

Observing decision-making in the general practice consultation: who makes which decisions?

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Abstract

Objective To investigate opportunities for, and types of decision making in the general practice (primary care) consultation, and examine differences in skills of those doctors who are successful at meeting their patients' preferences and those who are less successful.

Design Observation study of doctor–patient consultations in general practice.

Participants Patients attending for routine appointments in 12 general practice surgeries across Oxfordshire.

Methods A total of 212 doctor–patient consultations were video-recorded. The patients involved completed a questionnaire to elicit their perceptions of how decisions were made. The video-taped recordings were coded with a new instrument, the Evidence Based Patient Choice Instrument (EBPCI), to classify the number and type of decision-making opportunities arising during each consultation. A total of 149 recordings were coded using the Oxbridge Rating Scale to assess the doctors' consultation styles.

Results There was a range of decision-making opportunities in addition to those involving medical treatment. With the exception of 'fitness for work', decisions were generally 'doctor led'. There was only moderate agreement between patient perceptions of their level of involvement in decision making and the objective ratings using the EBPCI. There was wide variation in the ability of doctors to meet their patients' preferences for involvement.

Conclusions There are many decisions made in primary care consultations, in addition to those about medical treatments, in which patients could be involved to a greater extent than they currently are. Some doctors are significantly better than others at meeting different patients' preferences for their decision-making role. Patients' perceptions of shared decision making appears to be influenced by the doctors' general consultation skills.

Introduction

Involving patients in the decision-making process is increasingly being advocated as a way of improving standards of health care^{1,2} and is linked with positive effects on patient outcomes.^{3,4} Sharing decisions and offering patients choice is also underpinned by the ethical principles of veracity and patient autonomy.⁵ The current shared decision-making debate is driven by consumers, professionals and policy makers in an effort to define the required competencies⁶⁻⁸ and investigate the effects on health outcomes.^{9,10} However, despite the theoretical and political call for greater patient involvement, there seems to be little evidence of this occurring in practice.^{11,12} The gap between theory and practice remains wide and attention is now being focused on the reasons for this.¹³

Most studies of patient involvement focus on decisions relating to treatment choices during the consultation.^{14,15} The process involves doctors and patients taking steps to participate in treatment decision making and the sharing of information is a prerequisite to this. However, there has been little investigation into other types of decision opportunities that arise during medical encounters and in which patients could potentially be involved. For example, decisions about the use of diagnostic tests or investigations are influenced by the perceived uncertainties around diagnosis, the sensitivity and specificity of the test, whether treatment is indicated and the risks of failing to make the diagnosis. These factors and the risks of the tests themselves are rarely shared with patients.¹⁶

Previous research in primary care suggests that it may be as important to measure patients' perceptions, as it is to analyse what doctors say in the consultation. In one observational study, patients' perceptions of whether or not they received patient-centred care were predictive of satisfaction and enablement. The main predictors were patients' perceptions of communication and partnership and a positive doctor approach.¹⁷ A recent qualitative project investigating consumers' views of quality in the consultation found that value was placed on the

feeling of being respected and the perception of contributing meaningfully to the process and discussions.¹⁸ Many participants felt that actual involvement in the decision-making process was not as important as the perception that they had been involved. It has been reported that just under 50% of patients wish to be involved in decision-making processes regarding their care.¹⁹⁻²¹ However, studies investigating what patients want from general practice care have found that a high priority is placed on technical competence, listening and informing, taking account of patients' preferences, and involving patients in decisions.²² Other highly rated aspects of care include good interpersonal communication and 'humanness'.²³ Much evidence exists which demonstrates that doctors' ability to communicate effectively with patients is variable with some doctors displaying more ability and skill in this area than others.²⁴⁻²⁶ The achievement of patients' satisfaction with their care is, therefore, to a large extent, dependent on the interpersonal qualities and consultation skills of the doctors who treat them. An important question is what are the skills and qualities that differentiate those doctors who generally satisfy their patients' expectations from those who do not?

This study forms the second phase of an investigation into the information and decision-making expectations of general practice patients during real life consultations. In the first phase, we found a substantial mismatch between the stated decision-making preferences of patients and what they perceived actually took place in the consultation.²⁷ Nearly half of those who wanted to share decisions felt that they had not been able to do so. In addition, there was evidence that some doctors were more successful than others at achieving congruity between their patients' expectations and perceived role.

The two main aims of the second phase of the study reported here were to: (i) investigate the opportunities for, and different types of, shared decisions in general practice consultations and (ii) examine differences in consultation styles between doctors able to meet their patients'

preferred level of involvement and those who were less able to meet these preferences.

Participants and methods

The video-taped consultations of 13 Oxfordshire general practitioners (GPs) and their patients ($n = 212$) had been previously collected during the first stage of the project²⁷ and these were later coded by the first author (S.F.) using the front page of the Evidence Based Patient Choice Instrument (EBPCI), a recently developed observation instrument (see below).²⁸ In the first phase of the study, consecutive patients attending routine surgeries were asked for their consent to have their consultation videotaped and were also asked to complete a patient preference questionnaire before leaving the surgery. This questionnaire (described elsewhere)²⁷ was designed to elicit patients' preferred decision-making roles and their perceptions of who actually made the decisions in the consultation. A total of 171 responses were received from patients in relation to their preferred level of involvement in decision making and to what extent they perceived this had occurred during their visit to the GP. Nineteen of these patients were excluded from the data set as they attended only for a review of a long-term problem and no decisions were made. A further three recordings were lost because of equipment failure, leaving a total of 149 consultations for coding. These were rated with the Oxbridge Rating Scale (ORS)²⁹ in order to examine the communication style of the doctors who (according to the patients' preference questionnaire) met patients' needs and those who did not (the rater was blind as to which group each doctor was in). The research protocol was approved by the Oxfordshire Applied and Qualitative Research Ethics Committee.

The EBPCI

The EBPCI is a recently developed instrument for measuring the extent to which a medical consultation is characterized by evidence-based patient choice.²⁸ The front page, or consultation

overview, was devised as a means of capturing and summarizing the content of the whole consultation. It serves as a record of opportunities for decision making in relation to a range of possibilities including: medical (i.e. drug) treatments; self-care and lifestyle changes; investigations; follow-up appointments; referral; medical procedures; fitness for work; other (non-drug) therapies; and complementary treatments. For all agenda items (i.e. issues brought up by the patient or the doctor during the consultation) data concerning the status of the problem (new, established, review), the type (e.g. physical, psychological, social) and decision opportunities, are entered into category boxes. The overview section of the EBPCI was used to classify the number and type of agenda items raised during each consultation, and to record the types of decisions made and who made them. For each consultation a judgement was made as to the key presenting problem and this was rated according to who led the decision-making process. There were six possible decision-making ratings: 0, no decision(s) were made; 1, the decision was made by the doctor alone; 2, the doctor made the decision but considered the patient's opinion; 3, doctor and patient shared responsibility; 4, the patient made the decision, but considered the doctor's opinion; 5, the patient made the decision alone. A random selection of consultations ($n = 13$) was double coded by the second author throughout the coding process to prevent coder drift. Disagreements were discussed and minor adjustments made to the coding.

The Oxbridge Rating Scale

The ORS assesses the flexibility of a doctor's personal communication style. The 10 items relate to specific communication skills that demonstrate a practitioner's willingness to elicit the patient's agenda, for example listening, exploring patient understanding and ideas, and responding to concerns. Items are rated on a 5-point scale: 0, 'not at all'; 1, 'minimally'; 2, 'adequately'; 3, 'effectively'; 4, 'very effectively'. The items can be split into four effectiveness

items (relationship, patient's understanding and ideas, patient's worries and concerns, and patient involvement) and six skill items (history taking, structuring, question style, listening, explaining, and checking).²⁹

Data analysis

All coded data from the EBPCI and ORS were entered into SPSS for Windows (10.2; SPSS Inc., Chicago, IL, USA). The EBPCI decision ratings were correlated with the patient preference questionnaire to examine the extent to which patient perceptions of decision making coincided with ratings made by health professionals. Reliability analysis was performed on the ORS to calculate Cronbach's alpha, which indicates the internal consistency of the scale. Main analyses included descriptive procedures, correlations and one-way analyses of variance. A chi-square test was conducted to examine the types of decisions that were predominantly doctor led compared with those which were more likely to be either shared or patient led. Correlations were carried out for each doctor to measure the level of congruence between patient preferences for involvement and patient perceptions of what actually occurred in the consultation. On the basis of these results doctors were split into two groups according to whether they had a congruent style (i.e. generally met their patients' preferences) or a rigid style (i.e. made the decisions alone or forced patients to share them, no matter what their preferences were). Analyses of variance were then employed to test for differences in ORS scores between these two groups of doctors.

Results

EBPCI data

For all 212 consultations, the median number of agenda items raised per patient was 2 (range 1–6). The average age of patients was 50 (SD = 18.4) and 64% of the sample were female. Overall, physical problems were mentioned most frequently (80%), followed by health promotion

(8%), psychological/emotional problems (7%), social concerns (3%) and administrative issues (2%). The average consultation time was 10 min, 15 sec (SD 4.3) and there were significant correlations between age and length of visit (Pearson's $r = 0.37$, $P = 0.01$) and age and number of agenda items ($r = 0.25$, $P = 0.05$). There were no significant differences between males and females in relation to number of agenda items and length of consultation.

The total number of agenda items across all 212 consultations was 471 and in 75% of cases a decision was made ($n = 352$ decisions selected). A breakdown of decision-making opportunities is presented in Table 1. It shows that the majority of decision-making opportunities were related to medical treatment or management. For 24% of items, no new decisions were made.

In 53% of all selected decisions, the doctor made the decision alone, in 24% the doctor made the decision, but considered the patient's opinion, and in 12% the decision was shared. In 5% of cases the patient made the decision, but considered the doctor's opinion and in 6% the patient made the decision alone. In summary, 77% of decisions were doctor led, 12% were shared and 11% were patient led. Table 2 shows the decision ratings according to each decision type. The original decision-making categories have been condensed to form three items: doctor led (1 and 2), shared (3), and patient led (4, 5). The table shows that decision-making style varied according to decision category and that

Table 1 Breakdown of decision-making opportunities

	Decision-making opportunities n (%)	Decisions selected n (%)
Medical treatments	43 (203)	78 (158)
Self-care/lifestyle	16 (75)	86 (64)
Investigations	13 (61)	97 (59)
Follow-up	13 (61)	100 (61)
Referral	7 (34)	72 (24)
Procedures	3 (14)	81 (11)
Fitness for work	2 (9)	82 (07)
Other therapies	2 (9)	100 (09)
Complementary treatment	1 (5)	0 (0)

Table 2 Evidence-Based Patient Choice Instrument decision-making ratings by category ($n = 352$)

	<i>N</i>	Doctor led (%)	Shared (%)	Patient led (%)
Follow-up	68	98	01	01
Investigations	42	91	–	09
Medical treatments	133	76	11	13
Complementary or other therapy	05	75	–	25
Self-care/lifestyle	62	71	21	28
Referral or procedure	35	62	19	19
Fitness to work	07	29	43	28

decisions concerning follow-up and investigations were more likely to be doctor led than in any other category. In order to assess whether these variations were due to chance alone, chi-square (χ^2) tests were conducted. To overcome the problems of empty cells we combined the patient-led and shared categories to form one item, leaving two main decision styles: doctor led vs. shared and patient led. However, the results of the first test were invalid, as 21.4% of cells had expected counts of < 5 . Two of these cells were in the 'other therapy/complementary' category and one in the 'fitness for work' category. Therefore, these categories were omitted and the test was run a second time. The results of this analysis indicate that the variations in decision-making styles and decision types are not chance differences and that there is an association between the type of decision to be made and the resulting manner in which it is made, i.e. whether it is doctor led or not. The results are presented in Table 3.

Table 3 Relationship between decision type and decision-making process

Decision type	<i>N</i>	Decision-making process	
		Doctor led (%)	Shared/patient led (%)
Follow-up	68	97.1	2.9
Investigation	42	90.5	9.5
Medical treatment	133	75.9	24.1
Self-care/lifestyle	62	71.0	29.0
Referral or procedure	35	62.9	37.1

$\chi^2 = 25.90$ (4 d.f.), $P < 0.001$.

The level of agreement (Pearson's r) between the EBPCI rating of patient involvement and patient-reported decision role during the consultation was 0.46 ($P = 0.01$), indicating a moderate level of association between patient perceptions and the objective measure.

Variations in doctors' ability to achieve congruence

For all 13 doctors, correlations were carried out to assess the level of congruence between patients' preferred level of involvement during the consultation and patients' perceptions of what they received during the consultation. Coefficients for each doctor ranged from 0.89 to -0.28 (Pearson's r). On the basis of these varying levels of agreement, the doctors were split into two communication style groups: 'congruent style' ($n = 6$) and 'rigid style' ($n = 7$). Those with correlations between 0.61 and 0.89 ($n = 6$) were classed as 'congruent' as they demonstrated flexibility across all decision styles enabling them to achieve higher rates of agreement with their patients' preferences. Those with coefficients between -0.25 and 0.29 ($n = 7$) were assigned to the 'rigid style' group. These doctors tended to stick to the same approach (either doctor led or forced sharing) regardless of patient preferences and therefore consistently achieved lower congruence rates. For both groups, 'congruent' and 'rigid', the number of consultations averaged 11 for each of the doctors. These ranged from 10 to 13 in the 'congruent group' and 7–15 in the 'rigid' group.

Oxbridge Rating Scale data

The ORS had a Cronbach's alpha coefficient of 0.79 demonstrating good internal consistency.³⁰ The dispersion of scores for some clinicians was much wider than for others, indicating a more flexible consulting style and reflecting the variation in ability to achieve congruence in the consultation. Doctors' individual mean scores ranged between 15.6 and 24.7. The total mean ORS score was 20.6 (SD 4.1) (top achievable score = 40). Mean scores for the four effective-

Table 4 Differences in Oxbridge Rating Scale (ORS) scores between consultation style groups

	ORS mean scores		
	Total mean	Effectiveness	Skills
Congruent style	22.4	9.4	13.0
Rigid style	19.5	8.1	11.2
All doctors	20.6	8.6	11.9
<i>F</i> Sig. < 0.001	18.441	13.825	17.659

ness and six skill items were 8.6 (SD 2.0) and 11.9 (SD 2.5) respectively. One-way ANOVA tests revealed significant differences between the two communication style groups on all three scores (total mean score, mean effectiveness, and skills scores). The mean scores for the congruent group of doctors were significantly higher than those of the rigid style group. These are presented in Table 4.

Discussion

This study investigated the opportunities for, and different types of, decision making in real general practice consultations and examined the differences in consultation styles between doctors able to meet their patients' preferred level of involvement and those who were less able to meet these preferences. In particular 'flexible' doctors were significantly more likely to demonstrate a superior consultation style and stronger interpersonal skills than their 'rigid' counterparts. We used a standardized assessment instrument to rate the level of patient involvement in all types of decision making in primary care consultations. The results show that there is a range of decisions in which patients could potentially be involved and that there are systematic differences in the types of decisions that are less likely to be shared, for example, decisions regarding investigations. Schofield suggests that one reason for seeking investigations is to reduce the uncertainty regarding diagnosis for the doctor and the patient.¹⁶ However, as there is a tendency not to share these uncertainties with patients or involve them in choices about them, these issues become the hidden decisions that are made inside the

doctor's head and reside in his or her private thought processes. Therefore patients' own perspectives regarding risks, possible benefits and their ability to tolerate uncertainty remain largely unexplored at the diagnosis stage of the illness trajectory. The question remains as to whether doctors are more aware of involving patients in treatment decisions than decisions concerning investigations. This is an area that requires further investigation.

Limitations

The main limitations regarding our untypical general practice sample have been previously discussed.²⁷ In the first phase of this study, we found no significant differences in enablement scores between those patients whose preferences were met and those who were not. Thus we have no evidence that achieved role preference is beneficial for patients. Furthermore, we are aware that this study was based on a very broad measure of patients' decision-making preferences and does not take into account that patients' desire for involvement can vary according to the situation they find themselves in. For instance, they might feel able to contribute significantly to a treatment decision concerning a chronic health problem, but in the situation of a new and potentially life-threatening condition would prefer (and expect) the doctor to take the lead.¹⁸ In addition, it should be emphasized that the patient questionnaire measured patients' broad perceptions of sharing during the consultation, whilst the EBPCI measure was related to the level of sharing concerning a patient's key problem. We are also aware that our patient measure does not reflect the difficulties involved in assessing and interpreting patients' decision-making preferences. Patients' perceptions of the level of involvement they have in medical decision making can reflect a variety of factors unrelated to the actual processes of decision making. For example, whether or not they felt respected by the doctor, his or her level of technical competence, adequate provision of information, reasonable consultation length and the like. However, it still remains

evident that what patients view as shared care, is different from what we considered to be a consultation characterized by shared decision making.²⁸

Conclusion

The results of this study indicate that patients' perceptions of decision-making during general practice consultations differ substantially from objective ratings using a standardized instrument. In our previous paper, patients reported that in 47% of cases decisions were made solely by the doctor.²⁷ However, our ratings using a new observational measure, suggested that 77% of the decisions made concerning key problems were doctor led. Therefore, our objective ratings suggest that patients overestimate the degree to which they are involved. Patients value a doctor's interpersonal style (including listening and information-giving skills) in addition to having their preferences taken into account and being involved in decisions.^{22,23} It therefore seems likely that their perceptions of what happened during the recorded consultations were influenced by a combination of factors including the communication style and 'humanness' of the doctor. There was wide variation across doctors in their ability to achieve congruity between patients' decision-role preferences and perceptions of what they actually received. Those doctors who were perceived (by patients) as meeting their patient's decision-role preferences scored significantly higher on the ORS. In particular, they were better at both 'effectiveness items' (establishing relationships, demonstrating respect for patients, exploring patient's understanding and ideas about their problems, responding to concerns, and involving patients in the decision-making process) and at 'skill items' (history taking, structuring, asking questions appropriately, listening to patients, explaining problems to patients and checking understanding).

It should be remembered that not all patients desire involvement in decision making. However, despite modern emphasis on patient involvement in health-care decisions, such involvement still remains at a low level. This

study emphasizes the importance of considering the priorities and outcomes of health care that patients rate highly rather than just relying on those formulated by health professionals.¹⁸

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