

Exploring factors associated with patients' satisfaction with medication change: a questionnaire survey

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SUMMARY

The recent drive to encourage general practitioners (GPs) to rationalise their prescribing has implications for patients who may have their medication changed. A postal survey of such patients was conducted and it was found that 65% were at least reasonably satisfied with the way they found out about changes in their medication. Logistic analysis showed that patients were more satisfied when they had been told about the change by a GP or a pharmacist or by a letter from the practice.

Keywords: Patient satisfaction; pharmacists; questionnaire; primary care.

Introduction

IN recent years there has been a drive to encourage general practitioners (GPs) to rationalise their prescribing.¹ This process has implications for patients undergoing medication change, yet little attention has been given to issues around patients' views in the literature.

In 1995, a study reported that 44% of patients undergoing prescribing change in a practice that had reduced its prescribing costs, were 'slightly unhappy' or 'very unhappy'.² The main reason for unhappiness was with the communication they received, rather than the change itself.

Given the results of this study, and the increase in pharmacist intervention in general practice, this study aimed to assess patient satisfaction with medication change where a pharmacist was employed to support GPs' prescribing activity.

Method

A postal questionnaire survey of patients who had undergone a change in their medication was carried out. In developing the questionnaire, a previous survey² was taken into account and the comments of pharmacists and GPs involved in the Doncaster Prescriber Support Project.³

The study was conducted in the second year of the Doncaster Prescriber Support Project (September 1997 to August 1998). Eight pharmacists (working with 13 practices) were recruited to help administer the questionnaire. The median list size for these practices was 7390 (interquartile range = 3848 to 8925). The median Townsend scores⁴ were 2.88 (interquartile range = 1.93 to 4.41). The practices included 52 GPs (median = 4), of whom two were single-handed. Six of the practices were fundholding and one was dispensing.

A systematic random sampling technique was used to identify up to 25 patients per practice who underwent a change in medication during a three-month period. The practice pharmacists distributed the questionnaires and reminders were sent to non-responders one month after the initial mailing.

An ordered logistic regression analysis was undertaken to examine the relationship between satisfaction, ranked in ordinal manner (very satisfied, reasonably satisfied, etc.) and a range of variables thought to be related to this. Patients who did not answer all of the questions were excluded from this analysis.

Ethics committee approval was obtained.

Results

The pharmacists issued a total of 314 questionnaires and

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HOW THIS FITS IN*What do we know?*

In 1995, a study reported that 44% of patients undergoing prescribing change in a practice that had reduced its prescribing costs, were 'slightly unhappy' or 'very unhappy'. Interviews suggested that the main reason for this unhappiness was the communication they received rather than the change itself.

What does this paper add?

Our study confirms that the way in which change is communicated is important. Patients were more likely to be satisfied with the way they found out about a change in medication if they were informed by either the GP, a pharmacist or by a letter.



219 (70%) were returned. The mean age of responders was 64 years (standard deviation = 11.8) and 51% were female. There were no significant differences between responders and non-responders in terms of age and sex.

Patients first found out about their change in treatment by a variety of methods (Table 1). It can be seen that 52% (108/206) of patients were told why the change was taking place, 32% (66/207) perceived that they had a choice with respect to the change and 55% (112/204) were given the opportunity to ask questions. Almost 65% (131/203) of patients were reasonably or very satisfied with the way in which they found out about their medication change, and 72% (144/199) were reasonably or very satisfied with the new treatment itself.

Results of the logistic regression analysis (Table 1) showed that satisfaction with the way in which the patients found out about their change in medication was associated with:

- being told of the change by the practice pharmacist, the GP, or by a letter from the practice; and
- the patient feeling that:
 - they had a choice about whether their medication was changed
 - they had been told why the change in treatment was

Table 1. Ordered logistic regression analysis of satisfaction with the way in which responders found out about the changes in their medication and with the medication changes themselves.

Variables	Responders (%)	Satisfaction with finding out about the change $\chi^2 = 110.80$ $n = 171$		Satisfaction with new treatment $\chi^2 = 73.45$ $n = 164$	
		Odds ratio	P-value	Odds ratio	P-value
Constant		159.17	<0.001	3.63	0.07
How the patient was told about the change					
The responder was informed of the change in treatment by the practice pharmacist	46/226 (20.3)	0.24	<0.001	1.52	0.25
The responder was informed of the change in treatment by letter	62/226 (27.4)	0.25	<0.001	0.69	0.21
The responder was informed of the change in treatment by their GP	51/226 (22.6)	0.32	0.01	1.01	0.49
The responder was informed of the change in treatment by phone	9/226 (4.0)	0.34	0.11	0.44	0.14
The responder felt they had a choice about whether their treatment was changed	66/207 (31.9)	0.17	<0.001	0.26	<0.001
The responder was told why there was a change in treatment	108/206 (52.4)	0.36	<0.001	0.48	0.03
The responder was given the opportunity to ask questions	112/204 (54.9)	0.70	0.20	0.83	0.33
Patient characteristics					
Female	111/216 (50.7)	0.43	<0.001	0.42	0.01
Over 65 years old	115/216 (53.2)	0.58	0.08	0.93	0.42
Paid for own prescriptions	41/214 (19.2)	0.83	0.35	1.08	0.43
The patient in relation to the surgery					
The responder always saw the same the same GP when visiting the surgery	112/214 (52.3)	0.17	<0.001	1.14	0.42
The responder often saw the same the GP when visiting the surgery	65/214 (30.4)	0.23	0.02	0.98	0.49
The responder sometimes saw the same GP when visiting the surgery	21/214 (9.8)	0.22	0.03	0.73	0.36
The responder had been coming to the surgery for more than five years	187/214 (87.4)	2.75	0.04	1.07	0.44

Degree of satisfaction ranked in descending order. Therefore, an odds ratio of <1 indicates that the variable was associated with higher satisfaction. To calculate the change in probability of being satisfied at a specific level associated with a change in a dependent variable, the β -coefficient from the ordered regression and the associated threshold or μ -value must be known. As results here have been converted to odds ratios, in the interests of clarity μ -values are not reported. The interested reader can obtain the raw regression results including μ -values on request from the authors.

- taking place
- the degree to which patients saw the same GP when visiting the surgery
- the patient being female.

Satisfaction with the new treatment was associated with:

- the patient feeling that:
 - they had a choice about whether their medication was changed
 - they had been told why the change in treatment was taking place
- the patient being female.

Discussion

This study suggests that patients' levels of satisfaction with medication change are associated with a number of factors. These are potentially important results.

First, they add support to the contention that patients should be involved in decision making. Secondly, if patients are as satisfied with a letter as they are with face-to-face contact, then the former may be a more cost-effective way of proposing medication change to patients.

The study helped to account for various factors when assessing patients' levels of satisfaction with medication change. It was possible to control for potential confounding factors, such as age and sex,⁵ continuity of care by the same GP,⁶ and whether the patient paid for their prescriptions. However, no questions were asked about social class or patients' levels of educational attainment. These may have been important confounders as other studies have shown education and income to effect client satisfaction with services.⁵ Nevertheless, given that the sample was obtained from mainly deprived practices and that most patients were of pensionable age, the variability in these factors is unlikely to have significantly affected the results.

A number of other potential confounding factors could have been included in the multivariate analyses of this survey. These included the different pharmacists, practices, and individual GPs involved in changing patients' medications together with the different types of prescribing change. The reason for not including these variables was that there were too many distinct categories to produce meaningful results. Nevertheless, all practices used a variety of methods for informing patients.

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