared with each other and were correlated with the actual length of the consultation. The mean length of the consultations was 21 minutes with a great variation between different doctors. Consultations with psychological problems were longer than those with a physical character (mean of 28 versus 14 minute). Elderly patients had longer consultations. The patients were on the whole more satisfied than the doctors. There was no evidence that longer consultations gave more satisfaction for either doctors or patients. The doctors not only registered more psychological problems than the patients but they were more likely to register insufficient time for discussing psychological problems.

Author.

98

WOOLLEY, H., STEIN, A., FORREST, G.C., BAUM, J.D.  
Imparting the diagnosis of life threatening illness in children.  
British Medical Journal; 298, 1989, no. 6688, pp. 1623-1626.  
nivel (C 3412)

variables: parent satisfaction, communication of diagnosis.  
methods: semistandarded interviews on satisfaction (based on pilot study).  
reliability test: no.  
validity test: no.  
population: 45 parents of children with life threatening or terminal illnesses.  
dimensions: amount of information, quality of information, pacing of information, who was present at discussion, follow up arrangement, overall satisfaction.

The parents of children with life-threatening or terminal illnesses were interviewed about their experiences of the way in which they were told the diagnosis. The interview was piloted on 25 families and then administered in a semi-standardized manner to a further 45 families. Parents were asked how satisfied they were with the initial discussion about the diagnosis: 23 families were satisfied with how much information they were given; 22 with the information concerning prognosis; 20 with the pacing of the information; 33 with who was present; 32 with arrangements for follow-up; and 26 were satisfied overall with the initial discussion. Clear patterns emerged about which elements of the discussion parents appreciated or resented. For example, they valued an open, sympathetic, direct, and uninterrupted discussion of the diagnosis in private that allowed sufficient time for them to take the news in and for doctors to repeat and clarify information. They disliked evasive or unsympathetic brief interviews. All parents remembered vividly the manner in which the diagnosis was imparted, and some were still preoccupied with this many years later. Analyses were carried out to test the possibility that reports of satisfaction and dissatisfaction were a function of current depression and anxiety, but no evidence was found for this.

99

RASHID, A., FORMAN, W., JAGGER, C., MANN, R.  
Consultations in general practice: a comparison of patients' and doctors' satisfaction.  
British Medical Journal; 299, 1989, no. 6706, pp. 1015-1016.  
nivel

variables: patient satisfaction, general practice consults.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 250 general practice patients.  
dimensions: 13 items reported on page 1016.

Objective: to provide an objective means of assessing patients' and doctors' satisfaction with a consultation. Design: questionnaire study of patients and general practitioners after consultations. Setting: urban general practice. Subjects: 250 patients attending consecutive consultations conducted by five general practitioners. Main outcome measure: identification of deficiencies within a consultation as perceived by both doctors and patients. Results: the doctor's and patient's questionnaires for each consultation were matched and the results analyzed on a group basis. The response rate for individual questions was high (81-89%). The doctors and patients significantly disagreed about the doctors' ability to assess and put patients at ease, to offer explanations and advice on treatment, and to allow expression of emotional feelings and about the overall benefit that the patients gained from the consultation. In all cases of disagreement the doctor had a more negative view of the consultation than the patient. Conclusions: the results of giving structured questionnaires on consultations to both patients and doctors could be a useful teaching tool for established doctors or those in training to improve the quality and sensitivity of care they provide.  
Author.

100

VU, N.V., MARCY, M.L., VERHULST, S.J., BARROWS, H.S.  
Generalizability of standardized patients' satisfaction ratings of their clinical encounter with fourth-year medical students.  
Academic Medicine; 65, 1990, no. 9, supplement, pp. S29-S30.  
nivel

variables: patient satisfaction ratings, clinical encounters.  
methods: methodological testing of patient satisfaction rating form with standardized patients.  
reliability test: yes.  
validity test: yes.  
population: 18 standardized patients.  
dimensions: rating form consisted of 2 items on communication skills, 2 items on professional service, and 1 item on overall satisfaction.

The purposes of this study are to determine from a performance-based clinical examination using standardized patients (SPs): 1) the nature of the standardized patients' ratings of their satisfaction with the clinical encounter, 2) the reliability or generalizability of the patient satisfaction ratings and the number of patients needed to derive reliable ratings, 3) the specific behaviour that consistently characterized those students who received high and low patient-satisfaction ratings, and 4) the effects of the SPs' gender and age and the students' gender and race on patient-satisfaction ratings. Results from the study indicate that the SPs ratings of students' communications skills and professional service and of their satisfaction with the clinical encounter were valid. When based on 17 or 18 patients, the SPs ratings were found to be highly reliable and can be used with a reasonable degree of confidence for evaluation purposes. The results suggest that, in using SPs to assess patient satisfaction, a succinct patient satisfaction form with



a limited number of important items may prove to be sufficient and that the SPs gender or age may not have any effect on their ratings.

101

SAVAGE, R., ARMSTRONG, D.

Effect of a general practitioner's consulting style on patients' satisfaction: a controlled study.

BMJ; 301, 1990, no. 6758, pp. 968-970.

nivel

variables: patient satisfaction, directed versus shared consulting style.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 359 general practice patients.  
dimensions: 5 items reported on page 969.

Objective: to compare the effect of directing and sharing styles of consultation by a general practitioner on patients' satisfaction with the consultation. Design: patients were randomised to receive a directing or sharing style in the part of the consultation concerned with giving treatment, advice, and prognosis. Setting: an inner London general practice. Patients: 359 randomly selected patients consulting with one general practitioner. Four patients refused to participate and five were excluded. Thirty failed to complete the initial assessment and 110 failed to complete the assessment a week later, giving response rates of 89% and 58% respectively. Main outcome measures: patients' satisfaction with the general practitioner's perceived understanding of their problem and the explanation they received and whether they felt that they had been helped immediately after the consultation and one week later. Results: patients who had the directing style of consultation reported significantly higher levels of satisfaction on almost all the outcome measures. This was particularly striking for patients with physical problems (excellent explanation 23/68 (34%) v 10/65 (15%), p less than 0.02; excellent understanding 25/68 (37%) v 9/66 (14%), p = 0.004), and for patients who received a prescription (excellent explanation 20/60 (33%) v 9/59 (15%), p less than 0.04; excellent understanding 27/60 (45%) v 10/59 (17%), p = 0.04). There was no significant difference in the responses to the directing and sharing styles in longer consultations (8/31 (26%) v 8/31 (26%)), in which the main treatment was advice (10/30 (33%) v 7/36 (19%)), and among patients with psychological (6/17 (35%) v 6/27 (22%)) or chronic problems (14/28 (50%) v 8/32 (25%)). Conclusions: style of consultation does influence the satisfaction of the patient, but its effect is most noticeable in consultations with patients with physical problems and patients who receive a prescription.

Author.

102

SHILOH, S., AVDOR, O., GOODMAN, R.M.

Satisfaction with genetic counselling: dimensions and measurement.  
American Journal of Medical Genetics; 37, 1990, no. 4, pp. 522-529.  
nivel (C 3095)

variables: patient satisfaction, genetic counselling.  
methods: development of questionnaire.  
reliability test: yes.  
validity test: no.  
population: 40 (study) and 56 (control) genetic counsellors.  
dimensions: instrumental (12 items), affective (10), procedural (4), general satisfaction (5), information (1).

Patient satisfaction has become a significant issue in evaluating medical care, although it has been largely neglected in genetic counselling. A 32-item questionnaire was designed to examine patient satisfaction and was administered to 76 clients in a genetic counselling centre, and 56 parents attending a paediatric outpatient clinic (the control group). Factor analysis showed 3 dimensions to satisfaction with genetic counselling: instrumental, affective, and procedural. The general level of satisfaction was found to be lower in the genetic counselling group than in the control group. This finding was interpreted as expressing basic properties of genetic counselling. The most important determinant of satisfaction in both groups was satisfaction with the content of information provided in counselling. Some affective and procedural aspects of genetic counselling were found more satisfying, and more important in determining genetic clients' general sense of satisfaction, as compared to the control subjects.

103

BAKER, R.

Development of a questionnaire to assess patients' satisfaction with consultations in general practice.  
British Journal of General Practice; 40, 1990, no. 341, pp. 487-490.  
nivel

variables: patient satisfaction, consultations in general practice.  
methods: development of a patient satisfaction questionnaire.  
reliability test: yes.  
validity test: yes.  
population: 239 general practice patients.  
dimensions: general satisfaction, professional care, depth of relationship, perceived time.

The assessment of patient satisfaction has become an important concern in the evaluation of health services. Measures of satisfaction must be valid and reliable if they are to be used widely. This paper reports the development of a new questionnaire to assess patients' satisfaction with consultations together with initial tests of the questionnaire's reliability and validity. Principal components analysis of the patients' assessments of care revealed three

factors of satisfaction: the professional aspects of the consultation, the depth of the patient's relationship with the doctor, and the perceived length of the consultation. The consultation satisfaction questionnaire is reliable under the conditions of this study and may have a role in research, medical education and audit.

Author.

104

BERTAKIS, K.D., ROTER, D., PUTNAM, S.M.

The relationship of physician medical interview style to patient satisfaction.

Journal of Family Practice; 32, 1991, no. 2, pp. 175-181.

variables: patient satisfaction, medical interview style.  
methods: 43 satisfaction items in self-developed questionnaire (adapted from Inui et al., 1982; Roter et al., 1987).  
reliability test: yes.  
validity test: no.  
population: 550 return visits to physicians.  
dimensions: satisfaction subscales: task-directed skill, interpersonal skill, attentiveness, emotional support, partnership.

The results of previous studies on the relationship between patient satisfaction and specific interviewing behaviours have been difficult to generalize because most studies have examined small samples of patients at one clinical location, and have used initial or acute care visits where the patient and physician did not have an established relationship. The present collaborative study of medical interviewing provided an opportunity to collect interviews from 550 return visits to 127 different physicians at 11 sites across the country. Tape recordings were analyzed using the Roter Interaction Analysis System, and postvisit satisfaction questionnaires were administered to patients. A number of significant relationships were found between communication during the visit and the various dimensions of patient satisfaction. Physician question asking about biomedical topics (both open- and closed-ended questions) was negatively related to patient satisfaction; however, physician question asking about psychosocial topics was positively related. Physician counselling for psychosocial issues was also positively related to patient satisfaction. Similarly, patient talk about biomedical topics was negatively related to satisfaction, while patient talk regarding psychosocial topics was positively related. Furthermore, patients were less satisfied when physicians dominated the interview by talking more or when the emotional tone was characterized by physician dominance. The findings suggest that patients are most satisfied by interviews that encourage them to talk about psychosocial issues in an atmosphere that is characterized by the absence of physician domination.

Author.

105

STEPTOE, A., SUTCLIFFE, I., ALLEN, B., COOMBES, C.

Satisfaction with communication, medical knowledge, and coping style in patients with metastatic cancer.

Social Science Medicine; 32, 1991, no. 6, pp. 627-632.

nivel

variables: satisfaction with test-information, care in general, medical knowledge, psychological coping, trait anxiety.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 77 cancer patients.  
dimensions: information of tests, care in general.

Interviews were conducted with 77 patients aged 19-84, admitted to a medical oncology ward for assessment and modification of treatment. Satisfaction with information provided about tests, symptoms and treatment was assessed, together with satisfaction with care in general, factual knowledge concerning cancer and other medical conditions, and anxiety. Habitual style of coping with stress by information-seeking versus avoidance was measured using the Miller Behavioral Style Scale. Satisfaction levels were generally high. Patients reporting the highest level of satisfaction with information were more avoidant in their coping style than the remainder, and were also less anxious. Factual knowledge about cancer was in contrast greater among patients who were less satisfied with communication. These patterns were not dependent on age or education. It is argued that satisfaction with communication in medical settings is not a simple function of communication skills and the provision of adequately structured information, but that patients' tendencies to cope with stress by seeking out or avoiding information need to be taken into account.

Author.

106

BENSING, J.

Doctor-patient communication and the quality of care.

Social Science & Medicine; 32, 1991, no. 11, pp. 1301-1310.

nivel

variables: patient satisfaction, physician judgments, doctor-patient communication.  
methods: Patient Satisfaction Scale (Verhaak, 1986).  
reliability test: yes.  
validity test: no.  
population: 103 consults.  
dimensions: 6 items on dimension "humaneness".

In this article a comparison is made between three independent sources of assessment of medical consultations. A panel of 12 experienced general

practitioners rated 103 consultations with hypertensive patients on the quality of psychosocial care. There was a wide consensus between the judges, resulting in a high reliability score. Two contrasting groups were formed: consultations that were rated high and those rated low in quality of psychosocial care. A comparison was made between this general assessment of the quality of psychosocial care and a more detailed assessment of the same consultations on nine much used communication variables made by trained psychologists. Knowledge about doctor-patient communication proved to predict very well as to which quality group the consultations belonged. A very high percentage (95%) was predicted accurately, solely on the basis of these nine communication variables. Affective behaviour, and especially nonverbal affective behaviour had the strongest predictive power. In the last part of the study a third source of assessment, i.e. patients' satisfaction was compared with both other sources. Much lower relationships were found, although most were in the predicted direction. Affective behaviour seems to be the most important in determining patient's satisfaction. The implications of these findings are discussed.

Author.

### 4.3 Methods in other types of health care

#### 4.3.1 Nursing

107

HINSHAW, A.S., ATWOOD, J.R.

A patient satisfaction instrument: precision by replication.

Nursing Research; 31, 1982, no. 3, pp. 170-175.

nivel (C 3118)

variables: patient satisfaction.  
methods: development of Patient Satisfaction Instrument (adapted from Risser, 1975).  
reliability test: yes.  
validity test: yes.  
population: 600 patients, primary medical surgical inpatients and outpatients.  
dimensions: technical-professional care, trust, patient education.

The Patient Satisfaction Instrument was developed over a series of five clinical and administrative studies during a period of eight years, with a total of 600 patients, primary medical surgical inpatients and outpatients. The process illustrates measurement precision by replication. The PSI is a Likert-type summated rating scale with three dimensions of patient satisfaction: technical-professional care, trusts, patient education. It was adapted for the use with inpatients from Risser's out-patient instrument. Internal consistency estimates appear satisfactorily and stable across the various studies: for example, alpha coefficients for the Technical-Professional subscale average .79. Education coefficients average .78, and Trust coefficients average .88. Interitem, item-subscale, and interscale correlations corroborate the alphas. Construct validity estimates were made via convergent/discriminant technique, discriminance, and predictive modelling. Empirical correlations moderately substantiated the multiple, convergent/discriminant predictions. Discriminance was strongly documented for all but the Education subscale which had modest support. Predictive modelling produced moderate to strong validity estimates. Overall the PSI has acceptable levels of validity and reliability with refinements indicated.

Author.

108

VENTURA, M.R., FOX, R.N., CORLEY, M.C., MERCURIO, S.M.

A patient satisfaction measure as a criterion to evaluate primary nursing.

Nursing Research; 31, 1982, no. 4, pp. 226-230.

nivel (C 3153)

variables: patient satisfaction.  
methods: controlled experiment, Risser Patient Satisfaction Scale (Risser, 1975).

reliability test: yes.  
validity test: no.  
population: 25 primary nursing unit patients, 21 team/functional nursing unit patients.  
dimensions: technical-professional, interpersonal-educational, interpersonal-trusting.

The Risser Patient Satisfaction Scale was used to evaluate the effectiveness of implementing the key concepts of primary nursing. An experimental control design was used. Forty-six subjects from two units completed the questionnaire. Estimates of reliability and homogeneity are reported. There is reason to question the discriminant validity of the subscales. No significant differences were obtained between the units on any of the scales or total score. A number of explanations are offered for interpreting the measuring of the nonsignificance of the differences. Work needs to continue on revising existing patient satisfaction measures or developing new ones. Other criteria with theoretical importance should be used in conjunction with satisfaction measures in assessing the effects of primary nursing.

Author.

109

GUZMAN, P.M., SLIPEVICH, E.M., LACEY, E.P., VITELLO, E.M., MATTEN, M.R., WOEHLKE, P.L., WRIGHT, W.R.

Tapping patient satisfaction: a strategy for quality assessment.

Patient Education and Counselling; 12, 1988, no. 3, pp. 225-233.

nivel

variables: patient satisfaction, quality of non-physician encounters in hospital.  
methods: development of a questionnaire, explorative study.  
reliability test: no.  
validity test: no.  
population: 686 discharged patients.  
dimensions: items on admission process (3), nursing actions (11), other hospital services (14), interpersonal (7) and information-giving skills (10).

Participant satisfaction is an important measure of program effectiveness. In hospitals, patient satisfaction is a measure that is compatible with quality assurance. This article focuses on the revision, implementation and analysis of a patient satisfaction questionnaire that was designed as a tool for assessing the quality of non-physician encounters in a small hospital. The Patient Satisfaction Questionnaire (PSQ), which contained a 30-item rating scale, was designed to collect data about admission, nursing care and seven other hospital services. The 686 PSQs that comprised a four-month sample of 2156 instruments (31,8%) completed in a selected year were analyzed. Results show no less than 90% of patient ratings reflecting satisfaction. In

addition, open-ended responses were overwhelmingly laudatory. The content and process of this collaborative effort demonstrate compatibility between research and management when goals and purposes are clearly delineated.  
Author.



#### 4.3.2 Hospital care

110

BAUER-ANSTADT, S.P.

Method for the study of the effectiveness of attendance in the multiple-family group on overall client treatment in a day-hospital setting.

International Journal of Partial Hospitalization; 2, 1984, no. 3, pp. 219-232.  
nivel (C 3102)

variables: satisfaction with family relationships, multiple-family group program.  
methods: development of questionnaire.  
reliability test: no.  
validity test: no.  
population: 35 hospital patients (phase 1), 51 hospital patients (phase 2).  
dimensions: affection, contact, understanding, tolerance.

Client satisfaction in a specific day-hospital session was demonstrated using an evolving questionnaire process. This process consisted of phases in which the questionnaire was systematically revised based on significant findings from the previous questionnaire, further client input, and the application of pertinent theoretical frameworks. 86 Caucasian hospital clients (aged 15-65 years) participated in 2 phases of revision to determine specific aspects of client satisfaction from attendance in a multiple-family group (MFG). The theory of separation-individuation by M.S. Mahler (1975) and the circumplex model by C. Russell were used in the revision of critical items from Questionnaire 1 used in Questionnaire 2. Results of Questionnaire 2 yielded more refined data of discrete aspects of client satisfaction from attendance in the MFG.  
Author.

111

DALY, R., FLYNN, R.J.

A brief consumer satisfaction scale for use in in-patient rehabilitation programs.  
International Journal of Rehabilitation Research; 8, 1985, no. 3, pp. 335-338.

nivel (C 3103)

variables: consumer satisfaction, in-patient rehabilitation programs.  
methods: development of Patient Feedback Questionnaire (PFQ).  
reliability test: yes.  
validity test: yes.  
population: 62 inpatients.  
dimensions: 12 items on benefit of treatment, physical improvement, knowledge, discharge, stay in centre, quality of service (2), needs, recommendation of program, effectiveness, general satisfaction, return.

The purpose of this research was to derive a brief, administratively feasible measure of consumer satisfaction that was suitable for use in inpatient rehabilitation programs. 62 inpatients discharged from the Royal Ottawa Regional Rehabilitation Centre completed a 19-item Patient Feedback Questionnaire (PFQ) and an 8-item concurrent validation measure, the Client Satisfaction Questionnaire (CSQ). Interitem correlations revealed that internal consistency of the PFQ was high enough for comparisons to be made among subgroups of consumers. Validity was promising, in that 7 of the 12 items were taken from the CSQ. This together with the brevity of the scale, makes it a feasible instrument for in-patient rehabilitation program evaluation purposes. With appropriate changes in wording an out-patient version of the scale could be developed. The PFQ is appended.

Author.

112

GLASSER, M., BAZUIN, CH. H.

Patients' views of the medical education setting.

Journal of Medical Education; 60, 1985, pp. 745-756.

nivel

variables: patients' views and preferences, quality of care, medical students versus physicians.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 1,334 patients at community health centres.  
dimensions: no dimensions or items reported.

The results of a survey of 1,334 patients at three community health centres operated by the University of Illinois College of Medicine at Rockford are presented and discussed. The research was designed to begin to obtain a better understanding of the patient's views on the quality of care and medical students in the medical education setting. Patients in the study reported being attracted to the educational site for the same reasons they would go to a private physician, that is location, advice of a friend, or dissatisfaction with their previous doctor. They also reported satisfaction with care in general and with the specific components of care at the health centres. However, the patients expressed different views of the medical students' role, and there were differences in the patients' preferences for a student or a faculty physician depending on their medical problem or condition. These views of the student's role and the patients' preferences of physicians were found to be related significantly to the patient's age, the patient's perception of his primary source of medical care, the patient's evaluation of the effect of medical schools on health care, and the patient's level of satisfaction with the care received.

Author.

113

WARE, J.E., HAYS, R.D.

Methods for measuring patient satisfaction with specific medical encounters.  
Medical Care; 26, 1988, no. 4, pp. 393-402.

variables: medical encounters, payment systems, patient satisfaction.  
methods: review, comparison item response formats, Visit-Specific Satisfaction Questionnaire.  
reliability test: yes.  
validity test: yes.  
population: outpatients in fee-for-service (n=136) and prepaid system (n=363).  
dimensions: visit overall, technical quality, interpersonal manner, waiting time.

This paper presents the results of two studies that compared methods for measuring patient satisfaction with specific medical encounters. One form used six-point response scales ranging from "very satisfied" to "very dissatisfied" (S6 scale); the other used five-point scales ranging from "excellent" to "poor" (E5 scale). Forms were assigned randomly to outpatients in fee-for-service (N=136) and prepaid systems of care (N=363) and were compared in terms of response variability, reliability, and validity. In both studies, the E5 scales showed greater response variability and better predicted whether patients intended to return to the same doctor in the future, recommend the doctor to a friend, and comply with medical regimen. Reliability was satisfactory and did not differ between methods. Results are discussed in terms of their implications for constructing visit-specific satisfaction rating scales.

Author.

114

CLEARY, P.D., KEROY, L., KARAPANOS, G., McMULLEN, W.

Patient assessments of hospital care.  
Quality Review Bulletin; 15, 1989, no. 6, pp. 172-179.  
nivel (C 2735)

variables: patient satisfaction, hospital care.  
methods: self-developed questionnaire.  
reliability test: yes.  
validity test: no.  
population: 589 inpatients.  
dimensions: admissions process, nursing, physicians, room, radiology, food and nutrition services, the discharge process, overall satisfaction.

Brigham and Women's Hospital in Boston recently refined a patient survey instrument that elicits information on satisfaction with specific areas of care as well as the impact of sociodemographic correlates and length of stay on satisfaction. The survey was administered to 255 medical patients, 347 surgical patients, and 329 obstetric patients. Results were analyzed using summary scales for ratings of physician care, nursing care, room, and food

service. The analysis found generally high ratings of satisfaction, although several areas in need of improvement were identified.  
Author.

115

NELSON, E.C., HAYS, R.D., LARSON, C., BATALDEN, P.B.

The patient judgment system: reliability and validity.

Quality Review Bulletin; 15, 1989, no. 6, pp. 185-191.

nivel (C 2735)

variables: patient judgments, quality of hospital care.  
methods: psychometric analysis of Patient Judgment System (Gillem, 1988).  
reliability test: yes.  
validity test: yes.  
population: 5,625 hospital patients.  
dimensions: admissions, daily care, information, nursing care, physician care, auxiliary staff, living arrangements, discharge, billing, total process, allegiance.

The Hospital Corporation of America (HCA) recently developed a patient judgment system (PJS) that generates information for monitoring long-term trends in hospital quality. Central to the system is a 68-item questionnaire that includes 11 quality scales. To test the questionnaire's reliability, validity, and representativeness, completed questionnaires from 5,625 patients from 32 hospitals were analyzed. Findings showed uniformly high patient-level reliabilities, good to excellent hospital-level reliabilities, and strong empirical support for the validity of the questionnaire's quality measures.  
Author.

116

DAVIS, D., HOBBS, G.

Measuring outpatient satisfaction with rehabilitation services.

Quality Review Bulletin; 15, 1989, no. 6, pp. 192-197.

nivel (C 3527)

variables: patient satisfaction, rehabilitation services.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 50 outpatients.  
dimensions: access to care, physical environment, care received (human, clinical, outcome aspect); items on page 194.

The Rehabilitation Services Department staff at University Hospital-UBC site (Vancouver, British Columbia) conducted a patient satisfaction survey in 1987 to measure outpatient satisfaction with the care received. Fifty completed surveys, which represented approximately 10% of the outpatient population

discharged during the study period, indicated that outpatients were primarily satisfied with the actual care and services provided and least satisfied with environmental factors, such as parking, waiting area conditions, and directions to treatment facility.

Author.

117

METERKO, M., NELSON, E.C., RUBIN, H.R. (Editors)  
BATALDEN, P., BERWICK, D.M., HAYS, R.D., WARE, J.E. (Contributors)  
Patient judgments of hospital quality: report of a pilot study.  
Medical Care; 28, 1990, no. 9 supplement, S1-S56.  
nivel

variables: patient judgments, hospital quality.  
methods: development of Patient Judgements of Hospital Care questionnaire, literature review.  
reliability test: yes.  
validity test: yes.  
population: 2,113 hospital patients.  
dimensions: admission (4 items), daily care in the hospital (14), nursing care (5), medical care (5), other hospital staff (3), living arrangements and the hospital environment (10), discharge (3), billing (2).

This report describes the results of the 6-month Hospital Satisfaction project. The study attempts to answer two principal questions: 1) what does a hospitalized patient experience? and 2) how can one gather hospital performance evaluations that reflect the patient's concerns? Three methods were used to answer these questions.

1 *Literature review.* A review was undertaken of published studies concerning patients' assessment of their inpatient experiences. This review emphasizes the development of assessment tools, particularly the content of questionnaire items and the psychometric properties of those instruments (Chapter 1).

2. *Content analysis and taxonomy of patient concerns.* To guard against any gaps in the literature and to understand better how people think about and evaluate their hospitalization, the researchers: 1) conducted focus group discussions and 2) collected verbatim comments from questionnaires returned by hospital patients. As they reviewed additional material they added new content categories, further differentiated existing ones, and recoded old material. In this iterative fashion they elaborated a taxonomy representing how patients' hospital experiences were structured (see Chapter 2).

3 *Pilot study.* Drawing on the literature review and the evolving taxonomy of patient concerns, they designed a questionnaire, and administered it in both a mail-out/mail-back self-report and a telephone interview format. The development and administration of the questionnaire is described in Chapters 3 and 4. Chapters 5, 6 and 7 describe the findings of the pilot test. In the final chapter the findings are summarized, conclusions are drawn and recommendations are offered for future work.

### 4.3.3 Health Maintenance Organisations

118

WARD, R.A.

HMO Satisfaction and understanding among recent medicare enrollees.

Journal of Health and Social Behaviour; 28, 1987, no. 4, pp. 401-412.

nivel

variables: patient satisfaction.  
methods: questionnaire (Ward & Bryant, 1986).  
reliability test: no.  
validity test: no.  
population: 124 enrollees in HMO Medicare.  
dimensions: dimensions of care (warmth and personal interest, training and competence of providers, ability to see desired providers, quality and thoroughness of care, information and explanations received, courtesy and friendliness of ancillary staff, availability of care when needed, willingness of providers to listen, scheduling of appointments, waiting time), convenience of health centre, dimensions of coverage (comprehensiveness, cost).

HMO enrollment is growing substantially, with particular interest in stimulating Medicare enrollment. The outcomes of this relatively novel form of health care for older persons are unclear, however. A survey of 124 recent enrollees in HMO Medicare coverage assessed their experience as a follow-up to a study of their enrollment decision. Satisfaction with various dimensions of care and coverage is high, reflecting fulfilment of high expectations held at enrollment. Perceived understanding of HMO coverage and procedures is the best predictor of satisfaction. Informal ties appear to play an important role in providing orientation to the HMO model of care and coverage, echoing their role in the enrollment decision itself. The importance of understanding and lay referral is highlighted from the standpoint of a "consumerist" orientation to health care.

Author.

119

ROSSITER, L.F., LANGWELL, K., WAN, T.T.H., RIVNYAK, M.

Patient satisfaction among elderly enrollees and disenrollees in Medicare Health Maintenance Organizations: results from the National Medicare Competition Evaluation.

Journal of the American Medical Association; 262, 1989, no. 1, pp. 57-63.

nivel

variables: patient satisfaction, HMO versus fee-for-service beneficiaries.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 2098 HMO enrollees and 1059 FFS beneficiaries.  
dimensions: technical quality of care, accessibility.

More than one million Medicare beneficiaries have enrolled in Health Maintenance Organizations (HMOs) and competitive medical plans under a new program in which beneficiaries can freely enroll in a risk-based HMO in their area or remain in the fee-for-service sector under Medicare. Based on a randomly selected nationwide sample of beneficiaries, the authors analyzed differences in patient satisfaction between 2091 beneficiaries who were continuously enrolled in an HMO plan for one year and 1000 beneficiaries in the fee-for-service sector. They also studied the reasons for disenrollment. No significant difference in overall satisfaction was found between HMO enrollees and fee-for-service beneficiaries. However, HMO enrollees expressed less satisfaction compared with fee-for-service beneficiaries regarding the professional competence of their health care providers and the willingness of the HMO staff to discuss problems. On the other hand, HMO enrollees were more satisfied than fee-for-service beneficiaries with waiting times and claims processing. Approximately half of the disenrollment from an HMO within 1 year was attributed to misunderstanding the terms enrollment.

Author.

120

CRYNS, A.G., NICHOLS, R.C., KATZ, L.A., CALKINS, E.

The hierarchical structure of geriatric patient satisfaction: an Older Patient Satisfaction Scale designed for HMOs.

Medical Care; 27, 1989, no. 8, pp. 802-816.

variables: older patient satisfaction, HMOs.  
methods: self-developed 60-item Older Patient Satisfaction Scale (based on focused group interviews); 36-item PSQ (Ware et al., 1975, 1983); and a 6-item CSQ (Larsen et al., 1979).  
reliability test: yes.  
validity test: yes.  
population: 229 elder HMO subscribers.  
dimensions: undifferentiated positive regard for health care providers, complaints about waiting time, appreciation of financial arrangements at HMO, appreciation of treating physician, ease of access, special care for serious problems, doctor informs about tests, continuity of physician-provider relationship, good value for money, physician-provider access difficulties, HMO is for routine care, availability of regular provider, general appreciation of the HMO.

This paper describes an instrument design effort aimed at measuring patient-satisfaction among older (65 years and over) subscribers of HMOs. The study was conducted in a multi-satellite prepaid group practice in Buffalo, New York. In order to be able to construct a satisfaction measure that would reflect the interests of the actual consumers of HMO-services, a series of four focused group interviews were held with 24 randomly selected elderly enrollees. The substantive content of these interviews was systematically analyzed for both topics and ideas, yielding a total of 173 distinct ideas

about the perceived satisfaction with the services received expressed over 3,176 lines of narrative. From this substantive pool, sixty attitudinal statements were constructed with the ideas represented in these statements being proportional to the number of lines of transcribed discussion devoted to each topic. This 60-item Older Patient Satisfaction Scale (OPSS) was submitted to a systematic sample of 229 elderly HMO subscribers. They also were asked to complete two existing scales: the Ware PSQ, and the Larsen CSQ-8. Factor analysis performed on the OPSS items yielded 14 primary factors of geriatric patient satisfaction, two second-order and one third-order general factor. As the second-order factors accounted for the largest proportion of the common variance, those items of the original 60-item OPSS were identified that had highest loadings on these second-order factors, yielding 7 such items for one and 5 for the other. These scales had alpha-reliabilities of .83 and .80, respectively. It was also found that the OPSS had good convergent validity with the PSQ and CSQ-8. The overall psychometric properties identified for the OPSS, as well as the fact that it was constructed from a health-care consumer's perspective, makes it well suited for use with a unique and rapidly expanding geriatric patient population.

Author.

121

HALL, J.A., FELDSTEIN, M., FRETWELL, M.D., ROWE, J.W., EPSTEIN, A.M.  
Older patients' health status and satisfaction with medical care in an HMO population.

Medical Care; 28, 1990, no. 3, pp. 261-270.

variables: patient satisfaction, health status, sociodemographic characteristics, physician characteristics.  
methods: self-developed questionnaire containing 12-item patient satisfaction scale (based on DiMatteo & Hays, 1980).  
reliability test: no.  
validity test: no.  
population: 532 older HMO subscribers.  
dimensions: overall satisfaction, amount of contact with providers, communication behaviours of providers, humaneness of providers, technical competence of providers, and relief of worry. Items in appendix A.

Few studies have examined the relationship between older patients' satisfaction with medical care and their health status, and none of these investigations has been based at an HMO. To examine this question, data on 532 patients older than 70 years in an HMO were analyzed. Patients' reports of satisfaction with medical care were examined in relation to several dimensions of health status (based on self-reports, chart data, and physicians' ratings), their own sociodemographic characteristics, and characteristics of their primary physicians. Greater satisfaction was significantly associated with better self-rated health and physical function, less emotional distress, and more social activity but was not related to physicians' health



ratings, number of diagnoses, or cognitive function. Mean levels of satisfaction were also significantly different for patients of different physicians but not appreciably related to patients' sociodemographic characteristics. When patient sociodemographic characteristics were controlled for, the relations of health status variables to satisfaction were essentially unchanged. It was concluded that the key issues to be resolved are whether better health leads to greater satisfaction or vice versa, and, in either case, whether the relations are mediated by factors relating to the patient's experience of medical care.

Author.

122

WEISS, B.D., SENF, J.H.

Patient satisfaction survey instrument for use in Health Maintenance Organizations.

Medical Care; 28, 1990, no. 5, pp. 434-445.

nivel

variables: patient satisfaction, HMO enrollment.

methods: self-developed questionnaire.

reliability test: no.

validity test: no.

population: 2,365 HMO enrollees.

dimensions: satisfaction with medical care in general, satisfaction with the patient's own individual health care, and satisfaction with the patient's most recent encounter with their health care provider.

The objective of this research was to devise a survey instrument specifically applicable to prepaid health care plans that could accurately predict whether patients would disenroll from their current plan because of dissatisfaction when given the opportunity to do so. A "prequestionnaire" was sent to all employees at a southwestern university whose employee benefit package included the option of selecting one of several Health Maintenance Organizations (HMOs) as a source of health care. The prequestionnaire included 90 variables reported in the literature as related to patient satisfaction. The prequestionnaire was mailed two months before "open enrollment," the time at which subjects would have the opportunity, if desired, to change HMOs. After open enrollment, a "postquestionnaire" was sent to the same subjects, asking whether or not they did change plans during open enrollment. There were 2,365 respondents enrolled in HMOs who formed the study population. Of these, 189 (8.0%) changed HMOs during open enrollment. Discriminant function analysis was used to identify prequestionnaire variables which were predictive that subjects had changed plans; 10 variables were identified. They were combined into a survey instrument, which can be scored to predict an individual subject's probability of changing plans.

Author.

#### 4.3.4 Dentistry

123

JOHNSON, J.D., SCHEETZ, J.P., SHUGARS, D.A., DAMIANO, P.C., SCHWEITZER, S.O.

Development and validation of a consumer quality assessment instrument for dentistry.

Journal of Dental Education; 54, 1990, no. 11, pp. 644-652.  
nivel (C 3092)

variables: patient's assessment, dental care quality.  
methods: review of literature, meta-analysis, adapted questionnaire (based on meta-analysis).  
reliability test: yes.  
validity test: yes.  
population: 145 dentists patients.  
dimensions: art of care, technical aspects of care, access to care, cost of care, general satisfaction, pain, interpersonal relations with staff personnel.

The authors review the literature related to quality of care and consumer involvement in quality assessment, and present an argument for inclusion of this information in dental quality assessment. A conceptual model for measuring dental consumer quality assessment is outlined and data relating to the development and validation of an instrument based on the conceptual model are presented.

A consensual meta-analysis of existing rating instruments identified the Dentist Consumer Quality Assessment (DCQA) questionnaire with 78 items on eleven scales. After a survey of 145 patients a 35-item questionnaire with seven scales was developed. The seven scales were internally consistent. Item/scale correlations suggested that the instrument possesses construct validity.

#### 4.3.5 Mental health care

124

SLATER, V., LINN, M.W., HARRIS, R.

A satisfaction with mental health care scale.

Comprehensive Psychiatry; 23, 1982, no. 1, pp. 68-74.

nivel (C 3101)

variables: patient satisfaction, outpatient psychiatric care.  
methods: development of Satisfaction with Mental Health Care scale (SMHC) (based on discussions in clinical research staffs and on staffs appraisal of patient satisfaction).  
reliability test: yes.  
validity test: yes.  
population: 170 psychiatric patients.  
dimensions: general satisfaction, therapeutic relationship, prevention, access.

The article describes the Satisfaction with Mental Health Care scale (SMHC), that was constructed primary as a research tool to assess outpatient psychiatric care from the patient's point of view. After preliminary testing, the scale was administered to 170 patients randomly selected from the rolls of an outpatient mental health clinic. Patients were retested one week after their first rating. Reliability: the 32-items of the completed version of the scale had above  $r = .50$  test-retest values. Validity: correlations between ratings of the satisfaction by the patients and ratings of how the therapist viewed the patient's level of satisfaction as  $r = .13$ . The correlation between patient ratings of satisfaction and therapist assessments of treatment progress was  $r = .18$ . Factor structure: the first major factor was general overall satisfaction with the operation of the clinic. The second factor appears to measure an attitude about the therapeutic relationship. The third factor referred to attitudes about prevention and the fourth to attitudes about planning or access to care. The SMHC scale appeared a reliable, but uncertain valid instrument for assessing satisfaction with outpatient mental health care.

Author.

125

WENNINK, H.J., WIJNGAARDEN, B. VAN

De Zorg Evaluatie Score: een schaal voor het meten van de tevredenheid met het wonen in institutionele woonvoorzieningen.

(The Care Evaluation Score (ZES): a scale for assessing the satisfaction with living in institutional housing facilities.)

Gezondheid & Samenleving; 8, 1987, no. 4, pp. 266-274.

nivel

variables: patient satisfaction, amount of care in institutional housing facilities  
methods: development of instrument.  
reliability test: yes.

validity test: yes.  
population: 50 chronic psychiatric patients.  
dimensions: location, number of patients, kind of relations between patients, amount of autonomy, amount of privacy, and intensity of staff care.

The *Zorg Evaluatie Score* (ZES) has been developed to measure how satisfied chronic psychiatric patients are with their housing facilities. The instrument focuses on the evaluation of the amount of care patients receive in different types of housing. These types range from the psychiatric hospital to apartments for two situated in the community. The amount of care can be described with six variables: location (near a psychiatric hospital, in town), number of patients, kind of relations between patients (is it possible to choose your co-residents?), amount of autonomy, amount of privacy, and intensity of staff care. Six types of housing were described with these six variables and patients were asked to sort them from one to six according to their preference for each type was compared on each care variable with the type of house in which the patients presently live. On this comparison the evaluation of care is based, the most preferred housing as a standard. Tests on validity and reliability suggest that the ZES is a useful instrument for measuring the evaluation of care.

Author.

126

WAISMANN, L.C., ROWLAND, L.A.

Ranking of needs: a new method of assessment for use with chronic psychiatric patients.

*Acta Psychiatrica Scandinavica*; 80, 1989, no. 3, pp. 260-266.

nivel (C 3106)

variables: patient perceptions of needs.  
methods: methodological analysis, development of instrument.  
reliability test: yes.  
validity test: no.  
population: 83 psychiatric patients, 46 control respondents.  
dimensions: self-care and personal hygiene, household, accommodation, occupational role, relationships, finances, safety, support, recreation, general health.

An instrument to measure the relative importance that individuals attribute to needs is presented. This device employs a methodology especially designed for use with individuals who often have difficulties in concentrating when faced with the more traditional methods of assessment. The instrument was tested on both psychiatric patients and individuals with no psychiatric history. The results showed its satisfactory psychometric properties and its suitability for use with severely disabled psychiatric patients.

Author.

KOOI, R., DONKER, M.

Cliënten over de RIAGG: ontwerp en afname van een vragenlijst voor kwaliteitsbeoordeling door cliënten.

(Clients about their RIAGG: development and assessment of a questionnaire on quality judgements by clients.)

Utrecht: NcGv, 1991.

nivel (B 2480)

variables: quality judgements, ambulatory mental health care.  
methods: self-developed questionnaire, focus group interviews, explorative study.  
reliability test: yes.  
validity test: yes.  
population: 2126 ex-RIAGG clients.  
dimensions: experienced effect, problem treatment, intake treatment, treatment, and RIAGG information.

Quality of mental health care is strongly related to quality judgements by clients. A questionnaire was developed to assess the quality judgements of ex-RIAGG clients. 2126 ex-clients responded to the questionnaire they received. The pre-study aimed at gathering information on what are relevant quality dimensions for clients. Ex-clients were interviewed personally and in groups. This information was discussed with important members of RIAGG organizations. The questionnaire was constructed according to the Likert scaling technique and corrected for answer tendencies. The items were clustered in seven parts: nature of RIAGG care, intake and first sessions, treatment, contact with RIAGG, general help from RIAGG, demographic characteristics, method of treatment. Factor analysis of the results produced the following dimensions: experienced effect, problem treatment, intake treatment, treatment, and RIAGG information. Indications of construct validity, content validity, and congruent validity are reported. Reliability, as measured by Cronbach's alpha, was high. The average judgement of the respondents on several quality dimensions and the general quality of RIAGG care was positive. Most positive satisfaction was found on the dimension attitude ("bejegening"). Less positive were the dimensions treatment effect and RIAGG information. The authors discuss how these results can be used for internal quality improvement, public relations and external quality testing.

#### 4.3.6 Alternative medicine

128

FLEUREN, M.A.H., VERMULST, A.A., PERSOON, J.M.G.

Tevredenheid bij gebruikers van alternatieve geneeswijzen: determinanten van tevredenheid.

(Satisfaction of users of alternative medicine: determinants of satisfaction.)

Tijdschrift voor Sociale Geneeskunde; 68, 1990, pp. 335-340.

nivel

variables: consumer satisfaction, expectations, values, discrepancy and personal characteristics.

methods: Test of Linder-Pelz model, self-developed questionnaire on patient satisfaction and determinants.

reliability test: no.

validity test: no.

population: 227 clients of non-official healers.

dimensions: 20 aspects of satisfaction on page 338.

In this article the results of a survey, measuring patient satisfaction with non-official healers, are described. Aspects about which patients were not satisfied or that were unclear to them are described. The authors tested a model, explaining satisfaction, using four variables, derived from Linder-Pelz: expectations, values, discrepancy and personal characteristics. The authors conclude that in general the patients were satisfied although many things were unclear to them such as the treatment by the non-official healer and the results of it. There is much need of information about reliable healers. The authors could not fully replicate the results of Linder-Pelz. In total 71.3% of the variation in patient satisfaction could be explained by the variables discrepancy, personal characteristics and values.

Author.

#### 4.3.7 Physical therapy

129

DURANT, T.L., LORD, L.J., DOMHOLDT, E.

Outpatient views on direct access to physical therapy in Indiana.

Physical Therapy; 69, 1989, no. 10. pp. 850-857.

nivel (C 3108)

variables: patient opinions, access to physical therapy.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 361 patients of physical therapists.  
dimensions: type of patient, patient experiences with physical therapy, opinions on access to physical therapy, opinions on services, patient support of direct access.

The purpose of this study was to determine the opinions of outpatients receiving physical therapy in Indiana about physical therapy evaluation and treatment without referral (direct access). Subjects were 361 individuals being treated at one of 25 privately owned clinics. Each subject completed a 15-item questionnaire. Results showed that 82.8% of the respondents supported direct access to physical therapy. A majority indicated they would seek physical therapy services without referral if they were available. Physical therapists were cited as frequently as all other health care professionals combined as the practitioners providing the most thorough evaluation. Physical therapists were cited far more often than other health care professionals combined as the practitioners providing the best information about the control of symptoms. Subjects who had received more treatments than others were significantly more likely to support direct access ( $p$  less than .05). Conclusions were that individuals who have received physical therapy at private outpatient physical therapy clinics in Indiana are supportive of direct access to physical therapy services.

Author.

#### 4.4 Remainder

130

GRAY, L.

Consumer satisfaction with physician provided services: a panel study.

Social Science & Medicine; 14a, 1980, pp. 65-73.

nivel

variables: patient satisfaction, prior satisfaction, physician services, consumer characteristics.  
methods: unstructured and structured interviews, explorative study.  
reliability test: yes.  
validity test: no.  
population: 821 contract holders of a employees health benefits program.  
dimensions: seven items on quality of care, consult time, physician's information, physician's courtesy, physician's explanation of home care, physician's follow up care, and physician's personal interest.

In this paper, factors thought to explain consumer satisfaction with physician provided services are analyzed in causally ordered models using cross-sectional and longitudinal data. Categories of variables employed are prior satisfaction, characteristics of the health delivery, interim utilization of services, and characteristics of the consumer. The study group is government employees enrolled in either a prepaid group or a fee-for-service plan. In both path analyses, the hypothesized orderings are partially supported. Notably, interim utilization of health services is not statistically significant in accounting for consumer satisfaction. As posited, much of the explained variance in current satisfaction is due to prior satisfaction, assessment of the availability of services and having or not having a personal physician. Revised models are suggested. Results are discussed in view of the current state of the literature and practical implications.

Author.

131

KOERNER, B.L., COHEN, J.R., ARMSTRONG, D.M.

Collaborative practice and patient satisfaction: impact and selected outcomes.

Evaluation and the Health Professions; 8, 1985, no. 3, pp. 299-321.

nivel (C 1741)

variables: patient satisfaction, collaborative practice versus traditional team nursing.  
methods: literature review, Patient Satisfaction Survey (Koerner & Cohen, unpubl.).  
reliability test: no.  
validity test: no.  
population: 180 collaborative practice patients and 100 team nursing patients.



dimensions: patient-provider interaction, quality of care, health education, knowledge of practitioners, environment.

The Collaborative Practice Project was a demonstration project sponsored by the Hartford Hospital Administration, and the Departments of Medicine and Nursing. A prospective evaluative study was established to measure the impact of collaborative practice on increased patient and family satisfaction with health care, as well as the impact on selected outcome variables. A specific 27-bed medical unit and a comparison unit with identical structural characteristics were chosen for study from March 31, 1982, to March 31, 1983. Results of the study indicate that significant differences in patients' perceptions of care existed between the Collaborative Practice Unit (CPU) and the comparison unit under a traditional team nursing system. More positive ratings from patients on the CPU were found for all selected dimensions: patient-provider interaction, quality of care, health education, knowledge of practitioners, and the environment. In order to assess the impact of collaborative practice on outcome variables, a retrospective audit of randomly selected patient records was done. No significant differences for selected variables were found except for the number of health teaching plans. More documented health teaching was recorded on the Team Nursing Unit.

Author.

132

OERMANN, M.H., DOYLE, T.H., CLARK, L.R., RIVERS, C.L., ROSE, V.Y.

Effectiveness of self-instruction for arthritis patient education.

Patient Education and Counselling; 8, 1986, no. 3, pp. 245-254.

nivel

variables: self-instruction, patient satisfaction.

methods: control-group pretest-posttest experiment, self-developed questionnaire.

reliability test: yes.

validity test: no.

population: 30 rheumatoid arthritis patients.

dimensions: knowledge, self-care skills, time, appropriateness.

Self-instruction is one means of providing patient education, allowing the health professional to teach a larger number of persons than with one-to-one or group instruction at a lower cost. The purpose of this study was to examine the effects of self-instruction learning, satisfaction with the teaching approach, and health status of persons with rheumatoid arthritis (RA).

A control-group pretest-posttest design was used. Thirty subjects receiving care at a rheumatology clinic who met study criteria were randomly assigned to two groups: (a) self-instruction and (b) control.

One-way analysis of covariance on posttest Rheumatoid Arthritis Knowledge Inventory (RAKI) scores, with the pretest as covariate, was used to examine the difference in learning between the self-instruction and control groups. There was a significant difference between the groups ( $p=0.01$ ). Participants

who completed the self-instructional program had improved scores of the posttest as compared to the control. Subjects rated self-instruction as an effective teaching strategy in terms of promoting learning about RA and patient acceptability. *t*-test demonstrated no significant difference between the groups in health status. Significant correlations were found between subjects' test scores and selected variables.

Author.

133

URQUHART, B., BULOW, B., SWEENEY, J., SHEAR, M.K.

Increased specificity in measuring satisfaction.

Psychiatric Quarterly; 58, 1986-87, no. 2, pp. 128-134.

nivel (C 3110)

variables: patient satisfaction, treatment preference.  
methods: self-developed questionnaire.  
reliability test: yes.  
validity test: no.  
population: 291 psychiatric outpatients.  
dimensions: 9 items on appearance of clinic, staff courtesy, satisfaction with therapist, received treatment wanted, treatment met needs, would recommend clinic, treatment helped to deal with problems, overall satisfaction, treatment helped.

The authors report a patient satisfaction study that addressed some of the methodological limitations of previous studies and increase the variance of satisfaction assessment by increasing the scope and specificity of inquiry. 291 adult outpatients receiving different treatments from different therapists participated. Same-sex patient/therapist match, duration of therapy, individual therapy, and treatment with staff social workers rather than psychiatric residents were all positively correlated with increased patient satisfaction. Satisfaction appeared to be a unitary dimension that could be tapped by a global score. Nonetheless, although overall satisfaction was high, one third of patients preferred an alternative treatment.

Author.

134

GERACE, T.M., SANGSTER, J.F.

Factors determining patients' satisfaction in a family residency teaching centre.

Journal of Medical Education; 62, 1987, no. 6, pp. 485-490.

nivel

variables: patient satisfaction, adequacy, information, expressing of concerns, patient attitude, availability  
methods: self-developed questionnaire with question on patient satisfaction.  
reliability test: no.  
validity test: no.  
population: 195 patients of family medicine teaching centre.  
dimensions: one item on patient satisfaction.

A primary function of family medicine teaching centres is to provide residents with ongoing experiences with patients and their families. A critical issue in maintaining a stable patient population for such teaching is patient satisfaction. In the study reported here, the authors examined the factors determining patients' satisfaction. A questionnaire was mailed to a representative sample of 10 percent of the patients in a family practice in a family medical centre. Seventy-eight percent of the sample responded; these respondents were representative of the sample populations. Four variables were identified as significant in determining the patients' satisfaction: whether the patients felt that the time spent with their identified family physician was adequate and that the physician's explanations regarding their health care and teaching program were clear; whether the patients felt comfortable in expressing their concerns about the teaching program to the permanent staff members; whether the patients had a positive attitude regarding the teaching program; and whether the patients felt that their identified family physician was available to them.

Author.

135

SMITH, N.A., LEY, P.H., SEALE, J.P., SHAW, J.

Health beliefs, satisfaction, and compliance.

Patient Education and Counselling; 10, 1987, no. 3, pp. 279-286.

nivel

variables: patient satisfaction, health beliefs, compliance.  
methods: control-group experiment, initial and follow-up interviews including a satisfaction scale.  
reliability test: no.  
validity test: no.  
population: 174 asthmatic children.  
dimensions: satisfaction with waiting time, length of consultation, friendliness of doctor, the doctor being too business-like, the ease the doctor could be understood, and a composite total score.

Relationships were studied between measures of parents' Health Beliefs, satisfaction, and compliance in 174 children suffering from asthma. It was found that while concurrent measures of Health Belief Model (HBM) variables and compliance were significantly correlated, measures of HBM variables did not predict future compliance. Satisfaction measures, however, not only correlated with concurrent, measures of compliance but also predicted future compliance. It is concluded that these findings are consistent with the view that in this sample health beliefs were reactive to compliance behaviours and that they did not have a casual effect on compliance.

Author.

136

MURRAY, J.P.

A follow-up comparison of patient satisfaction among prepaid and fee-for-service patients.

Journal of Family Practice; 26, 1988, no. 5, pp. 576-581.

nivel

variables: patient satisfaction, prepaid versus fee-for-service programs.  
methods: questionnaire (Marquis et al., 1982).  
reliability test: no.  
validity test: no.  
population: 245 patients of a family health centre.  
dimensions: general patient satisfaction, access, availability, continuity, finances, physician conduct (humaneness, technical quality).

This study reports the results of a follow-up patient satisfaction survey that sampled patients enrolled in a capitation program and compared their satisfaction levels with otherwise similar patients in a fee-for-service program two years after the programs began. On a scale of 1 (very dissatisfied) to 5 (very satisfied), the mean general satisfaction level for 158 prepaid patients was  $3.17 \pm 0.70$ , and  $3.42 \pm 0.61$  for 87 fee-for-service patients ( $p < .05$ ). This finding contrasts with no differences seen in a previous study of the same populations at six months after the programs began (mean general satisfaction levels of 3.26 and 3.36 for the prepaid and fee-for-service patients, respectively). A statistically significant difference also existed in the subdimension "technical aspects of quality":  $3.38 \pm 0.65$  for prepaid patients, and  $3.61 \pm 0.53$  for fee-for-service patients ( $p < .05$ ). Levels of satisfaction within other individual constructs were similar for both groups and tended to remain the same over two years, although satisfaction with access to care decreased among prepaid patients, and satisfaction with continuity of care increased among fee-for-service patients. These data support the hypothesis that overall satisfaction levels and certain aspects of patient satisfaction may be compromised by a capitation program.

Author.

137

GORMAN, A.R., LUDEMANN, M.A., REICHLE, S.C.

Comparing satisfaction levels of inpatients and outpatients with a diabetes teaching program.

Patient Education and Counselling; 12, 1988, no. 2, pp. 121-129.

nivel

variables: patient satisfaction, inpatients versus outpatients receiving a diabetes teaching program.  
methods: control-group experiment, self-developed questionnaire.  
reliability test: yes.  
validity test: no.  
population: 42 inpatients and 47 outpatients.  
dimensions: the questionnaire (26 items) included six areas: 1) demo-

graphics, 2) patients' perceptions of understanding their diabetic condition and treatment, 3) comfort in class, 4) perception regarding treatment as an individual, 5) life satisfaction, and 6) influence of recommendations on future health.

With the changing climate of health care there is an increasing need to offer diabetes education in outpatient rather than inpatient settings. This study was conducted to determine if there is significant difference in the satisfaction level between inpatients and outpatients receiving diabetes teaching in the same program. Patient satisfaction with the practitioner is a determinant of patient learning and compliance. The study included 42 inpatients and 47 outpatients who participated in the same program and were taught by the same teaching nurses and dietitians. A questionnaire developed for this study examined six areas: 1) demographics, 2) patients' perceptions of understanding their diabetic condition and treatment, 3) comfort in class, 4) perception regarding treatment as an individual, 5) life satisfaction, and 6) influence of recommendations on future health. The results of the study showed a significant difference ( $p < 0.05$ ) in two areas: 1) inpatients felt more that more interest and concern were shown towards them than outpatients and 2) more inpatients than outpatients felt they were treated more like individuals than cases. The result indicated that the personalized and ongoing contact inpatients have with the practitioner determine the degree of satisfaction with diabetes teaching received in these important areas.

Author.

138

KERR, C.E.

Seeking employee perceptions of quality of health care.

Quality Review Bulletin; 15, 1989, no. 6, pp. 198-202.

nivel (C 3527)

variables: patient perceptions, quality of HMOs and a self insured indemnity plan.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 1932 bank employees.  
dimensions: access to and consistency of care, physician performance, and iatrogenic disease levels.

In 1987, the Bank of America sent its employees a survey to investigate their perceptions of the quality of care provided by 42 Health Maintenance Organizations (HMOs) and a self-insured indemnity plan. The questions on employee perception fell into three broad categories: access to and consistency of care, physician performance, and iatrogenic disease levels. Concerning access and consistency, no major differences were found between the indemnity plan and the HMO average responses. Physician performance evaluations revealed that almost 25% of the respondents felt that their physician never identified their medical problem(s). Survey results

showed further that employees more frequently recommend to other employees those health plans that they feel provide better quality of care.

139

SUTHERLAND, H.J., LOCKWOOD, G.A., MINKIN, S., TRITCHLER, D.L., TILL, J.E., LLEWELLYN-THOMAS, H.A.

Measuring satisfaction with health care: a comparison of single with paired rating strategies.

Social Science & Medicine; 28, 1989, no. 1, pp. 53-58.

nivel

variables: patient satisfaction, out-patient clinic visits.  
methods: comparison of two patient satisfaction questionnaire scoring techniques (paired comparisons and rating on a self-developed visual analogue scale).  
reliability test: yes.  
validity test: yes.  
population: 30 women with breast cancer.  
dimensions: staff attitude, control over treatment decisions, and continuity of medical supervision.

One of the central problems in studies of patient satisfaction is the development of reliable and valid methods to determine the relative importance of different aspects of health care. Two techniques, paired comparisons and rating on a visual analogue scale, were compared in terms of their consistency with logical assumptions, test-retest reliability and convergent validity. Thirty women with breast cancer were asked to assess brief hypothetical scenarios describing out-patient clinic visits to a tertiary cancer care centre. Each scenario incorporated three variables related to satisfaction with care: staff attitude, control over treatment decisions, and continuity of medical supervision. The paired choice method showed marginally better reliability and logical consistency than the rating method. Of the three variables assessed, continuity of medical supervision was consistently ranked highest in importance, and control over treatment decisions lowest. These preference assessment techniques appear to be suitable for use in the development of patient satisfaction indices, and for studies designed to examine variations in the priority given to different aspects of satisfaction with care.

Author.

140

RADECKI, S.E., BERNSTEIN, G.S.

Use of clinic versus private family planning care by low-income women: access, cost, and patient satisfaction.

American Journal of Public Health; 79, 1989, no. 6, pp. 692-697.

nivel

variables: patient satisfaction, clinic versus private family planning care, ethnicity, cost, access.  
methods: self-developed questionnaire with 10 items on satisfaction with source of care.  
reliability test: no.  
validity test: no.  
population: 454 patients.  
dimensions: 10 items on page 696.

Use of private physicians versus public family planning facilities by poverty level and near poverty level women was examined by means of a sample survey conducted in low-income areas of Los Angeles County. Utilization differed by race/ethnicity, with Hispanics more likely to go to federally subsidized family planning clinics (primarily county-run), Whites and Blacks to private physicians. Private family planning offers easier access, greater convenience, and higher satisfaction, albeit at almost double the cost. Clinic usage is influenced by lack of a regular source of medical care and lack of insurance coverage more than poverty level per se. Clinic patients report greater patient education regarding contraceptive methods, but less general medical care during clinic visits. They are more likely than private patients to express a desire for a different source of family planning care.  
Author.

141

COLLARD, A.F., BERGMAN, A., HENDERSON, M.

Two approaches to measuring quality in medical case management programmes.

Quality Review Bulletin; 16, 1990, no. 1, pp. 3-8.

NIVEL (C 3098)

variables: patient view, quality of medical case management.  
methods: self-developed interview protocol to evaluate the quality of case management services from the client's perspective.  
reliability test: -  
validity test: -  
population: parents of high-risk infants.  
dimensions: demographic information, health service utilization history, parent's general well-being, parents' coping strategies, social support, attitudes and satisfaction (subscales: general issues, professional/competence, service provision, support/sensitivity).

An evaluation of two additional quality measurement approaches is presented. The first approach assessed the technical medical care that is coordinated through the case management programme. This involves independent physician specialists' ratings of the appropriateness and adequacy of medical care. Five physician experts, applying criteria to medical records, found the care provided appropriate in a majority of 40 cases (10 each of head injury, spinal cord injury, high-risk infants, and AIDS). Nurses interviewing parents of 30 high-risk infants found general satisfaction with

case management.

In the second approach parents of high-risk infants (one of the four study populations) were interviewed to determine their attitudes about and satisfaction with their case management program. The results showed that, for instance, nearly 75% of the parents of patients felt that the medical care management had met their expectations; and 80% of the parents agreed that the case manager was both competent and professional as well as sensitive and supportive. The authors conclude that medical case management played an important role in maintaining high-quality medical care for critically ill patients and their families.

142

ELKIND, A., EARDLEY, A.

Consumer satisfaction with breast screening: a pilot study.

Journal of Public Health Medicine; 12, 1990, no. 1, pp. 15-18.

nivel

variables: consumer satisfaction, breast screening.  
methods: self-developed questionnaire (including open-ended questions), explorative study.  
reliability test: no.  
validity test: no.  
population: 146 women.  
dimensions: no dimensions or items reported.

One hundred and forty-six women registered with a general practice and 84 members of health authority staff, who had attended a breast screening unit by invitation, completed a postal questionnaire about their reactions to screening. The staff of the unit also recorded their observations. The letter of invitation and accompanying health education leaflet were favourably received, and most women were glad of the opportunity offered, although some experienced anxiety. Few practical problems were reported with regard to attending the clinic. In general, the facilities in the clinic were thought to be of a high standard but specific criticisms included problems with access and privacy and feelings of claustrophobia. Some women experienced anxiety or discomfort when the mammogram was being taken, but many favourable comments were made about the helpfulness of staff. Almost all women said that they would return for screening if invited again.

Author.

143

HATCHER, J.W., RICHTSMEIER, A.J.

Parent anxiety and satisfaction with a paediatric visit.

Medical Care; 28, 1990, no. 10, pp. 978-981.

nivel

variables: patient anxiety, patient perceptions and satisfaction.  
methods: self-developed statements list.



reliability test: no.  
validity test: no.  
population: 103 parents.  
dimensions: 10 items on page 979.

This study evaluated the relationship of parent anxiety when seeking paediatric care to patient satisfaction with the health care visit. The study sample comprised of 103 parents, whose distress was assessed before the visit using the State Anxiety Scale. Their perceptions of the visit were assessed by asking them to rate their degree of agreement with ten statements.

The results indicate that there is a relationship between parent anxiety and satisfaction with a paediatric health care visit. Parent anxiety while waiting to see the physician was unrelated to perceptions of the visit or report of satisfaction with the visit. This indicates that, regardless of how anxious parents are before the visit, parents who are anxious after the visit report less satisfaction with the visit and are more likely to have negative perceptions of the physician.

144

HIGGINSON, I., WADE, A., McCARTHY, M.  
Palliative care: views of patients and their families.  
BMJ; 301, 1990, no. 6746, pp. 277-281.  
nivel

variables: patients' views, relatives' views, palliative care.  
methods: self-developed questionnaire.  
reliability test: no.  
validity test: no.  
population: 65 patients, each with a relative.  
dimensions: 8 items on views of care: pain control, symptom control, patient anxiety, family anxiety, practical aids, wasted time, communication of support team and communication of professionals.

Objective: to investigate the current problems and needs of terminally ill cancer patients and their family members, and to discover their views of hospital, community, and support team services. Design: prospective study of patients and families by questionnaire interviews in the patients' homes. Setting: inner London and north Kent (London suburbs). Subjects: 65 patients, each with a member of their family or a career. Main outcome measures: ratings of eight current problems and ratings and comments on three services-hospital doctors and nurses, general practitioners and district nurses, and the support team staff-obtained after a minimum of two weeks' care from palliative care support teams. Results: effect of anxiety on the patient's nearest career and symptom control were rated as the most severe current problems by both patients and families; a few patients and families identified other severe problems. Families' ratings of pain control, symptom control, and effect of anxiety on the patient were significantly worse than the patients' ratings ( $p$  less than 0.05). Support teams received the most praise,

being rated by 58 (89%) patients and 59 (91%) of family members as good or excellent. General practitioners and district nurses were rated good or excellent by 46 (71%) patients and 46 (71%) family members, but six (9%) in each group rated the service as poor or very bad, and ratings in the inner London district were significantly worse than those in the outer London district. Hospital doctors and nurses were rated good or excellent by 22 (34%) patients and 35 (54%) of family members, and 14 (22%) patients and 15 (23%) family members rated this service as poor or very bad. Negative comments referred to communication (especially at diagnosis), coordination of services, the attitude of the doctor, delays in diagnosis, and difficulties in getting doctors to visit at home. Family members were more satisfied with the services than were patients. Conclusions: palliative care needs to include both the patient and family because the needs of the family may exceed those of the patient. Support teams and some hospital and community doctors and nurses met the perceived needs of dying patients and families, but better education and organisation of services are needed.

Author.

145

DUTTON, D., GOMBY, D., MEUNIER, B.

Mothers' satisfaction with the cost of children's care: the role of practice settings and actual expenses.

Social Science & Medicine; 30, 1990; no. 12, pp. 1297-1311.

nivel

- variables: mothers' satisfaction with cost, various practice settings, economic security, perceived needs and attitudes, demographic factors, patient costs and provider charges, poor versus nonpoor patients.
- methods: satisfaction-with-cost items in questionnaire on the quality of children health care (Kessner et al., 1974).
- reliability test: no.
- validity test: no.
- population: 618 respondents.
- dimensions: personal care, competence, friendliness, atmosphere, speed of service, cost.

This paper analyzes mothers' satisfaction with the cost of children's care in six widely-varying ambulatory settings: fee-for-service solo and group practices, a prepaid group, public clinics, hospital outpatient departments, and an emergency room. Data are from a household survey in Washington, DC and represent 638 children. Findings indicate significantly higher satisfaction with cost in public clinics than in solo practice, fee-for-service groups, and the emergency room, adjusting for patient characteristics, attitudes and financial coverage. In fee-for-service settings, both provider charges and out-of-pocket costs had a nonlinear relation to satisfaction with cost; to a point, increasing costs and charges were associated with decreasing satisfaction, but thereafter higher costs and charges appeared to lead, other things equal, to higher satisfaction. Out-of-pocket costs had a

significantly greater negative effect on poor mothers' satisfaction than on the more affluent. Implications for current policy trends are discussed.  
Author.

146

RAATIKAINEN, R.

Dissatisfaction and insecurity of patients in domiciliary care.

Journal of Advanced Nursing; 16, 1991, pp. 154-164.

nivel

variables: patient dissatisfaction, patient insecurity, aspects of domiciliary care.  
methods: self-developed questionnaire with one question of patient satisfaction.  
reliability test: no.  
validity test: no.  
population: 344 patients.  
dimensions: -

This paper is based on material from two domiciliary care studies undertaken in Finland. The purpose of this paper is to clarify on one hand the patient factors which relate to dissatisfaction and insecurity and on the other hand the significance of dissatisfaction and insecurity in patient care. The data were collected by interviewing patients (Helsinki, 129; Espoo, 215), by devising a careplan in Espoo and directing a questionnaire to the domiciliary care providers (Helsinki, 202; Espoo, 64). About one in 10 of the patients was dissatisfied and insecure. Correlation between dissatisfaction and insecurity was high (Helsinki,  $r=0.63$ , Espoo,  $r=0.53$ ). The dissatisfaction was more with external factors, which appeared as a behaviour perceived by others. The quality of human relationships in care was the main predicting factor of the variance of dissatisfaction. Insecurity again was linked more with internal factors. The main factor which predicted the variance of insecurity was the quality of human relationships in care but also the well-planned goal-oriented care. A dissatisfied patient who actually feels insecure, can be perceived as being unco-operative, non-compliant and unpopular by care providers.

Author.



## 5 Reviews and meta-analyses

147

LEBOW, J.

Consumer satisfaction with mental health treatment.  
Psychological Bulletin; 91, 1982, no. 2, pp. 244-259.  
nivel (C 3121)

variables: consumer satisfaction, mental health treatment.  
methods: literature review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Reviews literature on the evaluation of consumer satisfaction with mental health treatment. The methods of assessing consumer satisfaction, methodological issues in studies assessing satisfaction, results of the studies, and the value of consumer evaluation are discussed. Consumer evaluation is found to be a useful though flawed method of assessing services. It is concluded that consumer evaluation should be included in a multimethod treatment evaluation.

Author.

148

LEBOW, J.L.

Pragmatic decisions in the evaluation of consumer satisfaction with mental health treatment.  
Evaluation & Program Planning; 5, 1982, no. 4, pp. 349-356.  
nivel (C 3404)

variables: consumer satisfaction.  
methods: literature review, methodological analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Argues that choices involving sampling, format, and procedure for examining client satisfaction with mental health treatment may influence the results of such research and that these factors must be considered when conducting or evaluating these efforts. Discussion focuses on the definition of consumer satisfaction, the purpose of assessment, the selection and identification of the treatment centre, the choice of a survey instrument, and procedures for data collection, including the timing of the evaluation, mode and location of data collection, presentation of the instrument, and return elicitation. Consent and other ethical issues are also considered. It is concluded that with an

improvement in methodology, consumer satisfaction research can be an important source of data about mental health treatment useful in program evaluation and planning, quality assurance, and clinical care.  
Author.

149

PASCOE, G.C.

Patient satisfaction in primary health care: a literature review and analysis. Evaluation and Program Planning; 6, 1983, pp. 185-210.  
nivel (C 3347)

variables: patient satisfaction, quality of primary health care services.  
methods: literature review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This paper reviews the literature on patient satisfaction in primary health care settings. Definitions and models of satisfaction are considered first. Attention is given to the conceptualization of satisfaction by investigators concerned about consumers in general as well as by researchers focusing on consumers of medical services. Research findings are discussed and used to develop a model of patient satisfaction. The measurement of patient satisfaction and the findings of empirical studies are then reviewed, including summaries of effect sizes. It is concluded that patient satisfaction information can provide a dependent measure of service quality and serves as a predictor of health-related behaviour. Issues deserving further investigation and recommendations regarding research strategies are presented.

Author.

150

LEBOW, J.L.

Research assessing consumer satisfaction with mental health treatment: a review of findings. Evaluation and Program Planning; 6, 1983, pp. 211-236.  
nivel (C 3159)

variables: consumer satisfaction, mental health treatment.  
methods: literature review.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This article reviews the findings of studies examining consumer satisfaction with mental health treatment. Typically, published studies find the vast majority of patients satisfied with treatment. Despite the numerous methodo-

logical problems in this research, it remains highly probable that the majority of consumers are satisfied with the services received. More specific findings in this literature remain less demonstrated; there generally are few studies relevant to each specific question and the methodology of these studies often has been weak. However, trends point to weak relationships between patient demographic variables and satisfaction; significant relationships between patient diagnosis, treatment history, and psychological status and satisfaction; strong relationships between length of treatment and manner of termination and satisfaction; a strong relationship between satisfaction and patient global report of outcome; and a weak relationship and therapist rating of outcome. Satisfaction also appears to be multidimensional, although a large general factor is evident in most studies. A number of additional findings are catalogued; and research lying outside the formal domain of satisfaction research, but relevant to this body of research is reviewed.  
Author.

151

LEBOW, J.L.

Similarities and differences between mental health and health care evaluation studies assessing consumer satisfaction.

Evaluation and Program Planning; 6, 1983, pp. 237-245.

nivel (C 3158)

variables: consumer satisfaction, mental health care.

methods: literature review.

reliability test: -

validity test: -

population: -

dimensions: -

This paper compares the literature assessing consumer satisfaction with health care and mental health treatment. Similarities and differences in the quantity, origins, quality, methodology, results, and utilization of findings are examined. The similarities identified far outweigh the differences. The trend toward carefully constructed high quality studies in the health care field is seen suggesting a promising direction for future research.

Author.

152

LEHMAN, A.F., ZASTOWNY, T.R.

Patient satisfaction with mental health services: a meta-analysis to establish norms.

Evaluation and Program Planning; 6, 1983, pp. 265-274.

nivel (C 3160)

variables: patient satisfaction, inpatient versus outpatient versus residential care; chronic versus non-chronic; and conventional versus innovative mental health programs.

methods: meta-analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Patients typically express high rates of satisfaction with their mental health care. This finding and the lack of well controlled studies on patient satisfaction in the literature underscore the need for meaningful guidelines for clinicians and program evaluators in interpreting patient satisfaction data. To address this problem a meta-analysis was undertaken to establish norms on patient satisfaction for various types of mental health programs. Programs were categorized according to three dimensions: inpatient versus outpatient versus residential care; chronic versus non-chronic; and conventional versus innovative. Meta-analysis procedures were modified to accommodate the single-group study designs that dominate the literature. The analysis revealed that chronic patients express less satisfaction with their treatment compared to non-chronic patients. Innovative programs are viewed more positively than conventional ones. No differences were found in rates of patient satisfaction between inpatient and outpatient programs. Acceptably reliable norms and confidence intervals of patient satisfaction were established for conventional inpatient programs serving either chronic or nonchronic patients; conventional outpatients programs for non-chronic patients; and for all programs combined according to chronic versus non-chronic, inpatient versus outpatient, and conventional versus innovative. However, data were insufficient to compute norms for other program types. The norms thus established can be used for comparative purposes by program evaluators. A cumulative, national data base on patient satisfaction is recommended to further refine these norms.

Author.

153

EL-GUEBALY, N., TOEWS, J., LECKIE, A., HARPER, D.  
On evaluating patient satisfaction: methodological issues.  
Canadian Journal of Psychiatry; 28, 1983, no. 1, pp. 24-29.  
nivel (C 3094)

variables: patient satisfaction.  
methods: literature review, methodological analysis.  
reliability test: -  
validity test: -  
dimensions: -  
population: -

The survey of patient satisfaction with the mental health services provided is recommended but involves a methodological dilemma. Concerns include a definition problem, the delineation of a representative sample, the selection of a survey technique and the type of questions to be used. A literature review and the authors' own experience with the process are presented.



The investigation of patient satisfaction while, as yet, limited in the critical information it can provide for the evaluation of services, will help pinpoint areas where the most patient dissatisfaction exists. The process can also be useful therapeutically, but patient satisfaction, although an important outcome measure, is not systematically related to other measures of treatment success. Methodological suggestions to improve the validity of the data gathered conclude the paper.

Author.

154

LEBOW, J.L.

Client satisfaction with mental health treatment: methodological considerations in assessment.

Evaluation Review; 7, 1983, no. 6, pp. 729-752.

nivel (C 3411)

variables: consumer satisfaction, mental health treatment.

methods: literature review, methodological analysis.

reliability test: -

validity test: -

population: -

dimensions: -

This article critically assesses the evaluation of consumer satisfaction in mental health treatment settings. Methodological problems addressed include uniformity myths, inclusion of items not measuring satisfaction, ambiguity in response alternatives, lack of precision in the use of terminology, failure to distinguish dissatisfaction and lack of satisfaction, failure to sufficiently probe, poor psychometric practice, the absence of accepted measures, failure to identify norms for satisfaction, lack of control over procedure, sampling bias, biasing responses, the lack of variability in responses, and primitive design, analyses, and reporting. Consumer satisfaction emerges as an important indicator of the quality of care, but one that must be interpreted with caution.

Author.

155

LOCHMAN, J.E.

Factors related to patients' satisfaction with their medical care.

Journal of Community Health; 9, 1983, no. 2, pp. 91-109.

nivel

variables: patient satisfaction, medical care.

methods: literature review, meta-analysis.

reliability test: -

validity test: -

population: -

dimensions: -

This article reviews research of patient satisfaction after recent, identifiable medical care visits. Results of the reviewed studies are grouped into 13 factors of the medical care setting and of the physicians' competence and relationships to their patients which may be related to patient satisfaction. The factors with the clearest relationship to patient satisfaction include the accessibility of medical care, the organizational structure of clinics, treatment length, perceived competence of physicians, clarity and retention of physicians' communication to patients, physicians' affiliative behaviour, physicians' control, and patients' expectations. Other factors with more complicated or no apparent relationship to satisfaction were mode of payment, clarity of patients' communication to physicians, physician personality, patients' sociodemographic characteristics, and patients' health status. The additive and potential interactive effects of these factors are discussed. Additional studies of the interactive aspects of the physician-patient relationship are encouraged, and implications for further research are presented, with emphasis on sampling, measurement, and design issues.  
Author.

156

VISSER, A.PH. (Ed.)

Onderzoek naar de tevredenheid van ziekenhuispatiënten: doel, methode en beleid.

(Research into satisfaction of hospital patients: object, method and policy.)

Lochem, Gent: De Tijdstroom, 1987.

nivel (B 1867)

variables: patient satisfaction, hospital care.  
methods: review, methodological analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This book presents several perspectives on the state of the art in satisfaction research of hospitalized patients. The following topics are discussed: the meaning of developing questionnaires for the assessment of patient satisfaction, the influence of the surroundings on patients' experiences, the relation between patient experiences and quality of care, the limitations of survey results, the influence of individual characteristics and medical data on patients' experiences, the importance of observations for understanding of the patient's behaviour, the utility of patient research for policy and programme development in hospitals, and patient surveys as a political tool of consumer organizations.

Each of these subjects is reviewed from three angles: object, method and policy. The object in nearly all contributions is patient satisfaction research in hospitals. Main topic are the experiences of patients during their stay in a hospital. Most investigations are descriptive.

The methodological approaches throughout the book are very diverse: standardized questionnaires (Chapters 2-4 and 8-10), a case study (Ch. 7),

interviews and unstructured questionnaires (Ch. 8 and 13), qualitative analyses of taped interviews (Ch. 11), and observational research (Ch. 12). Methodological problems are discussed by Bergsma (Ch. 7), who criticizes the one-dimensionality of the patient satisfaction construct that does not fit the patient's experiences very well, and by Visser and colleagues (Ch. 8-10), who evaluate disturbing influences of methodological factors. Visser concludes that client satisfaction can best be assessed using a simple evaluation model ("how do you judge...?") as contrasted with a discrepancy model (outcome expectations minus real outcome). Usually expectations are highly correlated with real outcome, thus questioning the independent assessment of both concepts. Also because of this phenomenon, difference scores bear less variance than simple evaluation-scores. The weighting of satisfaction scores according to the relative importance of different aspects of the hospital stay of satisfaction scores to the relative importance of different aspects does not provide extra information either. Also, both satisfaction scores and the assessment of relative importance are highly correlated. Response categories with highly differentiated positive values seem to increase variance. It is also advisable that questions referring to satisfaction are preceded by questions that refer to the situation as experienced by the patient. Questionnaires with preset response categories suffer from response set, thus artificially increasing satisfaction scores. This effect seems less when the response is expressed in a number referring to report marks. Neither the interview site (in the hospital or at home after discharge) nor the length of the time-span between discharge and interview systematically influences satisfaction scores. Clients with higher scores on a scale assessing the social desirability tendency in the response, and clients expressing feelings of gratitude, tend to have higher satisfaction scores. No difference was found when comparing satisfaction scores that were gathered by a representative of the hospital or a representative of an independent agency. Face-to-face interviews tend to increase satisfaction scores. It is concluded that, of all these factors, only social desirability is a serious disturber of research results.

Chapters 13 to 18 deal more specifically with policy-oriented research. Bokma and Kramer (Ch. 13) consider patient-asking as an instrument for quality improvement. Their reflections are illustrated by descriptions of some hospital projects (Ch. 14 and 15).

The appendix includes three questionnaires:

1. The questionnaire for assessment of satisfaction of hospital patients (Visser, 1983).
2. The questionnaire for patients of the Academic Hospital Leiden (Schelt, 1984).
3. The questionnaire for assessment of patients' hospital experiences (Bergsma, 1977).

157

HALL, J.A., ROTER, D.L., KATZ, N.R.

Meta-analysis of correlates of provider behaviour in medical encounters.

Medical Care; 26, 1988, no. 7, pp. 657-675.

nivel

variables: patient satisfaction, recall, compliance, provider behaviour.  
methods: meta-analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This article summarizes the results of 41 independent studies containing correlates of objectively measured provider behaviours in medical encounters. Provider behaviours were grouped a priori into the process categories of information giving, questions, competence, partnership building, and socioemotional behaviour. Total amount of communication was also included. All correlations between variables within these categories and external variables (patient outcome variables or patient and provider background variables) were extracted. The most frequently occurring outcome variables were satisfaction, recall, and compliance, and the most frequently occurring background variables were the patient's gender, age, and social class. Average correlations and combined significance levels were calculated for each combination of process category and external variable. Results showed significant relations of small to moderate average magnitude between these external variables and almost all of the provider behaviour categories. A theory of provider-patient reciprocation is proposed to account for the pattern of results.

Author.

158

HALL, J.A., DORNAN, M.C.

Meta-analysis of satisfaction with medical care: description of research domain and analysis of overall satisfaction levels.

Social Science & Medicine; 27, 1988, no. 6, pp. 637-644.

nivel

variables: consumer satisfaction, medical care.  
methods: meta-analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Consumer satisfaction with medical care was examined in a meta-analysis of 221 studies. For each study, (1) a coding form was filled out that described sample characteristics, design, and instrument methodology, and (2) the study sample's overall satisfaction level was transformed to a 0.00-1.00 scale. This article summarizes the study attributes as compiled from the coding form, presents grand satisfaction means over all studies, and tests for differences in satisfaction between studies that employed different methods of research.

Author.

159

HALL, J.A., DORNAN, M.C.

What patients like about their medical care and how often they are asked: a meta-analysis of the satisfaction literature.

Social Science & Medicine; 27, 1988, no. 9, pp. 935-939.

nivel

variables: consumer satisfaction, medical care.  
methods: meta-analysis on 12 dimensions of client satisfaction.  
reliability test: -  
validity test: -  
population: -  
dimensions: overall satisfaction, accessibility, cost, overall quality, humane-  
ness, competence, information, bureaucracy, physical facilities,  
attention for psychosocial problems, continuity of care, outcome  
of care.

A meta-analysis of studies on consumer satisfaction with medical care yielded 221 studies that reported relations between satisfaction and other variables, of which 107 reported satisfaction levels for two or more aspects of medical care. A method was developed to derive the relative levels of patient satisfaction with 11 aspects of care across these 107 studies. Humaneness and technical quality of medical care were ranked near the top, while the bottom five ranks were occupied by aspects of care that reflected the provider's attention to other patient needs and patient's relation to the system as a whole. In addition, it was demonstrated that different aspects of medical care are measured with extremely uneven frequencies in satisfaction instruments.

Author.

160

McDANIEL, C., NASH, J.G.

Compendium of instruments measuring patient satisfaction with nursing care.

Quality Review Bulletin; 16, 1990, no. 5, pp. 182-188.

nivel (C 3099)

variables: patient satisfaction, nursing care.  
methods: review of instruments.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

Recent changes in health care delivery have encouraged a search for comprehensive and established measures of patient satisfaction with nursing care (PSNC), which studies have found to be the most important predictor of overall satisfaction with hospital care and an important indicator of outcome. Twenty-one current PSNC instruments are described in a compendium, which provides information on the developer and the date of

publication or first use, types of items and subscales, mode of administration, reliability and validity formulas, and availability.

Author.

161

CORRIGAN, P.W.

Consumer satisfaction with institutional and community care.

Community Mental Health Journal; 26, 1990, no. 2, pp. 151-165.

nivel (C 3096)

variables: consumer satisfaction.

methods: literature review, meta-analysis.

reliability test: -

validity test: -

population: -

dimensions: characteristics of staff, treatment services, the physical environment, and activities that foster autonomy.

Rather than addressing the psychiatric patients' preference between institutional and community care, research has addressed the consumers' satisfaction with the respective milieus. Studies of overall satisfaction have found that at least 50% of patients approve of the overall treatment strategies in both settings. However, the discriminative power of overall analyses is limited. This paper reviews those studies which have evaluated consumer satisfaction with components of treatment across four dimensions; characteristics of staff, treatment services, the physical environment, and activities that foster autonomy. Inpatients are pleased with the quality of staff relationships and the hospital surroundings but find that talk therapy can be a nuisance and do not like the loss of freedom and privacy characteristic of a locked ward. Far less research has been completed on outpatient samples such that the four dimensions cannot be readily applied. Community consumers express similar approval of staff and are less critical of medication interventions than inpatients. Research suggests though, that consumer satisfaction in part reflects patient characteristics. Results of this summary have implications for addressing program development in both institutional and community settings.

Author.

162

HALL, J.A., DORNAN, M.C.

Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis.

Social Science & Medicine; 30, 1990, no. 7, pp. 811-818.

[published erratum appears in Social Science & Medicine; 30, 1990, no. 12, following 1368]

nivel

variables: patient satisfaction, sociodemographic characteristics.  
methods: meta-analysis.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

A meta-analysis was performed to examine the relation of patients' sociodemographic characteristics to their satisfaction with medical care. The sociodemographic characteristics were age, ethnicity, sex, socioeconomic status (three indices), marital status, and family size. Greater satisfaction was significantly associated with greater age and less education, and marginally significantly associated with being married and having higher social status (scored as a composite variable emphasizing occupational status). The average magnitudes of relations were very small, with age being the strongest correlate of satisfaction (mean  $r = 0.13$ ). No overall relationship was found for ethnicity, sex, income, or family size. For all sociodemographic variables, the distribution of correlations was significantly heterogeneous, and statistical contrasts revealed the operation of several moderating variables. The meaning of the overall results and their relation to earlier reviews is discussed.

Author.

163

LEMMENS, F., DONKER, M.

Kwaliteitsbeoordeling door cliënten: een metastudie naar tevredenheidsonderzoek in de geestelijke gezondheidszorg.

(Quality judgements by clients: a meta-study of satisfaction research in mental health care.)

Utrecht: NcGv, 1990.

nivel (B 2354)

variables: quality judgements, patient satisfaction, mental health care.  
methods: review of theories and methods.  
reliability test: -  
validity test: -  
population: -  
dimensions: -

This meta-study consists of three parts. In the first part the objects, methods, instruments and value of satisfaction research are reviewed critically. The second part contains guidelines for satisfaction research. Part three is a bibliography of theoretical, methodological and research literature.

The authors regard quality in health care as a subjective (an attribution by the patient to services) and time-place-related (it changes with the society the patient lives in) concept. The criteria for quality are constructed in negotiations between different parties.

Patient satisfaction is the measure most used for quality of care (from the patient's perspective). Most concepts of satisfaction are constructed around

the expectations of patients. According to the three main models, satisfaction judgements are a result of 1) evaluating the situation, 2) comparing expectations and experiences or 3) fulfilment of the expectations.

The authors discuss the theoretical problems behind satisfaction concepts. First, one has to distinguish the patient's perception of quality and the patient's judgement of that quality. Second, patient expectations are dynamic (they change in time) and this affects most of the satisfaction studies that assess patient satisfaction at one moment. Third, feelings of dissatisfaction do not always result in dissatisfaction judgements. According to the attribution theory a patient can accept his dissatisfaction as a result of attributing the failure to himself and thus be satisfied with the care provided. In a chapter on methodology the authors review qualitative and quantitative methods, which they regard as different phases in a good study design. An important critique of the quantitative method is the superficial use of the Likert scaling technique.

The authors attribute the phenomenon of high percentages of patient satisfaction to methodological errors. Most instruments lack measuring sensitivity and validity. On the basis of their meta-study the authors conclude that the main part of satisfaction research did not produce valid results.

Part two presents guidelines for research in the form of minimal requirements for satisfaction research.

See also

83

WENSING, M., GROL, R., SMITS, A.

Patiëntenoordelen over kwaliteit van huisartsenzorg.

(Patient judgements on the quality of general practitioners' care.)

Nijmegen: KUN, 1991.



## **Part III**

### **Instruments**



Patient Satisfaction Questionnaire

ITEMS IN FORM II OF THE PSQ

Item Number	Item Content	Item Number	Item Content
1*	I'm very satisfied with the medical care I receive.	24	The amount charged for lab tests and x-rays is extremely high.
2*	Doctors let their patients tell them everything that the patient thinks is important	25*	Doctors don't advise patients about ways to avoid illness or injury.
3*	Doctors ask what foods patients eat and explain why certain foods are best.	26*	Doctors never recommend surgery (an operation) unless there is no other way to solve the problem.
4*	I think you can get medical care easily even if you don't have money with you.	27*	Doctors hurt many more people than they help.
5*	I hardly ever see the same doctor when I go for medical care.	28*	Doctors hardly ever explain the patient's medical problems to him.
6*	Doctors are very careful to check everything when examining their patients.	29*	Doctors always do their best to keep the patient from worrying.
7	We need more doctors in this area who specialize.	30*	Doctors aren't as thorough as they should be.
8*	If more than one family member needs medical care, we have to go to different doctors.	31*	It's hard to get an appointment for medical care right away.
9*	Medical insurance coverage should pay for more expenses than it does.	32*	There are enough doctors in this area who specialize.
10*	I think my doctor's office has everything needed to provide complete medical care.	33*	Doctors always avoid unnecessary patient expenses.
11	Doctors never keep their patients waiting, even for a minute.	34*	Most people are encouraged to get a yearly exam when they go for medical care.
12*	Places where you can get medical care are very conveniently located.	35*	Office hours when you can get medical care are good for most people.
13	Doctors act like they are doing their patients a favor by treating them.	36*	Without proof that you can pay, it's almost impossible to get admitted to the hospital.
14*	The amount charged for medical care services is reasonable.	37	People have to wait too long for emergency care.
15	Doctors always tell their patients what to expect during treatment.	38	Medical insurance plans pay for most medical expenses a person might have.
16*	Most people receive medical care that could be better.	39*	Sometimes doctors make the patient feel foolish.
17	Most people are not encouraged to get a yearly exam when they go for medical care.	40*	My doctor's office lacks some things needed to provide complete medical care.
18*	If I have a medical question, I can reach someone for help without any problem.	41	Doctors always explain the side effects of the medicine they prescribe.
19*	In an emergency, it's very hard to get medical care quickly.	42*	There are enough hospitals in this area.
20	I can arrange for payment of medical bills later if I'm short of money now.	43*	It takes me a long time to get to the place where I receive medical care.
21*	I am happy with the coverage provided by medical insurance plans.	44	Just about all doctors make house calls.
22*	Doctors always treat their patients with respect.	45*	The care I have received from doctors in the last few years is just about perfect.
23*	I see the same doctor just about every time I go for medical care.	46*	Doctors don't care if their patients worry.
		47*	Sometimes doctors take unnecessary risks in treating their patients.
		48	In an emergency, you can always get medical care.

ITEMS IN FORM II OF THE PSQ (continued)

Item Number	Item Content	Item Number	Item Content
49*	The fees doctors charge are too high.	61*	More hospitals are needed in this area.
50	Doctors are very thorough.	62	Doctors seldom explain why they order lab tests and x-rays.
51*	The medical problems I've had in the past are ignored when I seek care for a new medical problem.	63	I think the amount charged for emergency room service is reasonable.
52*	Parking is a problem when you have to get medical care.	64	Sometimes doctors miss important information which their patients give them.
53*	There are enough family doctors around here.	65	My doctor treats everyone in my family when they need care.
54	Doctors never expose their patients to unnecessary risk	66*	Doctors cause some people to worry a lot because they don't explain medical problems to patients.
55*	Doctors respect their patient's feelings.	67*	There is a big shortage of family doctors around here.
56	It's cash in advance when you need medical care.	68	Sometimes doctors cause their patients unnecessary medical expenses.
57	Doctors never look at their patient's medical care.	*	People are usually kept waiting a long time when they are at the doctor's office.
58*	There are things about the medical care I receive that could be better.	-	
59	When doctors are unsure of what's wrong with you, they always call in a specialist.		
60	When I seek care for a new medical problem, they always check up on the problems I've had before.		

Note: Items marked with an asterisk are included in the 43-item short form of the PSQ; one item in that form does not appear in Form II. In addition, four items (11, 27, 44, and 57) were used only as validity checks.

format: Likert-type, 5 point scale: strongly agree (1), agree (2), uncertain (3), disagree (4), strongly disagree (5).

source: WARE, J.E., SNYDER, M.K., WRIGHT, W.R., DAVIES, A.R. Defining and measuring patient satisfaction with medical care. Evaluation and Program Planning; 6, 1983, pp. 247-263.

Client Satisfaction Questionnaire (CSQ-18)

Form A

1. Have you ever felt that our program was more concerned with procedures than with helping you?	4	3	2	1
	Concerned mostly with helping me	Concerned more with helping me	Concerned more with procedures	Concerned mostly with procedures
2. How satisfied are you with the quality of the service you have received	4	3	2	1
	Very satisfied	Mostly satisfied	Indifferent or mildly dissatisfied	Quite dissatisfied
3. Did you get the kind of service you wanted?	1	2	3	4
	No, definitely not	No, not really	Yes, generally	Yes, definitely
4. How satisfied are you with the amount of help you have received?	1	2	3	4
	Quite satisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied
5. You came to our program with certain problems. How are those problems now?	1	2	3	4
	Worse or much worse	No change	Somewhat better	A great deal better
6. Have the services you received helped you to deal more effectively with your problem?	4	3	2	1
	Yes, they helped a great deal	Yes, they helped somewhat	No, they really didn't help	No, they seemed to make things worse
7. How convenient is the location of our building?	4	3	2	1
	Very convenient	Mostly convenient	Somewhat convenient	Very inconvenient
8. In general, have the receptionists and secretaries seemed friendly and made you very comfortable?	4	3	2	1
	Yes, definitely	Yes, most of the time	No, sometimes not	No, often not
9. Have the services you received led to any changes in either your problems or yourself?	1	2	3	4
	Yes, but the changes were for the worse	No, there was really no noticeable change	Yes, some noticeable change for the better	Yes, a great deal of positive change
10. Are you satisfied with the fee that was charged for the services you received?	1	2	3	4
	Quite satisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied

Client Satisfaction Questionnaire (CSQ-18)

Form A (continued)

11. Do you feel that our program has kept your problem confidential?	4	3	2	1
	Yes, I feel they definitely have	Yes, I feel they have	No, I feel they have not	No, I feel they definitely have not
12. How would you rate the quality of service you have received?	4	3	2	1
	Excellent	Good	Fair	Poor
13. In an overall, general sense, how satisfied are you with the service you have received?	4	3	2	1
	Very satisfied	Mostly satisfied	Indifferent or mildly dissatisfied	Quite satisfied
14. When you first came to our program did the receptionists and secretaries seem friendly and make you feel comfortable?	4	3	2	1
	Yes, they definitely did	Yes, they generally did	No, they generally didn't	No, they definitely didn't
15. Have you received as much help as you wanted?	1	2	3	4
	No, definitely not	No, not really	Yes, generally	Yes, definitely
16. To what extent has our program met your needs?	4	3	2	1
	Almost all of my needs have been met	Most of my needs have been met	Only a few of my needs have been met	None of my needs have been met
17. How interested have the receptionists and secretaries been in helping you?	4	3	2	1
	Very interested	Interested	Somewhat interested	Very uninterested
18. How interested in helping you was the person with whom you have worked most closely?	4	3	2	1
	Very interested	Interested	Somewhat interested	Very uninterested

source: LEVOIS, M., NGUYEN, T.D., ATTKISSON, C.C.  
 Artifact in client satisfaction assessment: experiences in community mental health settings.  
 Evaluation and Program Planning; 4, 1981, pp. 139-150.

Client Satisfaction Questionnaire (CSQ-18)

Form B

1. When you first came to our program were you seen as promptly as you felt necessary?	4	3	2	1
	Yes, very promptly	Yes, promptly	No, there was some delay	No, it seemed to take forever
2. In general, how satisfied are you with the comfort and attractiveness of our facility?	4	3	2	1
	Quite satisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied
3. Did the characteristics of our building detract from the services you have received?	1	2	3	4
	Yes, they detracted very much	Yes, they detracted somewhat	No, they did not detract much	No, they did not detract at all
4. How satisfied are you with the amount of help you have received?	1	2	3	4
	Quite satisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied
5. Considering your particular needs, how appropriate are the services you have received?	4	3	2	1
	Highly appropriate	Generally appropriate	Generally inappropriate	Highly inappropriate
6. Have the services you received helped you to deal more effectively with your problems	4	3	2	1
	Yes, they helped a great deal	Yes, they helped somewhat	No, they really didn't help	No, they seemed to make things worse
7. When you talked to the person with whom you have worked most closely, how closely did he or she listen to you?	1	2	3	4
	Not at all closely	Not too closely	Fairly closely	Very closely
8. How satisfied are you with the kind of service you have received?	1	2	3	4
	Quite dissatisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied
9. Are there other services you need but have not received?	1	2	3	4
	Yes, there definitely were	Yes, I think there were	No, I don't think there were	No, there definitely were not
10. How clearly did the person, with whom you worked most closely, understand your problem and how you felt about it?	4	3	2	1
	Very clearly	Clearly	Somewhat unclearly	Very unclearly

**Client Satisfaction Questionnaire (CSQ-18)**

**Form B (continued)**

11. How competent and knowledgeable was the person with whom you have worked closely?	1	2	3	4
	Poor abilities at best	Only of average ability	Competent and knowledgeable	Highly competent and knowledgeable
12. How would you rate the quality of service you have received?	4	3	2	1
	Excellent	Good	Fair	Poor
13. In an overall, general sense, how satisfied are you with the service you have received?	4	3	2	1
	Very satisfied	Mostly satisfied	Indifferent or mildly dissatisfied	Quite satisfied
14. If a friend were in need of similar help would you recommend our program to him or her?	1	2	3	4
	No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely
15. Have the people in our program generally understood the kind of help you wanted?	1	2	3	4
	No, they misunderstood almost completely	No, they seemed to understand	Yes, they seemed to generally understand	Yes, they understood almost perfectly
16. To what extent has our program met your needs?	4	3	2	1
	Almost all of my needs have been met	Most of my needs have been met	Only a few of my needs have been met	None of my needs have been met
17. Have your rights as an individual been respected?	1	2	3	4
	No, almost never respected	No, sometimes not respected	Yes, generally respected	Yes, almost always respected
18. If you were to seek help again, would you come back to our program?	1	2	3	4
	No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely



**Client Satisfaction Questionnaire (CSQ-8)**

1. How would you rate the quality of service you have received?	4	3	2	1
	Excellent	Good	Fair	Poor
2. Did you get the kind of service you wanted?	1	2	3	4
	No, definitely not	No, not really	Yes, generally	Yes, definitely
3. To what extent has our program met your needs?	4	3	2	1
	Almost all of my needs have been met	Most of my needs have been met	Only a few of my needs have been met	None of my needs have been met
4. If a friend were in need of similar help would you recommend our program to him or her?	1	2	3	4
	No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely
5. How satisfied are you with the amount of help you have received?	1	2	3	4
	Quite dissatisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied
6. Have the services you received helped you to deal more effectively with your problems	4	3	2	1
	Yes, they helped a great deal	Yes, they helped somewhat	No, they really didn't help	No, they seemed to make things worse
7. In an overall, general sense, how satisfied are you with the service you have received?	4	3	2	1
	Very satisfied	Mostly satisfied	Indifferent or mildly dissatisfied	Quite satisfied
8. If you were to seek help again, would you come back to our program?	1	2	3	4
	No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely

source: PASCOE, G.C., ATTKISSON, C.C.  
 The evaluation ranking scale: A new methodology for assessing satisfaction.  
 Evaluation & Program Planning; 6, 1983, no. 3-4, pp. 335-347.

## Satisfaction with Physicians and Primary Care Scale

### I. Professions Competence

1. People do not know how many mistakes doctors really make.
2. Today's doctors are better trained than ever before.
3. Doctors rely on drugs and pills too much.
4. Given a choice between using an old reliable drug and a new experimental one, many doctors will choose the new one.
5. No two doctors will agree on what is wrong with a person.
6. Doctors will not admit it when they do not know what is wrong with you.
7. When doctors do not cure mildly ill patients, it is because the patients do not cooperate.
8. Doctors will do everything they can to keep from making a mistake.
9. Many doctors just do not know what they are doing.
10. Doctors spend more time trying to cure an illness you already have than preventing one from developing.
11. Doctors are put in the position of needing to know more than they possibly could.
12. Even if a doctor cannot cure you right away, he (she) can make you more comfortable.
13. Doctors can help you both in health and in sickness.
14. Doctors sometimes fail because patients do not call them in time.

### II. Personal Qualities

1. You cannot expect any one doctor to be perfect.
2. Doctors make you feel like everything will be all right.
3. A doctor's job is to make people feel better.
4. Too many doctors think you cannot understand the medical explanation of your illness, so they do not bother explaining.
5. Doctors act like they are doing you a favor by treating you.

### II. Personal Qualities (continued)

6. A lot of doctors do not care whether or not they hurt you during the examination.
7. Many doctors treat the disease but have no feeling for the patient.
8. Doctors should be a little more friendly than they are.
9. Most doctors let you talk out your problems.
10. Doctors do their best to keep you from worrying.
11. Doctors are devoted to their patients.
12. With so many patients to see, doctors cannot get to know them all.
13. Most doctors have no feeling for their patients.
14. Most doctors take a real interest in their patients.

### III. Cost/Convenience

1. Nowadays you really cannot get a doctor to come out during the night.
2. You may have to wait a little, but you can always get a doctor.
3. It is easier to go to the drugstore for medicine than to bother with a doctor.
4. In an emergency, you can always get a doctor.
5. There just are not enough doctors to go around.
6. Doctors try to have their offices and clinics in convenient locations.
7. More and more doctors are refusing to make house calls.
8. People complain too much about how hard it is to see a doctor.
9. It is hard to get a quick appointment to see a doctor.
10. Doctors should have evening office hours for working people.
11. Most doctors are willing to treat patients with low incomes.
12. A doctor's main interest is in making as much money as he can.

format: Likert type, 5 point scale: strongly agree (1), agree (2), uncertain (3), disagree (4), strongly disagree (5).

source: ROBERTS, J.G., TUGWELL, P.

Comparison of Questionnaires Determining Patient Satisfaction with Medical Care.  
Health Services Research; 22, 1987, no. 5, pp. 637-643.

## Evaluation Ranking Scale

### Dimensions of the evaluation ranking scale

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- Clinic location & appointment
    - Location
    - Parking
    - Hours of operation
    - Obtaining appointment(s)
    - Obtaining desired appointment time(s)
  - Clinic building, offices, and waiting areas
    - Amount of waiting time
    - Appearances of building, offices, and waiting areas
    - Comfort of offices & waiting areas
    - Appearances and clarity of signs, posted instructions/announcements
  - Clinic assistants & helpers
    - Courtesy and helpfulness of:
      - Telephone operators
      - Receptionists
      - Aides and volunteers
  - Nurses and doctors
    - Skillfulness
    - Friendliness
    - Clarity of information/advice
    - Thoroughness
    - Amount of time spent
  - Health services offered
    - Received the services I wanted
    - Saw the nurse or doctor I wanted
  - Service results
    - Success of services
    - Speed of results
    - Value of services
    - Usefulness of information/advice
- 

The ERS technique involves ranking and rating six dimensions of health care service. Six cards with the dimensions printed on it are randomly arranged on a table in front of the subject. In the first task the subject is asked to rank-order the cards on what was most important in determining their reactions to the health center to what was least important, regardless of whether they felt positively or negatively.

In the second task the subject is asked to rate the dimensions by placing the cards along a continuum representing service quality. The bottom anchor of the continuum is marked as 0 and labeled as Worst Possible Health Center. Multiples of 10 are appropriately marked up to the top anchor of 100, labeled as Best Possible Health Center.

source: PASCOE, G.C., ATTKISSON, C.C.

The evaluation ranking scale: a new methodology for assessing satisfaction.

Evaluation & Program Planning; 6, 1983, no. 3-4, pp. 335-347.

## Medical Interview Satisfaction Scale

### Item

#### Cognitive

The doctor told me the name of my illness in words that I could not understand.

After talking with the doctor, I know just how serious my illness is.

After talking with the doctor, I have a good idea of what changes to expect in my health over the next few weeks and months.

The doctor told me all I wanted to know about my illness.

The doctor is very good at explaining the reasons for medical tests.

The doctor told me how being sick will affect my ability to do work.

The doctor has relieved my worries about being seriously ill.

The doctor told me what the medicines he prescribed would do for me.

I feel I understand pretty well the doctor's plan for helping me.

#### Affective

The doctor gave me a chance to say what was really on my mind.

I really felt understood by my doctor.

After talking to the doctor, I felt much better about my problems.

I felt that this doctor really knew how upset I was about my pain.

I felt free to talk to my doctor about private thoughts.

I felt this doctor accepted me as a person.

I felt that this doctor didn't take my problems very seriously.

This doctor was not friendly to me.

The doctor I saw today would be someone I would trust with my life.

#### Behavioral

The doctor gave me a thorough checkup.

This doctor was too rough when he examined me.

The doctor looked into all the problems I mentioned.

I was satisfied with the doctor's decision.

I feel the doctor did not spend enough time with me.

The doctor seemed rushed during his examination of me.

The doctor gave directions too fast when he examined me.

The doctor seemed to know what he was doing during the examination.

format: Likert type, 5 point scale: strongly agree (1), agree (2), uncertain (3), disagree (4), strongly disagree (5).

source: WOLF, M.H. et al.

The Medical Interview Satisfaction Scale: development of a scale to measure patient perceptions of physician behavior. Journal of Behavioral Medicine; 1, 1978, no. 4, pp. 391-400.

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