

# Holism in primary care: the views of Scotland's general practitioners

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A holistic approach to care has traditionally been the central tenet of general practice in the UK. However, recent major changes in general practice may be diminishing the importance and/or deliverability of such an approach. We sought to explore the views of Scotland's general practitioner (GP) principals. We surveyed all 3713 GP principals in Scotland during February to July 2001 by postal questionnaire. Nearly 9 in 10 GPs (87%) felt that a holistic approach was essential to providing good health care, but only 1 in 5 (21%) felt that primary care was currently delivering high-quality holistic care, and only 1 in 15 (7%) felt that the current organization of primary care was conducive to such care. Constraints on holism were thought to contribute significantly to higher rates of prescribing (73% agreed), more referrals to secondary care (63% agreed), and increased demand for complementary therapies (57% agreed). Psychological factors were considered to play an important role in organic physical disease – its causation (67% agreed), course (94% agreed) and reversal (69% agreed) – yet when either the GP or the patient wished to explore issues relating to stress or emotional difficulties the GPs felt significantly constrained, mainly by time and their own stress (mean values (95% CI); 0: not limiting, 10: extremely limiting; time 7.6 (7.49–7.67); stress 4.9 (4.84–5.04); training 4.7 (4.66–4.84); skills 4.2 (4.13–4.30); motivation 3.4 (3.33–3.50)). In this survey Scotland's principal GPs overwhelmingly endorse the traditional holistic approach of general practice and primary care, but feel that it is failing to be delivered due to organizational and time constraints, with consequent human and financial costs. These results give voice to deep concerns among GPs who remain committed to a holism they are struggling to deliver.

**Key words:** consultation time; empathy; general practice; holism; holistic care; primary care

## Introduction

A holistic approach to care has traditionally been the central tenet of general practice in the UK and is widely regarded as being central to effective patient care (Greenhalgh and Eversley, 1999;

Howie *et al.*, 2004). There is a growing body of evidence to support this view, with recent research showing that whole-person approaches can increase enablement and patient satisfaction, and reduce symptom burden and hospital referrals (Howie *et al.*, 1999; Little *et al.*, 2001; Howie *et al.*, 2004). Public health policy has also advocated the importance of a shift from disease-centred models of care to holistic, patient-centred models of care (Lyon, 2003).

Despite these advances, the actual climate in general practice appears to be diminishing the

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importance traditionally attached to holism, focusing more on single disease control, targets, and information recording (General Practitioners Committee, British Medical Association, 2003; Howie *et al.*, 2004). In addition there are growing concerns about low morale, excessive work pressures, shortage of resources, and reducing job satisfaction with a rise in intention to quit (General Practitioners Committee, British Medical Association, 2001; Scottish General Practitioners Committee, British Medical Association, 2001; Simoens *et al.*, 2002; Sibbald *et al.*, 2003).

Under these current circumstances, do general practitioners (GPs) still value holism, and is general practice and primary care able to deliver holistic care? If not, why not, and what are the consequences on the quality of care of patients? We asked Scotland's principal GPs their views.

In this study we referred to holism in the context of the traditional, core values of general practice. We chose not to define holism more precisely, as *exact* definitions of holism are likely to vary between GPs (Pietroni, 1987; Lyon, 2003; Howie *et al.*, 2004) and our aim was to gather GPs' views on the state of holism as *they personally define and understand it*, in today's medicine. This context-based definition of holism would suffice, we believe, in evaluating GPs' views on the general state of holism in primary care, whilst specific issues such as time, stress, and mind–body relationships were explored in separate sections without reference to holism.

## Methods

We surveyed all 3713 GP principals in Scotland during February to July 2001. The initial questionnaire was devised by the authors and piloted at a national GP conference with feedback. After modification, the questionnaire was sent to the first 200 GPs on the ISD list of GP principals (as of September 2000, 3713 addresses) as a pilot exercise. Further changes were then made to the wording and layout of the questionnaire. The final questionnaire was sent to the remaining 3513 GPs and consisted of 28 questions in five sections. Section 1 (personal details) collected sociodemographic data. A five-point Likert scale was employed for sections 2 (holism and time),

section 4 (holism and mind–body interactions) and section 5 (holism and the current structure of primary care) and a visual analogue scale for section 3 (holism and stress). Two postal reminders were sent to nonresponders. The second reminder was shortened to five questions (indicated <sup>a</sup> in Table 1 and Figure 2) in order to boost the response rate for key issues in the survey. Duplicate responses, identified by number-coded returns, were discarded. A valid response was counted when at least one section in addition to section 1 was completed. Nonvalid responses were discarded. Data were entered into a Microsoft Access database. Exploratory factor analysis (principal component analysis) with varimax rotation and Kaiser normalization was carried out on SPSS software in order to explore the internal construct validity and structure of the questionnaire.

## Results

There were 107 responses for the pilot questionnaire, 1809 responses for the main questionnaire, and 471 responses for the shortened questionnaire, giving a total response rate of 2387 (64.3%). This included 76 nonvalid responses, giving a total valid response rate of 2311 (62.2%) for questions appearing in all questionnaire versions. The number of valid responses for each aspect of the survey is indicated in the figures and tables. Responders were almost identical to the total GP principal workforce (2001, from ISD figures) in age distribution (<30 years of age: 1.8% versus 2.0%; 30–39 years: 30.8% versus 27.5%; 40–49 years: 41.3% versus 40.7%; 50–59 years: 23.3% versus 26.6%; > 60 years: 2.3% versus 2.6%, for survey and total workforce, respectively). The overall gender balance was also similar (female: 41.0% versus 39.5% for survey and total workforce, respectively). However, more part-time female GPs were represented in the sample compared with the total workforce (male part time: 6.8% versus 5.6%; female part-time 51.1% versus 36.9%, for survey and total workforce, respectively). Locality of practice was recorded as urban (46.6%), rural (19.9%), or mixed (32.4%) and socioeconomic area of the practice as high deprivation (16.4%), medium/mixed (43.9%), marginal (23.2%), or no deprivation (14.7%), reflecting a good range of responses from GPs working in different practice settings.

**Table 1** GPs' views on holism and the organization of primary care

|  | Strongly disagree | Disagree    | Neutral       | Agree         | Strongly agree | Missing  |          |
|--|-------------------|-------------|---------------|---------------|----------------|----------|----------|
| <sup>a</sup> A holistic approach is essential to providing good health care<br><i>n</i> = 2205 (%)   | 5 (0.3)           | 33 (1.5)    | 213 (9.7)     | 1327 (60.2)   | 598 (27.1)     | 29 (1.3) |          |
| <sup>a</sup> Primary care in general is currently providing high-quality holistic care<br><i>n</i> = 2311 (%)  | 133 (5.8)         | 872 (37.7)  | 776 (33.6)    | 450 (19.5)    | 39 (1.7)       | 41 (1.8) |          |
| Primary care teams are adequately skilled to deliver high-quality holistic care<br><i>n</i> = 1861 (%)   | 53 (2.8)          | 589 (31.6)  | 597 (32.1)    | 543 (29.2)    | 34 (1.8)       | 45 (2.4) |          |
| The average appointment time in primary care is too short to deliver high-quality holistic care<br><i>n</i> = 2311 (%)   | 24 (1.3)          | 69 (3.7)    | 154 (8.3)     | 942 (50.6)    | 643 (34.6)     | 29 (1.6) |          |
| <sup>a</sup> The way primary care is currently organized is adequate to deliver high-quality holistic care<br><i>n</i> = 2311 (%)                                    | 393 (17.0)        | 1317 (57.0) | 410 (17.7)    | 139 (6.0)     | 19 (0.8)       | 33 (1.5) |          |
| <sup>a</sup> The constraints that currently limit the provision of a holistic primary care service for patients contributes significantly to:<br><i>n</i> = 2205 (%) |                   |             |               |               |                |          |          |
| Higher rates of prescribing  | 17 (0.8)          | 147 (6.7)   | 387 (17.6)    | 1351 (61.3)   | 261 (11.8)     | 42 (1.9) |          |
| Higher referral rates to secondary care  | 16 (0.7)          | 242 (11.0)  | 522 (23.7)    | 1150 (52.2)   | 234 (10.6)     | 41 (1.9) |          |
| Increased patient demand for complementary therapies   | 28 (1.3)          | 199 (9.0)   | 675 (30.6)    | 1064 (48.3)   | 198 (9.0)      | 41 (1.9) |          |
|  | None              | Few (<25%)  | Some (25–50%) | Many (50–75%) | Most (>75%)    | All      | Missing  |
| In your opinion, what proportion of your patients currently receive high-quality holistic care?<br><i>n</i> = 1755 (%)   | 24 (1.4)          | 425 (24.2)  | 654 (37.3)    | 439 (25.0)    | 148 (8.4)      | 5 (0.3)  | 60 (3.4) |

<sup>a</sup>Questions appearing in the shortened questionnaire

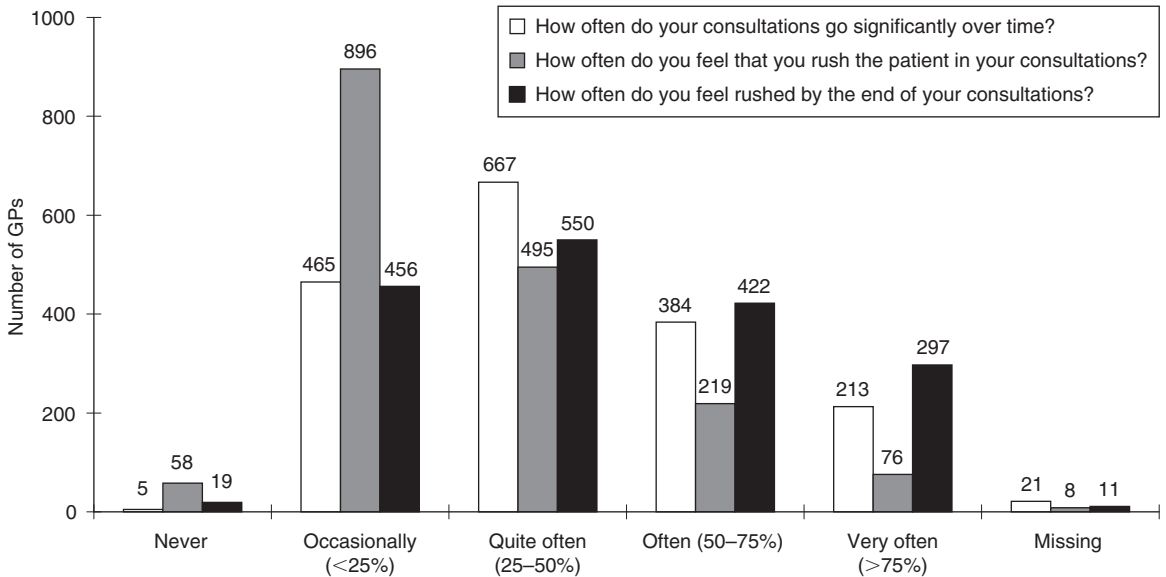
### GPs' views on holism and the current organization of primary care

Nearly 9 in 10 GPs (87.3%) felt that a holistic approach was essential to providing good health care, but only 1 in 5 (21%) felt that primary care was currently delivering high-quality holistic care, and only 1 in 15 (6.8%) felt that the way primary care is currently organized made it possible. There was general agreement that these constraints on holism were contributing significantly to higher rates of prescribing, higher referrals to secondary

care, and increased patient demand for complementary therapies (Table 1).

### GPs' views on holism and consultation length

The majority of GPs (85.2%) felt that the average consultation length in primary care was too short to deliver high-quality holistic care (Table 1). The average allocated time for a single consultation was 9.3 minutes. Almost a third of GPs (30.5%) provided less than 10 minutes, nearly two-thirds



**Figure 1** GPs' views on time in consultation (% of consultations) ( $n = 1755$ )

(65%) provided 10-minute appointments, and less than 1 in 20 (4.5%) provided more than 10 minutes; 1 in 3 GPs (34%) felt that the majority (>50%) of their consultations went over the allocated time, 1 in 6 GPs (16.8%) felt they often rushed the patient (in >50% of consultations) and 2 in 5 GPs (40.9%) often felt rushed themselves at the end of consultations (>50% of consultations) (Figure 1).

Booked consultation length was on average longer in rural areas (mean: 10.0 min.,  $CI_{95\%}$ : 9.9–10.3) than in urban or mixed areas (mean: 9.1;  $CI_{95\%}$ : 9.0–9.2) and was shorter in high-deprivation areas (mean: 8.9;  $CI_{95\%}$ : 8.8–9.1) than in low-deprivation areas (mean: 9.8;  $CI_{95\%}$ : 9.6–9.9).

The mean optimum consultation length (the mean score of what length of consultation each GP would like to be able to offer) was 13.3 min.; 43.3% gave an optimum time between 10 and 15 minutes, 39.8% specified 15 minutes and 9.9% felt more than 15 minutes was optimum.

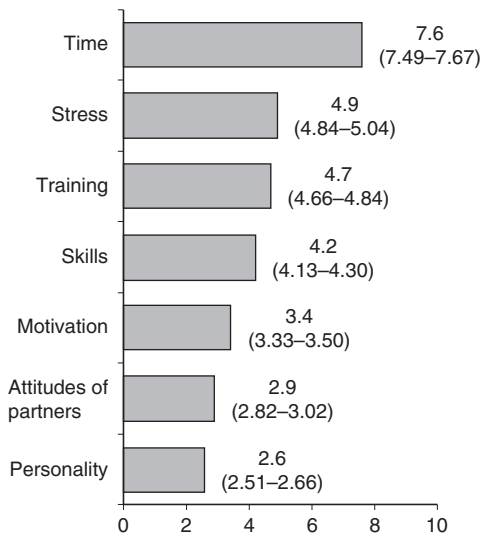
### GPs' views on constraints on holism within the consultation

In (hypothetical) consultations where either the doctor or the patient wished to explore issues

relating to stress or emotional difficulties (i.e., when a holistic approach would seem essential) the main constraint was seen as the time available, followed by the GPs' own stress level (Figure 2). GPs working in rural areas felt less constrained by time and stress in the consultation than those working in urban/mixed areas, and urban GPs working in areas of high socioeconomic deprivation felt more constrained by time and stress than those working in low-deprivation areas (Table 2).

### GPs' views on holism and mind–body interactions

The vast majority of GPs (96.8%) felt that psychological factors have significant physical consequences, and 89.8% felt that it was an important part of the doctor's job to explore psychological issues in consultations dealing with organic physical illness. Most GPs agreed that psychological factors can play an important role in the causation (67.3% agreed), course (94.4% agreed) and reversal (68.6% agreed) of organic physical disease, and that the impact of a prescribed intervention on the patient can be significantly influenced by both the thoughts and emotions of the patient (96.3% agreed) and the doctor (82.9% agreed) (Table 3).



**Figure 2** GPs' views on constraints on holistic consultations in general practice in Scotland

<sup>a</sup>In situations where either you or the patient wishes to explore issues relating to stress and emotional difficulties, to what extent do you feel that the factors below limit your ability to do so? ( $n = 2311$ )

The figure shows mean values (95% confidence intervals) rated on a scale of 0 (not limiting) to 10 (extremely limiting).

**Table 2** Comparison of time and stress as constraints on holism by location of practice and socioeconomic area (mean values, 0: not limiting, 10: extremely limiting, with 95% confidence intervals) ( $n = 2311$ )

|                                     | Time          | Stress        |
|-------------------------------------|---------------|---------------|
| <i>Location of practice</i>         |               |               |
| Rural                               | 6.9 (6.7–7.2) | 4.6 (4.4–4.8) |
| Urban/mixed                         | 7.8 (7.7–7.8) | 5.0 (4.9–5.2) |
| <i>Effect of socioeconomic area</i> |               |               |
| Urban high deprivation              | 7.9 (7.6–8.1) | 5.1 (4.8–5.3) |
| Urban no deprivation                | 6.4 (5.8–7.0) | 4.3 (3.8–4.7) |

### GPs' views on holism and empathy

Three-quarters of GPs (74.2%) felt that closeness, compassion or empathy with patients were prerequisites for good holistic care, with only 1 in 20 disagreeing with this view (Table 4). Two-thirds of GPs (66.1%) felt that they experienced a genuine closeness, compassion, or empathy with their patients in the majority (>50%) of their consultations (Table 4).

### Construct validity of the questionnaire

Factor analysis indicated a good internal consistency of the different items in the questionnaire. Twenty-five out of the 27 major items loaded onto five clear factors (eigenvalue >1) which explained 50.6% of the variance, and the remaining two items (concerning empathy and importance of empathy) loaded highly onto each other (factor loading 0.746 and 0.740) explaining a further 6.8% of the variance. Factor 1 related to views on holism and contained all seven questions shown in Table 3 plus question 1, Table 1, with factor loading ranging from 0.515 to 0.781. Factor 2 related to time and stress as constraints on holistic care, and consisted of question 4 in Table 1, all three questions shown in Figure 1, and the items of time and stress in Figure 2, with factor loadings from 0.514 to 0.835. Factor 3 concerned other constraints on holism and contained the items on skill, training, motivation, and personality shown in Figure 2 (factor loadings from 0.645 to 0.861). Factor 4 concerned the delivery of holism in primary care (items 2, 3, 5, 10 in Table 1, factor loading from 0.623 to 0.808) and factor 5 the consequences of constraints on holism (items 3, 4, 5 in Table 1, factor loadings from 0.693 to 0.833).

### Discussion

This nationwide survey of Scotland's principal GPs reveals two major findings: first, that they continue to consider a holistic approach as being essential to the provision of high-quality health care, in line with the traditional view of general practice (Greenhalgh and Eversley, 1999; Howie *et al.*, 1999; Little *et al.*, 2001) and secondly, that they feel that such care is currently not being delivered.

### Time for time?

In order to improve quality of care, the factors that enhance or hinder holism need to be understood, especially those that impact directly on the clinical encounter. The GPs in the present study identified lack of time as the major constraint, coupled with their own stress levels. Skills and training needs were also identified as important limiting factors. The vast majority felt that the average appointment time in primary care is currently inadequate for the delivery of high-quality holistic

**Table 3** GPs' views on holism and mind–body interactions  $n = 1861$  (%)

|   | Strongly disagree | Disagree  | Neutral    | Agree       | Strongly agree | Missing  |
|---|-------------------|-----------|------------|-------------|----------------|----------|
| Our thoughts and emotions can have significant physical consequences  | 3 (0.2)           | 3 (0.2)   | 33 (1.8)   | 793 (42.6)  | 1009 (54.2)    | 20 (1.1) |
| The impact of a prescribed intervention on the patient can be significantly influenced by the patient's thoughts and emotions | 4 (0.2)           | 4 (0.2)   | 36 (1.9)   | 1016 (54.6) | 777 (41.8)     | 24 (1.3) |
| The impact of a prescribed intervention on the patient can be significantly influenced by the doctor's thoughts and emotions  | 7 (0.4)           | 35 (1.9)  | 252 (13.5) | 1182 (63.5) | 361 (19.4)     | 24 (1.3) |
| Psychological factors can play an important role in the causation of organic physical disease                                 | 23 (1.2)          | 174 (9.3) | 386 (20.7) | 874 (47.0)  | 378 (20.3)     | 26 (1.4) |
| Psychological factors can play an important role in the course of organic physical disease                                    | 5 (0.3)           | 9 (0.5)   | 66 (3.5)   | 1084 (58.2) | 674 (36.2)     | 23 (1.2) |
| Psychological factors can play an important role in the reversal of organic physical disease                                  | 22 (1.2)          | 104 (5.6) | 411 (22.1) | 909 (48.8)  | 369 (19.8)     | 46 (2.5) |
| It is an important part of the doctor's job to explore psychological issues in organic physical illness                       | 3 (0.2)           | 16 (0.9)  | 139 (7.5)  | 1100 (59.1) | 572 (30.7)     | 31 (1.7) |

**Table 4** GPs' views on holism and empathy  $n = 1755$  (%)

|  | Strongly disagree | Disagree | Neutral    | Agree       | Strongly agree | Missing  |
|--|-------------------|----------|------------|-------------|----------------|----------|
| Do you think such compassion, closeness or empathy is a prerequisite for good holistic care? | 16 (0.9)          | 89 (5.1) | 321 (18.3) | 985 (56.1)  | 318 (18.1)     | 26 (1.5) |
|  | Never             | Rarely   | Sometimes  | Often       | Always         | Missing  |
| How often do you feel a genuine compassion, closeness or empathy with your patients?         | 1 (0.1)           | 33 (1.9) | 549 (31.3) | 1121 (63.9) | 38 (2.2)       | 13 (0.7) |

care, advocating a 50% increase. Consultation length is shorter in the UK than in many other parts of Europe (Deveugele *et al.*, 2002) and a growing body of evidence suggests that longer consultations are associated with better quality care (Howie *et al.*, 1999; Freeman *et al.*, 2002; Howie *et al.*, 2004). Increasing consultation length is no easy matter. The average full-time GP conducts 8000 consultations per year (plus telephone and email consultations, house visits, and administrative work) with an average of almost 2000

patients registered per GP. To substantially increase consultation length would either require more GPs (or other health care professionals taking on more GP-type activities) or substantially longer working hours for GPs. GP remuneration is strongly influenced by list size (number of registered patients), and the new GP contract offers no financial incentive for longer consultations (above the standard 10 minutes) and only a very limited incentive to actually measure patient satisfaction. Due to unmet need in the community (e.g., in mental

health), longer consultations are unlikely to result in lower consultation rates, at least in the short term, especially in the more deprived areas (Watt, 2002). Furthermore, the relationship between quality of care and consultation length may not be a simple one (Jenkins *et al.*, 2002; Wilson *et al.*, 2002). Time is clearly important, but is not the only consideration, and if other constraints are not addressed then even generous increases in time might not be sufficient to achieve high-quality holistic care.

### **Time for mind–body medicine?**

It was interesting to note the extent to which GPs agreed with statements about mind–body interactions in organic physical disease, with over two-thirds of GPs agreeing (and only 1 in 15 disagreeing) that psychological factors can play an important role in the reversal of organic physical disease. This emphasis on, and agreement about, the perceived importance of psychological factors in organic disease is striking, and highlights a key aspect of holistic care that is not adequately being served by the current approaches in Western medicine (Reilly, 2001).

### **Empathy and holism**

GPs in the present study considered the ‘human aspects’ of the clinical encounter, such as compassion and empathy, to be an essential feature of holistic care. This is in agreement with patients’ own views (Mercer and Reilly, 2002; Mercer and Reynolds, 2002). The patient’s perception of the doctor’s empathy (rather than consultation length itself) has been found to be a key factor in patient enablement (Mercer *et al.*, 2002), and this has recently also been shown in general practice (S.W. Mercer, unpublished). Other work has also revealed the importance of a holistic, patient-centred approach on enablement and symptom resolution (Little *et al.*, 2001).

### **Stress, deprivation, and holism**

GP stress was seen as the second most important constraint on a holistic approach. High levels of stress in GPs are well documented, and can have adverse effects on their own health and the care of their patients (Firth-Cozens, 2002). Stress has also been shown to have a negative impact on empathy (Bellini *et al.*, 2002). The present study also revealed

socioeconomic effects on time and stress, which presumably relates to the higher psychological and physical comorbidity in these patient populations (Watt, 2002). Further work is required to explore the sources of stress in the consultation in general in areas of differing socioeconomic deprivation.

### **The consequences of constraints on holism: increased risks and costs?**

The view that current constraints on holism may be contributing significantly to increased prescriptions, hospital referrals, and demand for complementary therapies is a striking example of the ‘inefficiency’ that may result from rushed or stressed care. If this view is correct, the ‘fast throughput’ system that characterizes the current organization of general practice may actually lead to increased overall costs to the health service, as well as increased risks to patients. Further research is required to evaluate this hypothesis and the effects, including the cost–benefits, of approaches that aim to promote holism in primary care, including (but not limited to) the provision of longer consultations. True cost comparison between the current model and one that facilitates holism would require costing of a patient’s total journey through multiple National Health Services (NHS) uses, rather than comparison of costs of single isolated events.

### **Limitations of the study**

The response rate to the survey was better or as good as similar surveys in GP (General Practitioners Committee, British Medical Association, 2001; Scottish General Practitioners Committee, British Medical Association, 2001; Sibbald *et al.*, 2003) but this still means that more than a third of GP principals chose not to participate. Thus we cannot say that our findings are applicable to all principal GPs in Scotland. The representativeness of the GPs who contributed can only be assessed by factors such as age, gender, and working pattern. Generally, as shown at the start of the results section, there was a very good match between these characteristics of the GPs who took part and the total GP principal population. The one exception was the inclusion of more part-time female GPs in this survey than in the national population. However in absolute terms this amounts to less

than 60 'extra' respondents in this category and is thus unlikely to significantly skew the results. We did not attempt to include nonprincipals in this survey. Although their views would be a welcome addition, at the time of the survey the number of nonprincipals practising in Scotland amounted to less than 10% of the total workforce (Sibbald *et al.*, 2003).

The study did not use validated measures because, as far as we are aware, no such measures exist for the main subject area investigated (GPs views on holism and the constraints on holism). Thus the survey was essentially exploratory and descriptive in nature. The robust internal structure of the questionnaire as indicated by the factor analysis does, however, give some confidence that the items included did relate to important underlying constructs. The 'external' validity of the survey is supported by recent work on 3000 consultations and 26 GPs in Scotland in which patients rated the GP in terms of empathy (using a validated instrument). Significant correlations exist (of between 0.4 and 0.6) between the patients ratings of the GPs empathy and the GPs own views on holism and time using the same items used in the current survey (S.W. Mercer, unpublished).

Further detailed qualitative work is required to explore in depth GPs' and patients' definitions of holistic care. However it is clear from the results of the present study that Scotland's GPs are in favour of a system of care which values the human aspects of medicine as much as the technical.

## Conclusion

The needs and demands of primary care are rapidly changing. Debate on delivery of primary care is often predicated on definable 'hard outcomes' as indicators of quality with scant reference to holism and human healing. This imbalance is clearly reflected the new GP contract in the UK, which rewards GPs for 'technical' care with a minimum of incentives for the psycho-social aspects of care (General Practitioners Committee, British Medical Association, 2003). The overwhelming endorsement by GPs of the importance of holism in primary care in the present study makes it axiomatic, in our view, that the debate on quality of care in primary care cannot be brought forward without reference to holism.

The majority of GPs in the present survey thought that structural constraints relating to the organization of primary care were a major limitation on holism. Without adequate funding, management, and training to substantially redress the deficiencies in primary care perceived by GPs, it is unlikely that good quality, holistic care can be delivered.

Scotland's GPs feel that the holism underpinning primary care is failing. The key personal issue is time, coupled with stress. Their view that such constraints are contributing significantly to increases in prescribing and secondary referrals implies both increased risks and costs, and suggests that frustrated core values are impacting on the doctor, the patient, and the care. These results give voice to deep concerns among a nation's GPs who remain committed to a holism they are struggling to deliver.

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## References

- Bellini, L.M., Baime, M. and Shea, J.A.** 2002: Variation of mood and empathy during internship. *Journal of the American Medical Association* 287, 3143–46.
- Deveugele, M., Derese, A., van den Brink-Muinen, A., Bensing, J. and De Maeseneer, J.** 2002: Consultation length in general practice: cross-sectional study in six European countries. *British Medical Journal* 325, 472–74.
- Firth-Cozens, J.** 2002: Interventions to improve physician's well-being and patient care. *Social Science & Medicine* 52, 215–22.
- Freeman, G.K., Horder, J.P., Howie, J.G.R., Pali Hungin, A., Hill, A.P., Shah, N.C. and Wilson, A.** 2002: Evolving general practice consultation in Britain: issues of length and context. *British Medical Journal* 324, 880–82.
- General Practitioners Committee, British Medical Association.** 2001: National survey of GP opinion. *Overall results, topline report*. London: British Medical Association.
- General Practitioners Committee, British Medical Association.** 2003: Investing in general practice: the new general medical services contract. London: British Medical Association.



- Greenhalgh, T.** and **Eversley, J.** 1999: *Quality in general practice: towards a holistic approach*. London: King's Fund.
- Howie, J.G.R., Heaney, D.J., Maxwell, M., Walker, J.J., Freeman, G.K.** and **Rai, H.** 1999: Quality at general practice consultations: cross sectional survey. *British Medical Journal* 319, 738–43.
- Howie, J.G.R., Heaney, D.** and **Maxwell, M.** 2004: Quality, core values and the general practice consultation: issues of definition, measurement and delivery. *Family Practice* 21, 458–68.
- Jenkins, L., Britten, N., Barber, N., Bradley, C.P.** and **Stevenson, F.A.** 2002: Consultations do not have to be longer. *British Medical Journal* 325, 388.
- Little, P., Everitt, H., Williamson, I., Warner, G., Moore, M., Gould, C., Ferrier, K.** and **Payne, S.** 2001: Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. *British Medical Journal* 323, 908–11.
- Lyon, A.** 2003: *The fifth wave; searching for health in Scotland*. Edinburgh: Scottish Council Foundation.
- Mercer, S.W.** and **Reilly, D.** 2002: A qualitative study of the consultation at the Glasgow Homoeopathic Hospital. *Focus on Alternative and Complementary Therapies* 6, 101.
- Mercer, S.W.** and **Reynolds, W.** 2002: Empathy and quality of care. *British Journal of General Practice* 52, 9–12.
- Mercer, S.W., Reilly, D.** and **Watt, G.C.M.** 2002: The importance of empathy in the enablement of patients attending the Glasgow Homoeopathic Hospital. *British Journal of General Practice* 52, 901–905.
- Pietroni, P.** 1987: Holistic medicine: new lessons to be learned. *Practitioner* 231, 1386–90.
- Reilly, D.** 2001: Enhancing human healing. *British Medical Journal* 322, 120–21.
- Scottish General Practitioners Committee, British Medical Association.** 2001: *The reality behind the rhetoric: a survey of the views of GPs in Scotland on morale, service provision and priorities for improving primary care*. London: British Medical Association.
- Sibbald, B., Bojke, C.** and **Gravelle, H.** 2003: National survey of job satisfaction and retirement intentions among general practitioners in England. *British Medical Journal* 326, 22–25.
- Simoens, S., Scott, A.** and **Sibbald, B.** 2002: Job satisfaction, work-related stress and intention to quit of GPs. *Scottish Medical Journal* 47, 80–86.
- Watt, G.** 2002: The inverse care law today. *Lancet* 360, 252–54.
- Wilson, P., McConnachie, A.** and **Stirling, M.** 2002: Increasing consultation time may not be straightforward. *British Medical Journal* 325, 104.