## Primary care

# Preferences of patients for patient centred approach to consultation in primary care: observational study

Paul Little, Hazel Everitt, Ian Williamson, Greg Warner, Michael Moore, Clare Gould, Kate Ferrier, Sheila Payne

#### Abstract

**Objective** To identify patient's preferences for patient centred consultation in general practice.

Design Questionnaire study.

**Setting** Consecutive patients in the waiting room of three doctors' surgeries.

**Main outcome measures** Key domains of patient centredness from the patient perspective. Predictors of preferences for patient centredness, a prescription, and examination.

Results 865 patients participated: 824 (95%) returned the pre-consultation questionnaire and were similar in demographic characteristic to national samples. Factor analysis identified three domains of patient preferences: communication (agreed with by 88-99%), partnership (77-87%), and health promotion (85-89%). Fewer wanted an examination (63%), and only a quarter wanted a prescription. As desire for a prescription was modestly associated with desire for good communication (odds ratio 1.20; 95% confidence interval 0.85 to 1.69), partnership (1.46; 1.01 to 2.09), and health promotion (1.61; 1.12 to 2.31) this study may have underestimated preferences for patient centredness compared with populations with stronger preferences for a prescription. Patients who strongly wanted good communication were more likely to feel unwell (very, moderately, and slightly unwell; odds ratios 1, 0.56, 0.39 respectively, z trend P < 0.001), be high attenders (1.70; 1.18 to 2.44), and have no paid work (1.84; 1.21 to 2.79). Strongly wanting partnership was also related to feeling unwell, worrying about the problem, high attendance, and no paid work; and health promotion to high attendance and worry.

**Conclusion** Patients in primary care strongly want a patient centred approach, with communication, partnership, and health promotion. Doctors should be sensitive to patients who have a strong preference for patient centredness—those vulnerable either psychosocially or because they are feeling unwell.

#### Introduction

The patient centred approach is widely advocated, but implementation in practice is limited and related to characteristics of both doctors and patients.<sup>1-3</sup> Some aspects of patient centredness may have important

benefits for patients: improved communication can improve satisfaction and biomedical outcomes<sup>4-9</sup> and involving patients in partnership can have benefits without increasing their anxiety<sup>10 11</sup> and with the potential to reduce adverse outcomes connected to prescribing.<sup>2</sup>

One of the problems in implementing patient centredness in practice is knowing which elements are the most important. One influential patient centred model of consultation with a doctor encompasses five principal domains: exploring the experience and expectations of disease and illness, understanding the whole person, finding common ground regarding management (partnership), health promotion, and enhancing the doctor-patient relationship; and a sixth domain, the realistic use of time.7 However, there is little empirical evidence from the patients' perspective to support the precise structure of the model or to identify which components are most important to patients. It makes little sense to try to implement each component of the patient centred approach unless they are consonant with patients' perspectives. Although there is evidence in general terms about what patients want from doctors and what satisfies them,<sup>12-19</sup> most of the data do not specifically examine preferences for the different aspects of a patient centred approach-particularly patients' ideas, expectations, and the desire for partnership-or do not come from patients who are about to have a consultation. An impending consultation with the doctor provides the most relevant context in which to assess preferences, as attending patients are about to be "recipients" of the consultation approach (as opposed to population samples, which include a relatively high proportion of non-attending or low attending patients). Furthermore, an impending consultation with a particular problem may plausibly change priorities and preferences and provides a real rather than an abstract or theoretical basis for patients considering questions and answers.

A further potential problem with the patient centred approach is the feasibility of implementing all domains in practice and whether a targeted approach can be used for particular patient groups. Although the last domain of the proposed patient centred model is realistic use of time,<sup>7</sup> provision of most of the components in all consultations may not be feasible in a busy surgery. Furthermore there is evidence, mostly Primary Medical Care Group, Community Clinical Sciences Division, University of Southampton. Aldermoor Health Centre. Southampton SO16 5ST Paul Little clinician scientist Hazel Everitt research fellow Ian Williamson senior lecturer Clare Gould research assistant Kate Ferrier medical student Nightingale Surgery, Romsey, Hampshire SO51 7QM Greg Warner

general practitioner Three Swans Surgery, Salisbury, Wiltshire SP1 1DX Michael Moore general practitioner

Health Research Unit, School of Health Professions and Rehabilitation Sciences, Southampton University Sheila Payne director of health research unit

Correspondence to: P Little psl3@soton.ac.uk

BMJ 2001;322:1-7

from secondary care settings, that older patients and those with serious illness<sup>20 21</sup> (estimated at one third in a recent study22) may not prefer a patient centred approach. If this is true then it would be unwise to advocate universal adoption of all components of patient centredness and important to be sensitive to patients' preferences for information seeking and partnership. However, it would be premature to extrapolate these data to patients in primary care as the nature of the problem (for example, cancer care<sup>22</sup>) may affect preferences for patient centredness, and the range of problems seen in primary care is different. Nevertheless, important questions are still raised: do all patients in primary care want all components of patient centredness, and are there preferences according to clinical groups? As the literature relating clinical groups to preference for patient centredness is limited<sup>10 20-22</sup> there may be important differences in preferences according to several dimensions: whether the problem is a new problem, age, socioeconomic status, how unwell or worried the patient feels, and whether the doctor is the patient's usual doctor.

We report on a study of patient preferences for patient centredness in the context of an impending consultation with a doctor in primary care. We report the principal domains of patient centredness from the patients' perspective and compare preferences for these components with preferences for other more conventional "biomedical" aspects of the consultation such as providing a prescription or physical examination.

#### Method

#### **Practices**

We chose local practices that were active in research and in supporting research to ease the logistic problems of performing the study, which required reception time to approach patients for the study and clerical help in accessing notes. The three practices selected represented a range of settings to ensure that the impact of demographic factors on patient preference could be assessed. The three practices serve a population of 24 100 patients, with an average patient turnover of 8.3% per year. One practice was in a deprived area of a large provincial city; the second was a training practice serving an urban population of a cathedral city; the third was a training practice in a market town serving a mixed urban-rural population.

#### **Development and piloting**

Patients completed a short questionnaire before their consultation, asking them to agree or disagree on a seven point Likert scale (very strongly agree, strongly agree, agree, neutral, disagree, strongly disagree, very strongly disagree) with questions about what they wanted the doctor to do in the consultation. We developed the questionnaire on the basis of the five principal domains of the patient centred model as previously described, including the main categories used to measure patient centredness.<sup>7</sup>

We piloted the draft questionnaire among 140 patients, and consecutive patients were interviewed about each question until no new comments emerged. The questionnaire was feasible for most patients in the time available before the consultation. The test-retest

#### Main domains of model of patient centredness

- Exploring the experience of disease and illness: patients' ideas about the problem, feelings, expectations for the visit, and effects on function
- Understanding the whole person: personal and developmental issues (for example, feeling emotionally understood) and the context (the family and how life has been affected)
- Finding common ground (partnership): problems, priorities, goals of treatment, and roles of doctor and patient
- Health promotion: health enhancement, risk reduction, early detection of disease
- eduction, early detection of disease
- Enhancing the doctor-patient relationship: sharing power, the caring and healing relationship

reliability after two weeks in 20 consecutive patients, which might be expected to show only moderate agreement because of changes not only in time but in context, was also acceptable (factor 1 rank correlation r=0.71, factor 2 r=0.56, factor 3 r=0.47). After interviews with patients the wording of a few ambiguous questions was clarified and the wording of negative items modified. To limit the halo effect (that is, groups of similar questions being answered in a "routine" way) we included some "negatively" worded items interspersed with positive items—for example, after "I want the doctor to be interested in how it affects my life (positively worded)" we included "How it affects my life is my affair and nothing to do with the doctor" (negatively worded).

We also included questions about preference for a prescription and an examination, whether the problem was new or long standing or whether the doctor asked them to attend (or a combination), how unwell they were feeling, and how worried they were about the problem (on six point Likert scales ranging from extremely to not at all).

#### Main study

Both the main study and pilot study had ethical approval from the Salisbury and the Southampton and South East Hampshire local research ethics committees. After informed consent, patients completed the pre-consultation questionnaire and a postconsultation questionnaire, which included sociodemographic details (age, sex, paid work, manual work, marital status, partner's work, years in higher education), nature of presenting problem, number of medical problems, current medication, and the short state anxiety questionnaire.23 The post-consultation questionnaire also contained patients' ratings of the consultation style of the doctor according to the different domains of the patient centred model (these data will be presented subsequently). Patients completed the pre-consultation questionnaire in the waiting room and if possible also completed the post-consultation questionnaire before they left the surgery.

#### Sample size (for 80% power and 95%)

To detect variables that predicted preference for patient centredness (or for an examination or prescription) with an odds ratio of 2 and a prevalence of variables ranging from 25% to 75%, and assuming that at least 25% of "unexposed" patients want patient centredness we calculated that we needed 448 post-consultation questionnaires (which documented predictive variables) or 640 in total allowing for 30% non-response.

#### Analysis

We scanned data with Formic 3 software and performed data analysis with SPSS for Windows and Stata for Windows software. We did factor analysis with varimax rotation to assess the underlying main latent variables (or domains) and assessed the internal reliability of the scales developed from these factors with Cronbach's  $\alpha$  statistic. We assessed predictors of preferences for the components of patient centredness or for an examination or a prescription using logistic regression. Variables significant in univariate analysis at the 5% level were entered by forward selection and retained if the variables remained significant.

#### Results

Of the 865 patients who participated, 824 (95%) and 661 (76%), respectively, returned pre- and post-consultation questionnaires.

#### Response

When we compared those who returned the post-consultation questionnaire (responders) with those who did not (non-responders) there were no significant differences in those feeling moderately or very unwell (44% and 38% respectively) or worried (55% and 58%), nor those strongly wanting good communication (43% and 45%), partnership (27% and 32%), or health promotion (25% and 25%).

#### Patient characteristics and generalisability

Compared with patients' estimates from the national morbidity survey for patients consulting at a surgery, the responding sample (that is, "responders" to the post-consultation questionnaire) were similarly mostly adults aged 17 to 64 (10% aged 0-16 years, 73% aged 17-64, and 18% aged 65 and over in sample versus 20%, 62%, and 18% in morbidity survey), married or living as married (67% versus 60%), working (in those aged over 16: 57% versus 57%), and female (66% versus 60%).

#### Main results

Table 1 shows patients' preferences for the consultation. Factor analysis suggested a three component solution, which explained 91% of the variance. Firstly, there was "communication," which included listening, exploration of concerns and requirements for information, doctor-patient relationship, and clear explanation (Cronbach's  $\alpha$  for the scale based on this factor 0.92). Second was "partnership," which included specific aspects of communication related to finding common ground<sup>7</sup>—exploration, discussion, and mutual agreement about patients' ideas, the problem, and treatment (Cronbach's  $\alpha$  0.87). Finally, there was health promotion, including how to stay healthy and reduce the risks of future illness (Cronbach's  $\alpha$  0.90).

Although factor analysis identified three domains, there was some overlap between factor 1 and factor 2—which are both about communication, albeit different aspects of communication. This is evident from the items which loaded most weakly on to these two factors—that is, item 3 of factor 1 and item 1 of factor 2—and which also loaded moderately on to the other factor. Thus the loadings for factors 1 and 2 for "I want the doctor to be interested in what I want to know" are 0.51 and 0.44 (that is, loading on to factor 1 but also moderately on to factor 2) and conversely for "I want the doctor to be interested in what I think the problem is" are 0.44 and 0.50.

Most patients wanted all aspects of good communication, partnership, and health promotion (questions answered with agree or more strongly for these domains, ranged from 88-99%, 77-87%, and 85-89% respectively).

## Secondary analysis of predictors of patients' desire for patient centredness

The groups of patients who agreed strongly that they wanted good communication were more likely to feel particularly unwell, be high attenders, and not have paid work and less likely to be aged over 60 (table 2). Similarly, those wanting partnership were more likely to feel particularly unwell, be very worried, be high attenders, and not have paid work. Those strongly wanting health promotion were high attenders and those worried about their problem. No domain of patient centredness related to whether the problem

 Table 1
 What patients want from their general practitioner: descriptive data and factor analysis. Figures are numbers (percentage) of patients

|   | Very           |                |            |          |         |
|---|----------------|----------------|------------|----------|---------|
| Stem (unless specified): I want the doctor              | strongly       | Strongly       |            | Neutral/ | Factor  |
| to  | agree          | agree          | Agree      | disagree | loading |
| Factor 1 communication: illness experience              |                |                | •          |          |         |
| Deal with my worries about the problem                  | 221 (27)       | 189 (23)       | 308 (38)   | 95 (12)  | 0.55    |
| Listen to everything I have to say about my problem     | 275 (34)       | 235 (29)       | 273 (33)   | 38 (5)   | 0.70    |
| Be interested in what I want to know                    | 197 (24)       | 211 (26)       | 323 (39)   | 89 (11)  | 0.51    |
| Understand my main reason for coming                    | 222 (28)       | 224 (29)       | 314 (40)   | 24 (3)   | 0.69    |
| Be friendly and approachable                            | 332 (42)       | 214 (27)       | 234 (30)   | 5 (1)    | 0.71    |
| (Full question:) I want to feel really understood       | 270 (34)       | 225 (29)       | 274 (35)   | 17 (2)   | 0.71    |
| Find out how serious my problem is                      | 316 (40)       | 231 (30)       | 210 (27)   | 25 (3)   | 0.74    |
| Clearly explain what the problem is                     | 354 (45)       | 244 (31)       | 170 (22)   | 16 (2)   | 0.74    |
| Clearly explain what should be done                     | 314 (40)       | 243 (31)       | 215 (28)   | 10 (1)   | 0.68    |
| Factor 2 partnership: interest in beliefs, exp          | oectations, an | d negotiating  | common gro | ound*    |         |
| Be interested in what I think the problem is            | 201 (26)       | 186 (24)       | 273 (35)   | 125 (16) | 0.50    |
| Discuss and agree with me what the<br>problem is        | 215 (27)       | 215 (27)       | 255 (33)   | 98 (13)  | 0.61    |
| Be interested in what I want done                       | 179 (23)       | 177 (23)       | 298 (38)   | 128 (16) | 0.79    |
| Be interested in what treatment I want                  | 172 (22)       | 161 (21)       | 266 (34)   | 182 (23) | 0.83    |
| Discuss and agree with me on treatment                  | 212 (27)       | 198 (25)       | 263 (34)   | 111 (14) | 0.65    |
| Factor 3: health promotion*                             |                |                |            |          |         |
| Give advice on how to reduce the risk of future illness | 193 (24)       | 197 (24)       | 331 (41)   | 85 (11)  | 0.61    |
| Give advice on how to stay healthy in future            | 182 (23)       | 197 (24)       | 306 (38)   | 124 (15) | 0.65    |
| Other aspects of consultation desired (not le           | oading strong  | ly on to any f | actor)     |          |         |
| Practical medicine:                                     |                |                |            |          |         |
| Examine me fully  | 104 (14)       | 139 (18)       | 245 (32)   | 280 (36) |         |
| (Full question) I want a prescription                   | 35 (5)         | 38 (5)         | 118 (15)   | 593 (76) |         |
| Give advice on what I can do                            | 188 (23)       | 199 (25)       | 353 (44)   | 66 (8)   |         |
| Appreciating the whole person:                          |                |                |            |          |         |
| Understand my emotional needs                           | 133 (17)       | 134 (17)       | 297 (37)   | 241 (30) |         |
| Be interested in how it (the problem) affects my life   | 236 (29)       | 204 (25)       | 282 (35)   | 95 (12)  |         |
|   |                |                |            |          |         |

\*Cronbach's  $\alpha$  for scales based on factor 1=0.92, 2=0.87, 3=0.90.

 Table 2
 Predictors of desire for main domains of patient centredness in general practice consultations.\* Scales derived from factors listed in table 1 (communication, partnership, health promotion) dichotomised to cut off at average question rating of strongly agree.

|                                     | No (%) who<br>want it | No (%) who don't<br>want it | Crude odds ratio (95% CI) | Adjusted odds ratio†<br>(95% CI) | Likelihood ratio test χ<br>(P value) |
|-------------------------------------|-----------------------|-----------------------------|---------------------------|----------------------------------|--------------------------------------|
| Want good communication strongly    |                       |                             |                           |                                  |                                      |
| High attender (≥5 times/year)       | 127 (50)              | 112 (34)                    | 1.96 (1.40 to 2.74)       | 1.70 (1.18 to 2.44)              | 8.2 (0.004)                          |
| Female                              | 234 (71)              | 269 (63)                    | 1.42 (1.04 to 1.93)       | 1.14 (0.78 to 1.68)              | 0.5 (0.50)                           |
| No paid work                        | 124 (48)              | 128 (37)                    | 1.55 (1.11 to 2.14)       | 1.84 (1.21 to 2.79)              | 8.2 (0.004)                          |
| No disability benefit               | 223 (93)              | 295 (97)                    | 0.36 (0.15 to 0.84)       | 0.52 (0.20 to 1.36)              | 1.9 (0.17)                           |
| Not seeing regular doctor           | 153 (48)              | 229 (55)                    | 0.74 (0.55 to 0.98)       | 0.89 (0.63 to 1.28)              | 0.4 (0.54)                           |
| Feeling unwell:                     |                       |                             |                           |                                  |                                      |
| Very                                | 73 (22)               | 42 (10)                     | 1                         | 1                                | 5.4 (0.07)                           |
| Moderately                          | 169 (52)              | 262 (62)                    | 0.41 (0.26 to 0.66)       | 0.55 (0.32 to 0.94)              |                                      |
| Slightly/not                        | 86 (26)               | 120 (28)                    | 0.37 (0.24 to 0.57)       | 0.57 (0.34 to 0.97)              |                                      |
| Feeling worried about the problem‡: |                       |                             |                           |                                  |                                      |
| Very                                | 117 (36)              | 76 (18)                     | 1                         | 1                                | 19.6 (<0.001)                        |
| Moderately                          | 111 (34)              | 221 (52)                    | 0.50 (0.34 to 0.74)       | 0.56 (0.35 to 0.89)              |                                      |
| Slightly/not                        | 101 (31)              | 130 (30)                    | 0.33 (0.23 to 0.47)       | 0.39 (0.25 to 0.59)              |                                      |
| Age (years):                        |                       |                             |                           |                                  |                                      |
| 0-16                                | 31 (12)               | 31 (10)                     | 1                         | 1                                | 10.5 (0.015)                         |
| 17-40                               | 103 (39)              | 141 (41)                    | 0.78 (0.45 to 1.35)       | 1.08 (0.56 to 2.07)              | · · · · ·                            |
| 41-60                               | 91 (35)               | 104 (30)                    | 0.93 (0.53 to 1.64)       | 1.41 (0.73 to 2.73)              |                                      |
| >60                                 | 37 (14)               | 66 (19)                     | 0.60 (0.31 to 1.13)       | 0.55 (0.27 to 1.10)              |                                      |
| Want partnership strongly           |                       |                             |                           |                                  |                                      |
| High attender (≥5 times/year)       | 79 (50)               | 162 (38)                    | 1.64 (1.14 to 2.37)       | 1.43 (0.96 to 2.11)              | 3.2 (0.08)                           |
| No paid work                        | 86 (52)               | 170 (38)                    | 1.80 (1.26 to 2.59)       | 1.80 (1.24 to 2.62)              | 9.4 (0.002)                          |
| No disability benefit               | 137 (92)              | 383 (97)                    | 0.39 (0.17 to 0.87)       | 0.55 (0.23 to 1.30)              | 1.8 (0.18)                           |
| Feeling unwell:                     |                       | (- /                        |                           |                                  | - ()                                 |
| Very                                | 48 (23)               | 69 (13)                     | 1                         | 1                                | 14.8 (<0.001)                        |
| Moderately                          | 48 (23)               | 160 (29)                    | 0.43 (0.26 to 0.70)       | 0.61 (0.38 to 0.99)              | . ,                                  |
| Slightly/not                        | 116 (55)              | 317 (58)                    | 0.53 (0.34 to 0.80)       | 0.38 (0.23 to 0.62)              |                                      |
| Feeling worried about the problem:  |                       |                             |                           |                                  |                                      |
| Very                                | 82 (38)               | 114 (21)                    | 1                         | 1                                | 7.3 (0.026)                          |
| Moderately                          | 64 (30)               | 167 (30)                    | 0.53 (0.36 to 0.80)       | 0.47 (0.27 to 0.83)              |                                      |
| Slightly/not                        | 69 (32)               | 268 (49)                    | 0.36 (0.24 to 0.53)       | 0.71 (0.42 to 1.21)              |                                      |
| Want health promotion strongly      |                       | ( /                         |                           |                                  |                                      |
| High attender (≥5 times/year)       | 81 (53)               | 163 (36)                    | 1.98 (1.37 to 2.87)       | 1.81(1.25 to 2.64)               | 9.7 (0.002)                          |
| Not seeing regular doctor           | 88 (45)               | 311 (54)                    | 0.72 (0.52 to 0.99)       | 0.88 (0.60 to 1.29)              | 0.4 (0.51)                           |
| Feeling unwell:                     |                       |                             |                           |                                  | ()                                   |
| Very                                | 40 (20)               | 79 (13)                     | 1                         | 1                                | 1.8 (0.41)                           |
| Moderately                          | 46 (23)               | 174 (29)                    | 0.52 (0.32 to 0.86)       | 0.76 (0.43 to 1.37)              |                                      |
| Slightly/not                        | 113 (57)              | 338 (57)                    | 0.66 (0.43 to 1.02)       | 1.03 (0.59 to 1.81)              |                                      |
| Feeling worried about the problem:  |                       | 000 (01)                    | 0.00 (0.10 10 1.02)       |                                  |                                      |
| Very                                | 74 (37)               | 130 (22)                    | 1                         | 1                                | 7.7 (0.02)                           |
| Moderately                          | 53 (27)               | 187 (31)                    | 0.50 (0.33 to 076)        | 0.57 (0.35 to 0.93)              | (0.02)                               |
| Slightly/not                        | 73 (37)               | 280 (47)                    | 0.46 (0.31 to 0.67)       | 0.56 (0.36 to 0.87)              |                                      |
| Medical problems:                   | 10 (07)               | 200 (47)                    | 0.01 0.01 0.01            | 0.00 (0.00 10 0.07)              |                                      |
|                                     | 9 (6)                 | 43 (10)                     | 1                         | 1                                | 2.8 (0.09)                           |
| 1                                   | 28 (19)               | 107 (25)                    | 1.25 (0.55 to 2.87)       | 1.20 (0.51 to 2.79)              | 2.0 (0.03)                           |
| 2                                   | 30 (20)               | 112 (26)                    | 1.28 (0.56 to 2.92)       | 1.04 (0.45 to 2.43)              |                                      |
| <u> </u>                            | 30 (20)               | 112 (20)                    | 2.21 (1.03 to 4.75)       | 1.04 (0.43 10 2.43)              |                                      |

\*Variables tested were sex, seeing regular doctor, reason for visit (new problem, chronic problem, doctor asked patient to come), feeling unwell, feeling worried about problem, age, paid work, sickness certificates, disability benefits, married, paid work of partner, partner's job, number of medical problems, years in full time education, tablets taken, symptom or disease category (related to appropriate *BNF* chapter), state anxiety. Variables are listed for each logistic model if they were significant in either univariate or multivariate analysis.

+Adjusted for variables that remained significant in logistic models.

‡Z trend P<0.001.

was new or long standing or whether the doctor had initiated the consultation.

## Patients' desire for prescription and for examination

A quarter of patients wanted a prescription, and 63% wanted an examination (see table 1). Patients who wanted a prescription were more likely to want good communication strongly (odds ratio 1.20; 95% confidence interval 0.85 to 1.69), partnership (1.46; 1.01 to 2.09), and health promotion (1.61; 1.12 to 2.31). Patients wanting a prescription were more likely to be

unmarried, have a partner with no paid work, no education beyond GCSE, and be aged over 60. Those wanting an examination were more likely to have no education beyond GCSE and to feel worried about their problem (table 3).

#### Discussion

This study is one of the largest quantitative studies to date to assess patients' preferences and one of the few to assess specifically preferences for patient centredness. We have shown that as patients are waiting to

| 1                                   |                       |                             | 0                         |                                  |  |
|-------------------------------------|-----------------------|-----------------------------|---------------------------|----------------------------------|--|
|                                     | No (%) who<br>want it | No (%) who don't<br>want it | Crude odds ratio (95% CI) | Adjusted odds ratio* (95%<br>CI) | Likelihood ratio test $\chi^2$ (P value) |
| Want prescription                   |                       |                             |                           |                                  |  |
| Not in paid work                    | 81 (58)               | 178 (37)                    | 2.36 (1.61 to 3.47)       | 1.43 (0.74 to 2.75)              | 1.1 (0.29)                               |
| Not married or living as married    | 56 (41)               | 148 (31)                    | 1.49 (1.01 to 2.20)       | 3.24 (1.06 to 9.84)              | 4.2 (0.04)                               |
| Partner not in paid work            | 40 (46)               | 80 (24)                     | 2.63 (1.61 to 4.28)       | 1.99 (1.02 to 3.89)              | 4.0 (0.046)                              |
| Partner non-manual work             | 26 (52)               | 184 (68)                    | 0.50 (0.27 to 0.92)       | 0.59 (0.30 to 1.18)              | 2.2 (0.14)                               |
| Age (years):                        |                       |                             |                           |                                  |  |
| 0-16                                | 8 (6)                 | 56 (12)                     | 0.19 (0.08 to 0.44)       | 0.06 (0.01 to 0.63)              |  |
| 17-40                               | 47 (34)               | 201 (42)                    | 0.31 (0.19 to 0.51)       | 1.09 (0.49 to 2.40)              |  |
| 41-60                               | 38 (27)               | 161 (34)                    | 0.32 (0.19 to 0.53)       | 0.60 (0.27 to 1.34)              |  |
| >60                                 | 47 (34)               | 63 (13)                     | 1                         | 1                                | 11.6 (0.009)                             |
| High attender                       | 69 (54)               | 169 (36)                    | 2.03 (1.37 to 3.01)       | 1.45 (0.82 to 2.56)              | 1.6 (0.20)                               |
| Medical problems                    |                       |                             |                           |                                  |  |
| 0                                   | 7 (6)                 | 43 (10)                     | 1                         | 1                                | 0.6 (0.91)                               |
| 1                                   | 25 (20)               | 110 (25)                    | 1.40 (0.56 to 3.47)       | 0.78 (0.25 to 2.42)              |  |
| 2                                   | 25 (20)               | 114 (26)                    | 1.35 (0.54 to 3.34)       | 0.66 (0.22 to 2.03)              |  |
| ≥3                                  | 71 (56)               | 178 (40)                    | 2.45 (1.05 to 5.70)       | 0.79 (0.28 to 2.23)              |  |
| Education (above GCSE)              | 37 (34)               | 245 (56)                    | 0.40 (0.26 to 0.63)       | 0.31 (0.18 to 0.55)              | 17.2 (0.000)                             |
| Want examination                    |                       |                             |                           |                                  |  |
| Education above GCSE                | 157 (48)              | 122 (57)                    | 0.69 (0.49 to 0.98)       | 0.70 (0.49 to 0.99)              | 3.9 (0.048)                              |
| Feeling unwell:                     |                       |                             |                           |                                  |  |
| Very                                | 87 (18)               | 29 (11)                     | 1                         | 1                                | 3.4 (0.18)                               |
| Moderately                          | 129 (27)              | 77 (28)                     | 0.56 (0.34 to 0.93)       | 0.58 (0.32 to 1.05)              |  |
| Slightly/not                        | 260 (55)              | 171 (62)                    | 0.51 (0.32 to 0.80)       | 0.70 (0.40 to 1.24)              |  |
| Felling worried about the problem†: |                       |                             |                           |                                  |  |
| Very                                | 143 (30)              | 53 (19)                     | 1                         | 1                                | 9.9 (0.007)                              |
| Moderately                          | 155 (32)              | 73 (26)                     | 0.79 (0.52 to 1.20)       | 0.81 (0.49 to 1.33)              |  |
| Slightly/not                        | 184 (38)              | 151 (55)                    | 0.45 (0.31 to 0.66)       | 0.52 (0.34 to 0.81)              |  |
|                                     |                       |                             |                           |                                  |  |

**Table 3** Predictors of patients' desire for prescription and examination in general practice

\*See table 2 for details.

tZ trend P=0.002.

enter the consulting room they strongly want a patient centred approach. From these data and from previous studies this desire is greater than for "biomedical" aspects of the consultation such as an examination or a prescription. There are likely to be at least three important domains of patient centredness from the patients' perspective: communication, partnership, and health promotion. Patients with a very strong preference for patient centredness are those who are vulnerable either socioeconomically or because they are feeling particularly unwell or worried.

#### Limitations of the study

The study is limited by the fact that patients required about 3-5 minutes to complete the questionnaire before seeing the doctor, and thus patients who came within 2-3 minutes of seeing doctors who were running on time (a small minority of consultations) could not be approached. The effect of this would possibly be slightly to overrepresent new same day appointments later in the surgery, when the doctors tended to run late. However, the type of problem did not predict preferences for patient centredness, and thus this probably does not greatly bias the study estimates. The time limitation also meant that relatively few questions could be asked; nevertheless we included questions relating to the five main domains of the patient centred model.7 Although the sample came from only three surgeries, the surgeries reflect a range of practices (deprived urban inner city, cathedral city, market town), and the characteristics of the sample were similar to the attending sample from the national morbidity survey, with the exception of slightly more women.

An unusual finding in this sample was that the number wanting a prescription was apparently lower (25%) than seen in previous studies (range 50-67%).<sup>24</sup> This could reflect several factors that are different compared with even the most recent studies.3 13 The format of the questions may have had an effect. For direct comparison with desire for patient centredness we used the same widely used format-that is, agreeing or disagreeing on a seven point scale with statements about what they wanted from the doctor; in this case most patients were "neutral" about wanting a prescription (54%). If we had used a question with a dichotomised answer (yes or no) this might have altered the apparent preference for a prescription; similarly if we had used "hoped for" or "expected" as in some previous studies rather than the more strongly worded "wanted" more patients may have responded positively. Demography may have influenced the results. Other studies have used inner city populations, and demographic factors strongly predict desire for a prescription. Surgeries in our study generally had low rates of antibiotic prescription, which might modify expectations.25 Also, government campaigns and media coverage (for example, the "don't wear me out" campaign about antibiotic use) may have influenced expectations for a prescription. However, even if we assume that expectations for prescriptions were really lower than the national picture, it is still not likely to alter the inference that most patients strongly want all components of the patient centred approach, as the desire for a prescription was slightly positively associated with the desire for patient centredness. Thus, this study may have slightly underestimated patients' preferences for patient centredness compared with other populations in which desire for a prescription is stronger.

The loss to follow up potentially limits the study, although a 76% follow up was achieved, and the characteristics of patients followed up and those not followed up were similar in feeling unwell and worried and in their preferences for patient centredness.

#### Important domains of patient centredness

This study provides empirical evidence that from the patients' perspective there are probably at least three important and distinct domains of patient centredness: communication, partnership, and health promotion. These domains provide strong support for the patient centred model,7 although the precise details of the theoretical structure are not all supported. Thus patients' ideas about the problem and expectations for treatment are more closely related to mutual discussion and partnership (empirical finding) rather than understanding the illness experience (theoretical model). Similarly the doctor-patient relationship (for example, being friendly and approachable (doctor), feeling understood (patient) is closely allied to communication (empirical finding) rather than a separate domain (theoretical model). Questions relating to the whole person-feeling emotionally understood and how the problem affects the patient's life-did not load strongly on to any factor and thus could be considered a fourth potential component of a patient centred model.

#### Do patients want patient centredness?

We have shown that most patients waiting to see a doctor strongly want a patient centred approach, not only a friendly approachable doctor who communicates well but health promotion and a partnership approach to both the problem and treatment. Furthermore most patients probably want patient centredness rather more than they want a prescription or an examination, with the caveats already discussed. This work supports general evidence about what patients want from their consultation<sup>12-17 19</sup> and contradicts evidence from other settings that a considerable minority of patients want a doctor centred approach,20-22 although the latter discrepancy may be explained by the very different nature of the problem (for example, cancer care). The current study is likely to be more representative of patients' views in primary care.

## What predicts who wants patient centredness, a prescription, and an examination?

The patient groups who agreed strongly that they wanted good communication were more likely to feel unwell and worried, be higher attenders (who have a high incidence of anxiety and depression<sup>26</sup>), and have no paid work. The preference for a patient centred approach in this group of patients—that is, those with a high prevalence of psychosocial problems—supports previous work that patients presenting with psychosocial problems are more likely to be satisfied with a patient centred consultation style.<sup>18</sup> A similar pattern was found for those strongly wanting partnership and health promotion. Age was important only in the desire for communication: middle aged patients were more likely and older patients less likely to want good communication strongly. No domain of patient

#### What is already known on this topic

A patient centred approach to consultation in general practice is often advocated

Little is known about the main domains from the patients' perspective

#### What this study adds

Three important domains of the patient centred approach are communication, partnership, and health promotion

Patients in primary care strongly want a patient centred approach

Doctors should be sensitive to those patients who are likely to have a particularly strong preference for patient centredness: patients who are vulnerable either psychosocially or because they are feeling particularly unwell

centredness related to whether the consultation was for a new or chronic condition or was initiated by the doctor. In contrast with the predictors of desire for patient centredness, sociodemographic factors were more important in the desire for a prescription: unmarried patients, partner with no paid work, no education beyond GCSE, and age. The finding that older patients are more likely to want a prescription is supported by a previous smaller study of patient expectations.<sup>27</sup> Predictors of wanting an examination were both psychological and sociodemographic: no education beyond GCSE and feeling worried.

#### Conclusion

Most patients strongly want a patient centred approach. There are likely to be at least three important domains of patient centredness from the patients' perspective: communication, partnership, and health promotion. Doctors should be sensitive to those individuals who are likely to have a particularly strong preference for patient centredness: patients who are vulnerable either psychosocially or because they are feeling particularly unwell.

We are grateful for the help of the doctors, staff, and patients at Aldermoor Health Centre, Nightingale Surgery, and Three Swans Surgery. We thank Professor Ann-Louise Kinmonth and Drs Paul Kinnersley and Simon Griffin for their expert advice.

Contributors: PL had the idea for the study, wrote the grant application, and with HE performed the analysis. HE and CG managed the data on a day to day basis. All authors contributed to the development of the protocol, study management, and writing the paper. Professor Kinmonth, Dr Griffin, and Dr Kinnersley were advisors to the study. PL is the guarantor.

Funding: NHS Research and Development South West and South East Regions. PL is funded by the MRC.

- Competing interests: None declared.
- Barry C, Bradley C, Britten N, Stevenson F, Barber N. Patients' unvoiced agendas in general practice consultations: qualitative study. *BMJ* 2000;320:1246-50.
- 2 Britten N, Stevenson F, Barry C, Barber N, Bradley C. Misunderstandings in prescribing decisions in general practice: qualitative study. *BMJ* 2000;320:484-8.
- 3 Law S, Britten N. Factors that influence the patient centredness of a consultation. Br J Gen Pract 1995;45:520-4.
- 4 Stewart M. Effective physician-patient communication and health outcomes: a review. Can Med Assoc J 1995;152:1423-33.

- 5 Henbest R, Stewart M. Patient-centredness in the consultation. 2: Does it really make a difference? Fam Pract 1990;7:28-33.
- 6 Henbest R, Fehrsen G. Patient-centredness: is it applicable outside the west? Its measurement and effect on outcomes. Fam Pract 1992;9:311-7. Brown J, Stewart M, Tessier S. Assessing communication between patients and
- Valley Family Practice Research Unit, 1995 (Working Paper Series 95-2). Kinnersley P, Stott N, Peters T, Harvey I. The patient-centredness of con-
- 8 sultations and outcome in primary care. *Br J Gen Prad* 2000;49:711-6. Savage R, Armstrong D. Effect of a general practitioner's consulting style on patients' satisfaction: a controlled study. *BMJ* 1990;301:968-70. 9
- Coulter A. Paternalism of partnership: patients have grown up and there is no going back. *BMJ* 1999;319:719-20.
   O'Connor A, Rostom A, Fiset V, Tetroe J, Entwistle V, Llewelyn-Thomas
- H, et al. Decision aids for patients facing health treatment or screening decisions: systematic review. *BMJ* 1999;319:731-4. 12 Baker R. Development of a questionnaire to assess patients' satisfaction
- Williams S, Weinman J, Dale J, Newman S. Patient expectations: what do primary care patients want from the GP and how far does meeting
- Patients value for the off and the off and the value of the value

- 16 Hjortdahl P, Laerum E. Continuity of care in general practice: effect on patient satisfaction. BMJ 1992;304:1287-9. 17 Streiner DL, Norman GR. Health measurement scales: a practical guide to
- Hornar DK, Hornar OK, Heulan measurement states: a practical guide to their development and use. Oxford: Oxford Medical Publications, 1995.
   Winefield H, Murrell T, Clifford J, Farmer E. The usefulness of distinguishing different types of general practice consultation, or are needed skills always the same? *Fam Pract* 1995;12:402-7.

- 19 Grol R, Wensing M, Mainz J, Ferreira P, Hearnshaw H, Hjortdahl P, et al. Patients' priorities with respect to general practice care: an international comparison. European Task Force on Patient Evaluations of General Practice (EUROPEP). Fam Pract 2000;16:4-11.
- 20 Guadagnoli E, Ward P. Patient participation in decision-making. Soc Sci Med 1998;47:329-39.
- 21 Charles C, Redko C, Whelan T, Gafni A, Reyno L. Doing nothing is no choice: lay constructions of treatment decision-making among women with early-stage breast cancer. Sociol Health Illness 1998;20:71-95.
- 22 Dowsett SM, Saul JL, Butow PN, Dunn SM, Boyer MJ, Findlow R, et al. Communication styles in the cancer consultation: preferences for a patient-centred approach. Psychooncology 2000;9:147-55
- 23 Marteau TM, Bekker H. The development of the short form of the state scale of the Speilberger state/trait anxiety inventory. Br J Clin Psychol 1992;31:301-6.
- 24 Britten N, Ukoumunne O. The influence of patients' hopes of receiving a prescription on doctors' perceptions and the decision to prescribe: a questionnaire survey. BMJ 1997;315:1506-10.
- 25 Little PS, Williamson I, Warner G, Gould C, Gantley M, Kinmonth AL. An open randomised trial of prescribing strategies for sore throat. BMJ 1997;314:722-7.
- 26 Neal R, Dowell A, Heywood P, Morley S. Frequent attenders: who needs treatment? Br J Gen Pract 1996;Mar:131-2.
- 27 Cockburn J, Pit S. Prescribing behaviour in clinical practice: patients' expectations and doctors' perceptions of patients' expectations-a questionnaire study. BMJ 1997;315:520-3.
  - (Accepted 2 December 2000)