

THE ROLE OF THE GENERAL PRACTITIONER'S AFFECTIVE BEHAVIOUR IN MEDICAL ENCOUNTERS

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In a random sample of 1524 consecutive consultations involving 30 General Practitioners (GPs), a study was made of the relationship between the GP's affective and instrumental behaviour and patient satisfaction as well as patients' space in the consultation, both at consultation and GP-level. In a subsample of 99 consultations with hypertensive patients, an additional study was made of the relationship between the GP's affective behaviour and the quality of care on three dimensions (technical-medical, psychosocial and doctor-patient relationship). The GP's affective behaviour was negatively correlated with some aspects of his/her instrumental behaviour, in particular with technical-medical interventions and prescriptions. On the other hand, the GP's affective behaviour related positively to several measures indicating patients' 'space in the consultation' (consultation length, proportion of patient talk, patient influence on the diagnosis and the discussion of psychosocial topics). As hypothesized, a positive relation between affective behaviour and all four outcome measures was found. In a series of multivariate analyses affective behaviour proved to be the strongest factor in explaining patient satisfaction and quality of care. Dimensions of instrumental behaviour did not explain these outcome measures except for referrals indicating decreasing patient satisfaction; whereas discussion of psychosocial topics, consultation length and proportion of patient talk explained additional variance in some of the outcome measures. The implications of these findings for general practice as the centre of the professional arena where health problems are encountered were discussed.

INTRODUCTION

The Physician's Black Box

When confronted with the ongoing stream of information about new medical technologies that so readily attracts popular as well as scientific attention, it is sometimes hard to realize that people's health problems, if ever they come to the notice of the health care system, are all seen and solved by the General Practitioner (GP), which places the GP-consultation at the centre of the professional arena where health problems are encountered (Bensing, 1991a, p.1). Most of the scientific attention given to the GP-consultation has been focused to the technical-medical side of it. White (1988, p.24) argues that this unbalanced attention to the technical-medical side of medicine is not supported in the literature: 'We should be crystal clear ... that probably no more than 20% of the therapeutic interventions are supported by objective evidence that they do more good than harm...'. Yet, most people get better. Some, of course, because of the natural course of the disease (most diseases are self-limiting in nature), but some also because of something that

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happens in the contact between doctor and patient. Matthews *et al.* (1993, p.973) state that 'an important component of healing, apart from the effect of any technology applied, derives from the relationship between the healer and the patient'. Roter (1992, p.146) points to several mechanisms that could be held responsible for the beneficial effects of a good physician-patient relationship. She suggests, for instance, that a satisfied patient may have more confidence in the doctor, maximizing the healing mechanisms of the placebo-effect. Also the relief to patients of unburdening to the provider might help relax them with beneficial health effects (Roter, 1992, p.147). Kaplan mentions the physician-patient relationship as a primary bond which may act as a form of social support to influence patients' health status (Kaplan, Greenfield, and Ware, 1989). Hitherto, not much empirical evidence has been available on the effective ingredients of the physician-patient relationship, although it is clear that this must be found in the nature of physician-patient communication. White (1988, p.25) urges researchers to be more curious about this black box in the physician's healing power, proposing that this is probably the most powerful therapeutic agent in existence. This study can be seen as an attempt to enter and start to decipher the data in the physician's black box.

Patients' Needs in the Medical Consultation

It is not possible to solve the riddle of the physician's healing power without taking account of the patients' needs when entering the consultation room. Consequently, it is important to realize that patients always have some kind of health history before they enter the consultation room: they have observed certain symptoms; they have considered them serious enough to require action; their own actions and counselling from their social network have not proved of sufficient help; accordingly, they have decided to make arrangements to go to see a doctor (Freidson, 1987, p.182). The patient, entering the consulting room is at the height of an accumulating stress curve (Ben-Sira, 1986). Stress with two distinctive aspects: uncertainty and anxiety. Uncertainty, because the patient wants to know what is the matter with him or her. Anxiety, because the patient is afraid, that perhaps it is bad or will get worse (Molleman, Krabbendam and Annyas, 1984). Some authors (Friedman, 1979; Ben Sira, 1986) have pointed to the fact that going to the doctor in itself produces additional uncertainty as well as anxiety. It leads to questions like 'what can I expect?' and 'will I be taken seriously?'. The result is that when patients go to their doctor they have two sorts of needs:

1. a need to know what is wrong (the diagnosis) and what can be done about it (prescription, advice, referral).
2. a need for understanding, for support, a need to be put at ease, a need for acceptance and respect.

Engel (1988, p.124) formulated both needs poetically as 'the need to know and understand' and 'the need to feel known and understood'. Most of the time, a visit to the GP involves a combination of both needs. As a consequence, the GP should meet those two needs by two different types of behaviour:

1. instrumental behaviour, which is primarily meant to help the patient to solve the health problem, and

2. affective behaviour which is primarily meant to create a relationship with the patient in which the patient feels secure to talk with the doctor about his concerns.

These two types of behaviour coincide with what Putnam *et al.* (1985) called 'the two faces of medicine': technology and humaneness, cure and care, the science and the art of medicine, a well-known and widely used distinction in medicine (Inui and Carter, 1985; Roter, 1989; DiMatteo, 1979; Ware and Snyder, 1975; Ben-Sira, 1980). In the literature most attention has been paid to the effectiveness of the GP's instrumental behaviour: the traditional behaviours like technical-medical interventions, prescriptions and referrals, but also newer departures like patient education and encouraging self-care. The other 'face of medicine': the GP's affective behaviour has been researched less systematically. For that reason, in this study, we analyze the role of the GP's *affective behaviour* in the medical encounter.

Theoretical Rationale Behind the Possible Role of the GP's Affective Behaviour

Psychotherapeutic theories lead one to expect that the GP's affective behaviour will have its counterpart in patients' 'space' in the consultation to talk about their real concerns (Rogers, 1951, p.202), which are often not the somatic health problems that are initially presented (Roter and Hall, 1992; Vaquez-Barquero, Diez Manrique, Gaité *et al.*, 1992; Verhaak and Tjhuis, 1994). The central mechanism that gives effect to this is 'empathy', a psychotherapeutic concept which is close to the concept of 'affective behaviour' in doctor-patient communication literature (Bareman, Nijenhuis, Dokter, Trijsburg, Out and Braams, 1993; Epstein, Campbell, Cohen-Cole, McWhimmey and Smilkstein, 1993; Epstein and Beckman, 1994; Evans, Stanley and Burrows, 1993; Matthews, Suchman and Branch, 1993; Orbell and Abraham, 1993; Putnam and Stiles, 1993; Zinn, 1993). Empathy refers to the therapists' sensitivity to the patients' needs (Rogers, 1951, p.167). Zinn (1993) describes empathy as a process for understanding an individual's subjective experience by vicariously sharing that experience while maintaining an observant stance. It is a useful tool in the medical encounter as it provides the physician with a fuller, more personalized view of the patient, and it provides patients with a sense of connectedness to the physician that may allow them to express his/her emotional distress more freely. It also makes the medical encounter more efficient because of time-effectiveness and a higher patient satisfaction (Zinn, 1993).

Empathy, or affective behaviour can have a direct influence on patient satisfaction by fulfilling patients' need to be recognized and understood (Engel, 1988, p.124), but also a more indirect influence by creating a better relationship with the patient, thereby facilitating the mutual process of information-giving; another crucial part of doctor-patient communication (Eisenberg, 1988; Waitzkin, 1985; Cassell, 1985; Inui and Carter, 1985; Putnam *et al.*, 1985; Tuckett and Williams, 1984). This indirect influence of affective behaviour will be the strongest for those parts of the information-giving process that go beyond the biomedical side of medicine, e.g. the discussion of psychosocial topics during the consultation (Roter and Hall, 1992).

RESEARCH QUESTIONS

To summarize the literature, we expect GP's affective behaviour to influence both the process and the outcome of the medical consultation. The concept 'space for the patient' seems useful in describing the supposed influence of the GP's affective behaviour on the **process** of the consultation. We hypothesize that the GP's affective behaviour gives 'space' to the patients to bring what is really worrying them to the surface. Aspects of this 'space for the patient' are: the patient's relative contribution to the conversation; the patient's influence on the diagnostic process; the explicit discussion of psychosocial topics in the consultation and the consultation length. Apart from this we expect a certain trade-off between GP's affective behaviour and GP's instrumental behaviour, especially GP's technical-medical, instrumental behaviour, in the form of technical medical interventions, prescriptions and referrals to medical specialists. Because we expect affective behaviour to be part of a consistent communication style on the part of the GP, we hypothesize the same kind of relationship at an aggregated (i.e. General Practitioner) level.

The literature also leads us to expect that the GP's affective behaviour will influence the **outcome** of the medical encounter. In line with several authors (Bensing, 1992; DiMatteo, 1979; Pendleton, 1983; Roter and Hall, 1992; Zinn, 1993), we expect a positive relationship between GP's affective behaviour and *patient satisfaction*, both at the consultation and GP-level. However, a patient can be satisfied without having received appropriate care from a professional point of view. So, the quality of care is another important and more specific outcome. Differentiation is usually made in the literature among three aspects of quality of care: technical-medical care, psychosocial care and the doctor-patient relationship (Bensing, 1992; DiMatteo and DiNicola, 1981; Linn *et al.*, 1984). We expect a positive relationship between GP's affective behaviour and all three aspects of quality of care. We expect the *quality of the technical-medical care* to be improved by GP's affective behaviour because of its supposed facilitation of mutual information exchange. We expect the *quality of psychosocial care* to improve because this behaviour supposedly facilitates the patient expression of their real worries (which are often not biomedical in nature). A positive relationship between GP's affective behaviour and the *quality of the doctor-patient relationship* is expected because of the supposed influence of this affective behaviour on the patients' need to be recognized.

METHODS

Sample

The data for this study are based upon a random sample of 1524 consecutive consultations of 30 general practitioners, working in ambulatory practice in different locations in the Netherlands. The consultations were videotaped after informed consent had been obtained from the patients. Permission was refused by 15% of the patients, with a slight overrepresentation of female patients and patients with psychological and social complaints; there were no age differences between those patients who refused and those who participated (Verhaak, 1986 and 1988).

Measures of GP's Affective Behaviour

General practitioner's (GP) affective behaviour was measured by observation of 4 independent variables (Bensing, 1991b):

1. eye-contact (stopwatch-timed)
2. manifest interest (the observer's rating on a Likert-type 5-points-scale)
3. non-specific behaviour, like 'hmm' [vocal acknowledgement] (number of utterances)
4. verbal empathy, like reflections and paraphrases (number of utterances)

The interjudge reliability of the measures of GP's affective behaviour varied between .51 for 'manifest interest' to .97 for eye-contact. A factor-analysis revealed one clear factor with an *Eigenvalue* of 1.724 and 43.2 % explained variance. The factor loadings for the four affective variables varied between .62 and .69. In the analyses the factor score is used to provide one comprehensive measure of the GP's affective behaviour.

Measures of GP's Instrumental Behaviour

Five types of instrumental behaviour were distinguished: technical-medical interventions, ordering external diagnostic tests (laboratory tests, EEGs, ECGs, scans, etc.), prescriptions, referrals to medical specialists, and patient education. These items were measured by a simple 'yes' or 'no'.

Process Measures ('space for the patient')

The observed process variables were consultation length (stopwatch-logged), proportion of patient's speaking-time related to GP's speaking time (stopwatch-logged), and the explicit discussion of psychosocial topics ('yes'-'no'). The observer's rating of patient's influence on the diagnostic process was measured on a five point Likert scale (Buys *et al.*, 1994; Byrne and Long, 1976).

Outcome Measures

Two outcome measures were used: patient satisfaction and panel-assessed quality of care. Patient satisfaction was measured by a patient satisfaction questionnaire with 6 items of a five-point Likert rating format, to be completed immediately after the consultation. Cronbach's alpha was .72. (Verhaak, 1986).

Quality of care was studied in a subsample of the original database, containing all videotaped consultations with hypertensive patients (excluding patients with severe organic damage). The rationale behind the choice of hypertension was the need for a homogeneous sample of consultations (Carter *et al.*, 1982) with a health problem that is both rather frequent and serious enough to deserve special medical attention, and a problem requiring biopsychosocial attention (Bensing, 1991a; 1991b). On the basis of the measure of health problems 99 consultations of the total sample were found to deal with hypertension. This number could be predicted from epidemiological studies (Royal College of General Practitioners, 1991). The age-sex

distribution of the patients was fairly similar to distributions found in morbidity research elsewhere (Office of Population Censuses and Surveys, 1979). These 99 consultations with hypertensive patients were observed by a panel of 12 experienced General Practitioners, who rated the quality of care on a series of ten-point-scales, independently of one another. Three measures of the quality of care were distinguished (Bensing, 1991a, p.115; 1992):

- quality of technical-medical care, which refers to all relevant GP technical medical diagnostic, preventive and therapeutic activities, using a record sheet, designed by the Nijmegen University Department of General Practice
- quality of psychosocial care, which refers to the degree to which the GP is receptive to and responds to non-somatic aspects of the health problems presented,
- quality of care of the doctor-patient relationship, which refers to the manner in which the doctor is successful in creating an open, secure and workable relationship with the patient.

Panel-members were trained and provided with written instructions on the quality criteria. The range of the scores varied from 3 to 9; the reliability of the three quality measures varied between .79 and .88 (Cronbach's alpha).

Analyses

Data were first analyzed at the consultation level. In order to get a profile of the 'High-affective GP' the results were also analyzed at an aggregated GP-level, i.e.: the mean scores of all GP's consultations. Bivariate correlations were presented first. Next, patient satisfaction at consultation and GP-level was predicted in stepwise regression analyses with the following independent variables: measures of space for the patients; measures of GP's instrumental behaviour and GP's affective behaviour. Finally, a prediction of the three dimensions of quality of care for the 99 consultations on hypertension was made using the same procedure. These analyses were not performed at GP-level, since more than half of the GP's had either none or only one or two hypertension consultations.

RESULTS

The Relationship between the GP's Affective and Instrumental Behaviour

In Table 1 the correlations between the GP's affective behaviour and several types of instrumental behaviour are given at the consultation level as well as the aggregated GP-level.

At the consultation level, affective behaviour had a significant negative association with technical-medical interventions and the prescription of medicines. The same pattern was seen at the aggregated GP-level. The high-affective GP is rather restricted in his instrumental interventions: high-affective GP's write significantly fewer prescriptions than their less affective colleagues and perform significantly fewer technical-medical interventions. The negative relationship with referrals to medical specialists ($r = -.28$) just fails to reach significance level; nor do the other correlations reach significance, it is interesting to note that of all

Table 1 Correlations of GP's affective behaviour with measures of instrumental behaviour at consultation and GP-level.

	Consultation level (N = 1524)	GP-level (N = 30)
techn-med. interventions	-.15***	-.31*
external diagnostics	-.03	-.18
prescriptions	-.06**	-.41*
referrals	-.04	-.28
patient education	.04	.16

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

our measures of instrumental behaviour, patient education is the only one that shows a positive correlation with the GP's affective behaviour. All relationships are stronger at the GP-level than at the consultation level.

The GP's Affective Behaviour and Space for the Patient

From Table 2, it can be seen that the GP's affective behaviour coincides with longer consultations, a higher proportion of patient talk (vis-à-vis GP's talk) and more patient influence on the diagnosis. There is also more explicit discussion of psychosocial topics in consultations with a relatively high level of GP affective behaviour. Here too, the same pattern is shown at the aggregated GP-level. The high-affective GP is a GP whose consultations in general tend to last longer than the consultations of less affective colleagues; more psychosocial topics are discussed during the consultation; patients in general are more talkative during the consultation and they have more influence on the diagnosis.

Patient Satisfaction

The GP's affective behaviour correlates with patient satisfaction at a consultation ($r = .14$; $p \leq .01$) and GP-level ($r = .38$; $p \leq .001$). In Table 3 the results of the stepwise regression analysis of patient satisfaction with GP's affective behaviour, GP's instrumental behaviour and measures of 'space' for the patient are given.

At the consultation level, the only three variables with significant regression coefficients in the prediction of patient satisfaction are: discussion of psychosocial topics; the GP's affective behaviour and referrals to medical specialists. Referrals to medical specialists have a negative effect on patient's satisfaction. At the GP-level, patient satisfaction is largely predicted by the degree to which the GP generally discusses psychosocial topics with the patients. This variable is the only

Table 2 Correlations of GP's affective behaviour with measures of space for the patient at consultation and GP-level.

	Consultation level (N = 1524)	GP-level (N = 30)
consultation length	.26***	.47**
proportion patient talk	.57***	.78***
patient's infl. diagn.	.49***	.81***
disc. psychosocial topics	.40***	.64***

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table 3 Prediction of patient's satisfaction at consultation level (N=1524).

	Consultation level (n = 1524)		GP-level (N = 30)	
	Beta	Adjusted R ² change	Beta	Adjusted R ² change
<i>GP's affective behaviour</i>	.093**	.008***	.178	
<i>GP's instrumental behaviour</i>				
techn-med. interventions	.052		.122	
external diagnostics	-.005		-.130	
prescriptions	.014		-.153	
referrals	-.059*	.002***	-.093	
patient education	.018		.102	
<i>Space for the patient</i>				
consultation length	-.005		-.144	
proportion patient talk	-.055		-.247	
patient's infl. diagn.	-.029		-.199	
disc. psychosocial topics	.103**	.019***	.422**	.149*
Total Adjusted R ²		.029***		.149*

* p ≤ .05; ** p ≤ .01; *** p ≤ .001

significant predictor of patient satisfaction in the regression analysis at GP-level. However, it is an important one since it explains almost a fifth of the variance of patient satisfaction (Table 3).

Quality of Care

Within the subsample of medical consultations with hypertensive patients (n = 99), the three dimensions of quality of care are regressed with GP's affective and instrumental behaviour and with the measures of space for the patient.

Table 4 shows that nearly a quarter of the variance in the quality of technical-medical care is explained by GP's affective behaviour (positively) and patients' amount of talking and consultation length (negatively). None of the measures of GP's instrumental behaviour specified contributes to the prediction of the quality of technical-medical care.

Table 4 Prediction of the quality of technical-medical care of the consultations for hypertension (N = 99).

	Beta	Adjusted R ² change
<i>GP's affective behaviour</i>	.514***	.128***
<i>GP's instrumental behaviour</i>		
techn-med. interventions	-.051	
external diagnostics	.053	
prescriptions	-.012	
referrals	.009	
patient education	.077	
<i>Space for the patient</i>		
consultation length	.255*	.046***
proportion patient talk	-.371*	.041***
patient's infl. diagn.	-.098	
disc. psychosocial topics	-.017	
Total Adjusted R ²		.215***

* p ≤ .05; ** p ≤ .01; *** p ≤ .001

Table 5 Prediction of the quality of psychosocial care of the consultations for hypertension (N = 99).

	<i>Beta</i>	<i>Adjusted R² change</i>
<i>GP's affective behaviour</i>	.489***	.297***
<i>GP's instrumental behaviour</i>		
techn-med. interventions	.010	
external diagnostics	-.121	
prescriptions	-.017	
referrals	-.076	
patient education	.108	
<i>Space for the patient</i>		
consultation length	.242**	.048***
proportion patient talk	-.156	
patient's infl. diagn.	.060	
disc. psychosocial topics	.112	
Total Adjusted R ²		.345***

* p ≤ .05; ** p ≤ .01; *** p ≤ .001

Table 6 Prediction of the quality of the doctor-patient relationship of the consultations for hypertension (N = 99).

	<i>Beta</i>	<i>Adjusted R² change</i>
<i>GP's affective behaviour</i>	.492***	.294***
<i>GP's instrumental behaviour</i>		
techn-med. interventions	.059	
external diagnostics	-.107	
prescriptions	.073	
referrals	-.083	
patient education	.152	
<i>Space for the patient</i>		
consultation length	.221*	.040**
proportion patient talk	-.178	
patient's infl. diagn.	.095	
disc. psychosocial topics	.043	
Total Adjusted R ²		.334***

* p ≤ .05; ** p ≤ .01; *** p ≤ .001

The quality of psychosocial care and of the doctor-patient relationship are predicted by GP's affective behaviour and consultation length. These variables together explain 36% and 35% respectively of the variance in quality of psychosocial care and quality of the relationship (Tables 5, 6).

DISCUSSION

This study has shown that the GP's affective behaviour is relevant both to the process and the outcome of general practice. Furthermore, it has been shown that the same types of relationship are found at the consultation level and at GP-level, suggesting that affective behaviour can be considered to represent a more general GP communication style. The results are in line with our expectations which derive from psychotherapeutic literature in which 'affective behaviour' broadly coincides

with the psychotherapeutic concept of 'empathy'. Our study has shown that affective doctors (as expressed by the amount of eye contact, manifest interest, verbal encouragement and empathic statements) seem to allow more space for the patients to talk about their concerns: patients of high-affective GP's are – in general – more talkative, they speak more about psychosocial topics, have a greater influence on the diagnostic process and (probably as a result) the consultations tend to last longer than with patients of less affective GP's. This study also appears to show that high-affective GP's are rather conservative in their medical interventions: they write fewer prescriptions and carry out fewer technical-medical interventions compared with colleagues who display less affective behaviour. High-affective GP's seem to be doctors who incur fewer costs in medical care compared with their less affective colleagues. Yet they seem to have more satisfied patients, probably because of the explicit discussion of psychosocial topics during the consultation, which has proved to have an independent influence on patient satisfaction. This confirms the results from other studies (Inui and Carter, 1985; Roter, 1989; Dimatteo, 1979; Ware and Snyder, 1975; Ben-Sira, 1980).

It is interesting to note that the correlations between the GP's affective behaviour and patient satisfaction at the GP-level are much higher than at the consultation-level. This suggests that GP's develop a kind of 'goodwill' with their patients which diminishes the necessity of displaying the desired (affective) behaviour on every occasion. GP's who are generally affective have generally satisfied patients. This is an important finding which can contribute in the discussion of the level at which patient involvement in quality-of-care assessments must be organized. It was also demonstrated (on a smaller selection of the study's sample) that affective behaviour is positively related to panel-assessed quality of care. Nearly one third of both the quality of psychosocial care and the doctor patient-relationship can be explained by GP's affective behaviour, with consultation length adding 6 and 5 per cent respectively. So it may be concluded that affective behaviour is an essential element in psychosocial care and in the establishment of a good doctor-patient communication. Perhaps more surprising and even more relevant is the finding that nearly a quarter of the variance in the quality of technical-medical care can also be explained by the GP's affective behaviour, the proportion of patient talk and consultation length. This allows us to postulate that affective behaviour is also an essential element in technical-medical care. It could be explained by the facilitating effect of GP's affective behaviour on the information exchange between patient and GP. As suggested in the Introduction, by displaying affective behaviour the GP will probably get more useful information from the patient and can give correspondingly more appropriate technical-medical help. In previous studies (Bensing, 1991a; 1992), it was demonstrated that GP's affective behaviour was also more important in determining the quality of care than GP's questioning, information-giving and counselling behaviour (together making up the communicative elements of instrumental behaviour). Taken together, these results suggest that at least part of the physician's healing power (Balint, 1964; White, 1988), has to be sought in the GP's affective behaviour. This sheds some new light on the recent discussion of the possible placebo-effect that originates in doctor-patient communication (Cassell, 1991; Leigh, 1992; Skrabanek and McCormick, 1992; Roter and Hall, 1992). It could well be that a major contribution to this placebo-effect has to be sought in GP's affective behaviour. However, new studies should first

establish the relationship between GP's affective behaviour and patients' health outcome, this being the ultimate proof of the relevance of this type of behaviour.

At this point, a warning is perhaps necessary. Affective behaviour is relevant, but must not be overemphasized. Research in social psychology and interviewing has demonstrated that empathy is a necessary but not sufficient condition for good quality of care (Bensing, 1991a; DiMatteo, 1979; Evans, 1990; Flaherty, 1985; Metcalfe, 1983; Pendleton, Schofield, Tate and Havelock, 1984; Poole and Sanson-Fischer, 1979; in: Evans, Stanley and Burrows, 1993). Authors on provider-patient communication emphasize this balance between the two sides of medicine, referring to the biopsychosocial model which resembles the systemic view and the family system approach (Baird and Doherty, 1990; Bensing, 1991a; Burkett, 1991; Epstein *et al.*, 1993; Eshet *et al.*, 1993; Goldberg, Novack and Gask, 1992; Merenstein and Schulte, 1990; Miller, 1992; Weyrauch, 1994; Williams, 1990). Illustrative in this context are the words of Epstein, who noted that physicians need to 'listen with both ears', that is, symbolically assigning one ear to receive biomedical and the other ear to receive psychosocial information (Epstein *et al.*, 1993, p.378).

Our study has not produced only favourable results. The predicted time-effectiveness of medical encounters with a high-affective GP (Zinn, 1993) was not confirmed by this study. It means a higher workload for the GP that is not compensated by higher fees, at least not in the Netherlands, where GPs are remunerated by capitation fee, and not fee-for-service. This brings us to the yield of affective behaviour for the GP himself. For a (Dutch) high-affective GP, the price of improved patient satisfaction and quality of care, is longer working hours and no increase in fees. We can query the attractions of practising affective behaviour for the GP. Fortunately, from literature it appears that affective behaviour also has advantages for the GP, because it meets their needs too. Matthews *et al.* (1993, p.973) state that 'the therapeutic nature of the patient-clinician relationship', in which empathy is the core dimension, 'lies in its capacity to meet the needs of both the patient and the clinician for making connections and giving meaning to their lives'. De Groot (1987, in Orbell and Abraham, 1993) states that interchange between doctors and patients may also help limit the bounds of medical responsibility and improve satisfaction for the doctor as well as the patient. GPs have to consider which price they want to pay for this. Moreover, in a previous study it was demonstrated that empathic behaviour could be trained in a group of experienced GPs, but in this project it was also shown that the training produced longer consultations in nearly all participating GPs (Bensing, 1985). Perhaps more tailored education is needed for more efficient practice. Eshet *et al.* (1993) developed a treatment approach in 10-15 minute encounters for GPs and concluded that the model, or parts of it, can be used under normal reception conditions in a primary care clinic in 10-15 minutes. So it seems that a GP's work becomes more interesting and satisfying as it becomes more affective; however, further research on the meaning of affective behaviour for the GP's themselves is needed.

This study has some limitations. First, the patients in this study were not a random sample of the general practice population. As may be remembered from the Methodology section, there was a slight overrepresentation of female patients and patients with psychosocial health problems among the patients who refused to cooperate with the study. Accordingly, no conclusions can be drawn about how GPs handle psychosocial problems in general. However, the same kind of relationships

between GP-behaviour and process and outcome of the consultation were found at the consultation level and the (aggregated) GP-level. Most relationships were even stronger at the GP-level. It would therefore seem that GPs tend to show consistent behaviour in different consultations regardless of the kind of patient, and this lowers the problem of patient selection biases.

A second draw-back to this study has to do with the correlational nature of the study, which makes it impossible to draw conclusions on cause and effect. This is a particular problem with the relationships between the GP's behaviour and the consultation-process variables measured. It cannot therefore be concluded from this study that the GP's affective behaviour leads to more talkative patients, or that talkative patients evoke an attentive attitude from the GP. As both affective behaviour and space for the patient are parts of the GP-patient communication, there is also a conceptual overlap. However, again from the repeated findings at the consultation level and the GP-level, it can be concluded that GPs who are generally attentive, seem to have generally talkative patients. While this finding does not suggest the direction of causality either, it suggests either the predominant influence of the GP on the patient, or the existence of a longer process of communication between GP and patients with mutual reinforcement. The latter is a real possibility in the Netherlands where patients tend to see the same GP over a long period of time. The same type of analysis in other countries in which there is no fixed relationship between GP and patient could shed some new light on this issue. Thirdly, the assessment of the quality of care can be discussed. Although the judges were not aware of the background to this study, it is possible that they were inclined to assess consultations as of higher quality of care because they preferred GP's displaying a great deal of affective behaviour. While this might be the case for the assessment of the quality of psychosocial care and the doctor-patient relationship, it seems hard to believe that the judges (themselves experienced GPs) would assess inferior medical treatment as good because the doctor was kind. The treatment protocol for hypertensive patients also provided clear guidelines about the assessment of technical-medical quality of care.

In summary, the overall conclusion of this study is that high-affective GPs are doctors who seem to incur relatively few costs for the health care system. They perform fewer technical-medical interventions and write fewer prescriptions, yet their patients are satisfied and their quality of care is favourably judged by colleagues. The trade-off between technical-medical instrumental behaviour and affective behaviour is fortunately not accompanied by a trade-off between technical-medical quality of care and psychosocial quality of care. The same type of interrelationship between instrumental and affective behaviour was found by other authors (Roter *et al.*, 1987; Dimatteo and DiNicola, 1981; Ben-Sira, 1982). With this combination of findings, the high-affective GP is not only the patient's favourite type of doctor, but may also be considered as the ideal doctor by both insurance companies and policy makers.

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