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## Asthma clinic questionnaires

Sir.

Pre-interview questionnaires have been recommended as a way of maximizing the information gained from interviews, reducing interview time, and making the interview more client focused and individual.1-4 Whether quality of life questionnaires could aid the interview process in nurse run asthma clinics was tested. In 1994, 27 practice nurses selected from throughout the United Kingdom who ran asthma clinics evaluated the asthma bother profile<sup>5</sup> and the St George's respiratory questionnaire<sup>6</sup> with a total of 133 patients randomly recruited from the clinics. Each patient completed the two questionnaires on sequential visits in random order. Using evaluation questionnaires the patients evaluated the questionnaire after the interview, and the nurses evaluated the interview and questionnaire. In addition, free-format comments were solicited from the nurses about the way they used the questionnaires.

The results of the evaluation questionnaires are shown in Table 2. The majority of patients and nurses found both questionnaires to be helpful. For both nurses and patients there was a significantly higher level of satisfaction with the asthma bother profile compared with the St George's respiratory questionnaire (Wilcoxon test, both P<0.01), though high levels of satisfaction were obtained with both questionnaires. In addition, the nurses rated interviews where the asthma bother profile had been completed by patients as having a significantly better outcome compared with the respiratory questionnaire (Wilcoxon test, P<0.01). The freeformat responses of the nurses indicated that the questionnaires were used in different ways depending on the type of patients and on which questionnaire was completed. However, a major function of the questionnaires, particularly the asthma bother profile, was that they highlighted worries and fears which had not been discussed on previous visits. Some nurses reported that their interview technique had changed after the use of these questionnaires so that they focused more on the emotional concerns of the patient.

It can be concluded that pre-interview quality of life questionnaires are a useful tool in asthma clinics.

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Table 2. Responses given by nurses and patients after interview.

	% of respondents				
	Poor	Poor/ Moderate	Moderate	Moderate/ Good	Good
Patient's perception of how helpful questionnaire was in describing experiences ABP (n = 129) <sup>a</sup> SGRQ (n = 127) <sup>b</sup>	3.1 7.9	5.4 10.2	19.4 23.6	34.0 27.6	38.0 30.7
Nurse's satisfaction with consultation ABP ( $n = 131$ ) <sup>c</sup> SGRQ ( $n = 130$ ) <sup>d</sup>	0.8 3.1	3.8 4.6	9.9 16.9	47.3 43.1	38.2 32.3
Nurse's perception of usefulness of questionnaire ABP $(n = 121)^{\circ}$ SGRQ $(n = 128)^{\circ}$	1.7 10.2	7.4 21.1	22.3 23.4	44.6 34.4	24.0 10.9

n = number of repsonses. ABP = asthma bother profile. SGRQ = St George's respiratory questionnaire. Data missing in: °4 cases,  $^{6}$ C cases, °2 cases,  $^{6}$ C cases, °12 cases,  $^{5}$ C cases.

# Corticosteroids and peptic ulceration prophylaxis in patients with advanced cancer

Sir,

Polypharmacy in patients with advanced cancer may undermine compliance in this patient group. One area of prescribing controversy is the concurrent prescribing of corticosteroids and prophylaxis regarding peptic ulceration. A review of corticosteroids and peptic ulceration suggests that prophylaxis is indicated for patients who have two or more of the following risk factors: 1 total dose of corticosteroid over 140 mg dexamethasone, 2 previous history of peptic ulcer, 2 and concomitant use of a non-steroidal anti-inflammatory and corticosteroid. 3

A retrospective study was carried out of 200 consecutive patients with incurable cancer admitted to St Christopher's Hospice, London in 1992; data were gathered on risk factors for peptic ulceration.

A total of 71 patients (36%) were receiving corticosteroids on admission to the hospice (mean age 67 years). Of these, 34 patients (48%) had a total equivalent dose of over 140 mg of dexamethasone, 10 patients (14%) had a history of peptic ulceration, and 22 patients (31%) were taking a non-steroidal anti-inflammatory drug and corticosteroid. Overall, 15 patients (21%) had two risk factors, and one patient had three risk factors.

Twenty three patients (32%) were receiving medication as prophylaxis against peptic ulcer. However, the patient with three risk factors and five of the 15 patients with two risk factors (33%) were not receiving prophylaxis. Further analysis revealed that nine patients with one risk factor (27%) and four with no risk factors (18%) were receiving prophylaxis.

In order to prevent corticosteroidinduced peptic ulceration but avoid unnecessary polypharmacy it is important to prescribe prophylactic medication to patients at high risk. This study shows that 38% of patients on admission to the hospice who were at high risk of developing corticosteroid-induced peptic ulceration were not receiving prophylaxis. A further 24% of patients taking corticosteroids and prophylactic medication were not in the high risk group. Prophylaxis may not be appropriate for those patients who are in the terminal phase of their illness. However, we suggest it should be considered for patients with advanced cancer who have two or more of the risk factors outlined.

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### Patients' beliefs about inhaler treatment

Sir,

We should like to report the results of a pilot study that has revealed differences between patients' beliefs relating to symptomatic and preventive inhaler treatment. The study was conducted in one practice (C H's) which has three full-time and two part-time partners and 10 000 patients.

Transcripts of unstructured interviews conducted by C H with a stratified sample of eight patients, each taking both salbutamol and beclomethasone inhalers, were analysed qualitatively.1 Eight themes emerged: positive and negative attitudes to inhaler use, satisfaction with the doctor, ease in obtaining inhalers, perceived benefits of inhalers, concern about side effects, desire for more knowledge about the inhalers and involvement of others in asthma management.

The themes were used to develop a structured interview, where questions relating to the eight areas of interest were answered using five-point Likert scales. Forty patients each prescribed both salbutamol and beclomethasone inhalers were randomly selected for the interview with C H. All agreed to participate. Inhaler use

was defined as the mean number of puffs per day based on the numbers of salbutamol and beclomethasone inhalers ordered in the previous year. Rank correlations between the combined responses to the eight themes and measures of inhaler use were analysed as the variables were not normally distributed.

The results of the correlations are shown in Table 3. Satisfaction with the doctor was correlated with beclomethasone use, as one might expect from a preventive treatment where an element of trust is needed. It would also seem that the inconvenience of collecting an inhaler presents less of a barrier to action where the benefits are obvious (symptom relief) compared with when they are less tangible (symptom prevention).

Although the doctor-patient relationship was one of the three factors that emerged from a study by Sibbald and colleagues,<sup>2</sup> no distinction was made between treatments. Osman and colleagues<sup>3</sup> found that a dislike of asthma medication existed independently of whether the medication was for prophylaxis or relief, but no questions were asked about positive attitudes to using inhalers which appear in this study to have a greater influence than negative attitudes. It is possible that the more detailed exploration of beliefs about the two types of medication conducted in the present study allowed detection of a difference between treatments not found in previous work.

Further work is planned to confirm the key themes and to evaluate interventions for changing misconceptions about inhaler treatment.

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Table 3. Correlation of themes with inhaler use.

	Spearman's rho			
Theme	Salbutamol use (n = 40)	Beclomethasone use (n = 40)		
Positive attitude to using inhalers	0.32*	0.31		
Negative attitude to using inhalers	-0.12	-0.18		
Satisfaction with the doctor	0.03	0.33*		
Ease in obtaining inhalers	0.02	0.22		
Perceived benefits of inhalers	0.26	0.37*		
Concern about side effects of inhalers	-0.30	-0.26		
Desire for more knowledge about inhalers	0.18	0.02		
Involvement of others in asthma management	t -0.04	0.17		

n = number of patients in group. \*P<0.05.

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## Teenage sexual health

We would like to respond to Dr Gardener's interesting reply (March Journal, p.161) to our review article on teenage health.1 He raises several valid points which are worthy of further discussion regarding primary prevention of sexually transmitted diseases and pregnancy in teenagers.

Dr Gardner takes the opposing position to that expressed in our paper regarding a longstanding debate: are teenagers who are exposed to increased sex education likely to become more sexually active? He quotes papers that support his assertion that teenagers will have increased sexual activity, but there are several studies and reviews of the literature which strongly suggest that no such increase occurs.

In their large study of sex education and contraceptive provision in industrialized countries Jones and colleagues conclude that those countries which have easier access to contraception and better sex education provision have lower rates of pregnancy.2 Furthermore teenage Voydanoff and Donnelly, summarizing work in the United States of America, and Hudson and Ineichen, summarizing work in the United Kingdom,4 independently conclude that increased sex education does not lead to increases in sexual activity among teenagers.

Gardner quotes the situation in the Netherlands where the rate of teenage sexual experience is one third that of the UK among those aged 16 years. However, the rates of pregnancy reported at a conference illustrate a success in the Netherlands with a teenage pregnancy rate seven times lower than that in the UK for all teenagers, and 11 times lower for those aged under 16 years. It can only be successful contraception provision and sex education which accounts for the difference in these rates.

The Dutch attribute their success in some part to good communication between general practitioners and teenagers, and a non-judgemental attitude regarding sexual activity as a nation. The conclusions of our review article are based on the hopes that we could apply such