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Non-attendance at the colorectal clinic: a prospective audit

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ABSTRACT

INTRODUCTION Non-attendance in the out-patient department has financial costs for the NHS and clinical implications to the non-attender and those awaiting an appointment. The aim of this audit was to quantify the percentage of non-attenders at colorectal clinics in a UK teaching hospital, assess which factors affected attendance, establish why individuals fail to attend and to implement appropriate change.

PATIENTS AND METHODS The number of 'did-not-attend' patients was recorded initially for 686 appointments. Non-attenders were contacted by post or telephone to ask why this was so. The study was then repeated following telephone reminders to 391 patients due to attend clinic. The 'did-not-attend' rates in the two limbs of the completed audit cycle were then compared.

RESULTS The initial study revealed a 'did-not-attend' rate of 21%, with significantly more males than females failing to attend (males, 28.6%; females, 16.9%; $P = 0.001$). The 'did-not-attend' rate was not significantly affected by the day of the week, time of appointment or by the weather. There were 51.7% responses to either the postal or telephone questionnaire regarding non-attendance. Of these, 27.7% did not receive an appointment letter or received it after the appointment. Hospital administration problems were cited as accounting for 34.2% of 'did-not-attends'. In the post-intervention limb, 87 patients (22%) replied to the reminder telephone call, of whom 9 (10%) cancelled their appointment and 78 (90%) confirmed that they would attend. The 'did-not-attend' rate fell to 19.7% although this was not a significant reduction.

CONCLUSIONS Telephoning patients before their appointments is labour intensive and did not significantly improve the 'did-not-attend' rate. Although hospital administration errors account for a significant number of the 'did-not-attends', patients also have a responsibility to notify the hospital if they are unable to attend.

KEYWORDS
Audit – Colorectal clinic – Non-attendance

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Non-attendance at hospital out-patient clinics has been a cause for concern for many years with no simple and cost-effective solution to date. Non-attendance has potentially adverse clinical consequences for the non-attender, other patients who could have benefited from the appointment and financial consequences for the NHS. To overbook each clinic for the estimated number of 'did-not-attends' is not the ideal solution as it fails to solve the first concern and 'did-not-attends' are subject to a degree of randomness. It has been calculated that 15% more appointments than necessary would need to be made to allow for this randomness,[1] which is not a good use of resources. Furthermore, on days where the overbooked patients do attend, this will cause an increase in waiting time in the clinic and will likely breach the Patients' Charter.

The reported 'did-not-attend' rate for inner city out-patient clinics varies from 5.4% to 33%.[2,3] The clinic speciality appears not to be a major factor in non-attendance.[4] Higher 'did-not-attend' rates are found in young males, higher Jarman index (the 'did-not-attend' rate is higher in deprived areas) and with an interval between referral and appointment date of more than 2 or 3 months.[2,5]

The reasons for not attending given by patients range from appointment notice to personal or family problems. Previous studies have reported that 5–20% did not receive the appointment notification, 1% received the appointment after the appointment date, 25% stated they had cancelled and 2% rang to cancel but could not get through.[6,7]

Several authors have tried various methods to reduce the 'did-not-attend' rate. Telephone reminders have significant-

ly reduced non-attendance at endoscopy[8] and after accident and emergency referral to out-patients.[9] Postal reminders and patient confirmation have had success in an orthodontic clinic.[10] A long-term paediatric out-patient study in an inner city hospital reduced the 'did-not-attend' rate from 34% to 12.3%, a significant and impressive reduction. However, several labour-intensive changes were implemented and this certainly does not represent a generally applicable solution. The author, however, concluded that telephone reminders were probably the most important factor.[5] Even so, the telephone calls were made after 5 pm which has personnel and cost-implications.

The aim of this audit was to establish the 'did-not-attend' rate in an inner-city, teaching hospital, surgical colorectal clinic, to contact the non-attenders to discover why they had not kept the appointment and to take action to decrease the 'did-not-attend' rate.

Patients and Methods

The audit was registered with the trust's audit department and ethical approval obtained. The study was carried out as two cycles: the data for both were gathered prospectively. In cycle 1, we established the 'did-not-attend' rate for 686 appointments in early summer (May and June). No clinics were held on Bank Holidays but no other dates were excluded. We also recorded the day of the week, whether the appointment was in the morning or afternoon, the weather on the day of the appointment and the age and sex of the patient. Those who had not-attended in cycle 1 were contacted initially by postal questionnaire to establish why they had not attended. We attempted to contact non-responders by telephone (three attempts, with two after 5 pm) and asked the same questions as were on the postal version.

We repeated the study in cycle 2 but here attempted to contact each patient by telephone in the week preceding their appointment to remind them of the date and time. We directly asked whether the patient intended to attend and cancelled appointments as appropriate. Three attempts were made to contact the patient. If an answer phone was reached, no message was left due to concerns about confidentiality. Although the calls for the purpose of the study were undertaken by junior doctors (two SHOs and one SpR), the majority were made before 5 pm as, if the results showed a significant decrease in 'did-not-attend' rate and the intervention adopted by the trust, the telephoning would probably be allocated to a clerical worker during office hours. We also contacted local general practitioners (GPs) and the accident and emergency department, asking that all referrals contained up-to-date contact details, including a telephone number.

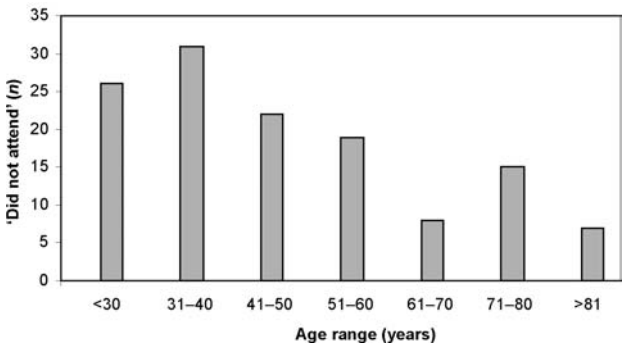

Figure 1 Distribution of 'did-not-attend' patients according to age.

The results were analysed using Arcus Quickstat and Microsoft Excel. The statistical test used was the chi-squared test for proportions in two groups, unless stated otherwise.

Results

Cycle 1

There were 686 appointments with 147 'did-not-attends', giving a 'did-not-attend' rate of 21%. Of these, full data (age, sex, day of week, morning or afternoon appointment, weather) were collected in 565 cases (of whom 128 [22.65%] failed to attend). Unfortunately, in the remaining 123 appointments, full data were not recorded due to absence of the study authors from the hospital site on the clinic days.

Men were significantly more likely to fail to attend than women (28.6% and 16.9%, respectively; $P = 0.0014$) and there was a non-significant (Cuzick's trend test) trend for non-attenders to be younger (Fig. 1).

The day of appointment did not affect the non-attendance rates (Table 1) but it should be noted that no colorectal clinics were held on a Friday.

Similarly, neither the time of appointment (morning clinics 'did-not-attend' rate 23.5% [82 of 349]; afternoon clinics

Table 1 Non-attendance rates as a function of day of appointment

	Number of 'did-not-attends'	Total appointments	'Did-not-attend' rate
Monday	26	101	25.7%
Tuesday	31	163	19.0%
Wednesday	41	158	25.9%
Thursday	30	118	26.4%

No colorectal clinics were held on a Friday.

Table 2 Attendance rates as a function of the weather

	Number of 'did-not-attends'	Total appointments	'Did-not-attend' rate
Raining	2	15	13.3%
Windy/cloudy	6	29	20.6%
Overcast	26	112	23.2%
Sunny/cloudy	33	119	27.7%
Hot and sunny	85	277	30.7%

rate 21.3% [46 of 216; non-significant difference]) nor the weather conditions affected attendance rates (Table 2). On hot, sunny and cloudy days, the 'did-not-attend' rate was 118 of 396 (29.8%) and on overcast and rainy days, the rate was 34 of 156 (21.8%). The difference was not significant ($P = 0.27$, chi-squared test).

QUESTIONNAIRE RESULTS

Of the 147 patients who did not attend, 47 responded to the postal questionnaire (32%). A further 29 were successfully contacted by telephone. The overall questionnaire response rate was thus 51.7%. Of these, 26 (34.2%) stated that they did not attend due to hospital administrative errors (either not receiving the out-patient letter or not being able to cancel the appointment successfully). Only 65.8% stated that they had received a clinic letter in advance of their appointment. Figure 2 shows the reasons stated for non-attendance.

Many respondents stated that a telephone call would have made them more likely to attend, either to check that the patient could attend (25%) or asking the patient to telephone and confirm attendance (10.5%).

We also asked whether English was the patient's first language. Table 3 shows that the majority of the respondents were fluent in English (74.3% stated English was their first language and a further 12.2% stated they were fluent in English); thus, it is difficult to ascribe most non-attendance to lack of adequate translations in the appointment letter.

Cycle 2

The total number of out-patient appointments in this study was 391. On attempting telephone reminders, 25% of patients had no available number either on the hospital system or registered with Directory Enquiries (this was despite our efforts to ensure all referrals contained a contact telephone number). The reply rate was 22% (87 of 391). Of these, 90% confirmed they would attend and we cancelled or re-booked the remaining 10% after the telephone call.

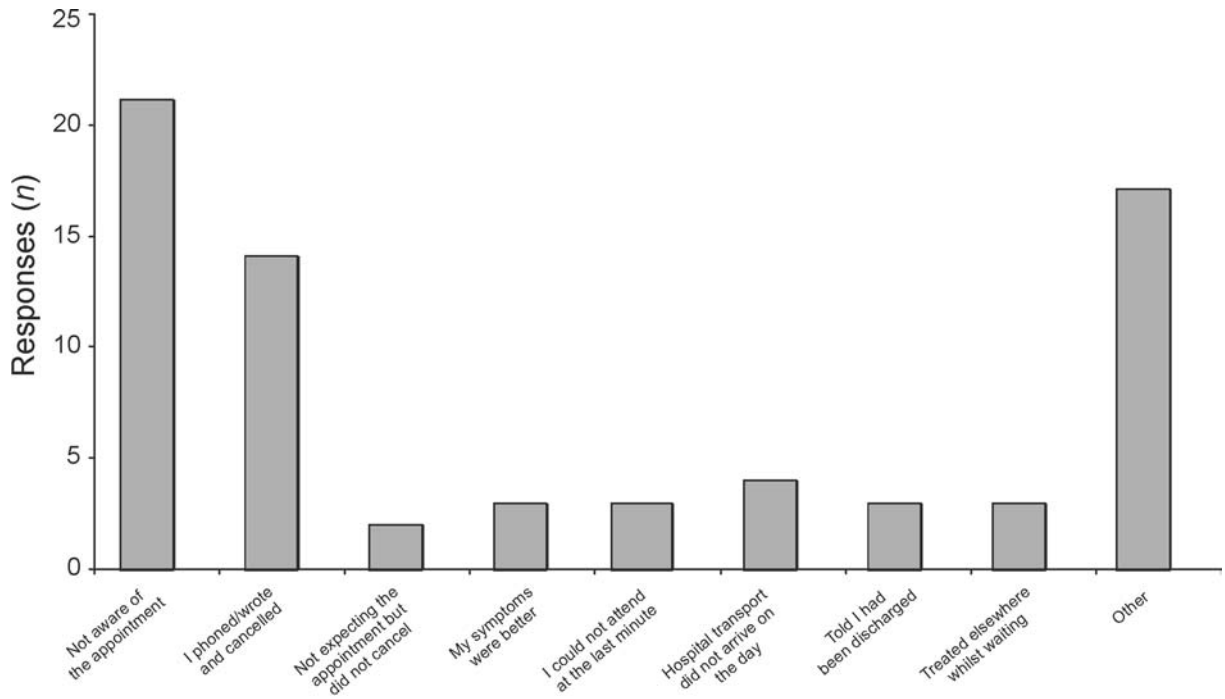

Figure 2 Response when asked why patient did not attend.

Out of the 391 appointments in cycle 2, there were 77 'did-not-attends' (19.69%), a reduction from the previous rate of 21.42% (147 of 686; not significant).

Discussion

The non-attendance rate in this inner city teaching hospital colorectal surgical clinic was within the range found in other studies. Like other studies, we have shown that young men are more likely to 'did-not-attend'. Interestingly, the weather makes no difference to the 'did-not-attend' rate (despite many anecdotal stories of increased non-attendance in extremes of weather).

The day of the week or time of day of the appointment made no difference to the 'did-not-attend' rate, although no Friday clinics were held in the unit under study.

The non-attenders themselves in this study stated that a telephone reminder would make them more likely to attend but this was not borne out by our audit results. Telephone reminders are hindered by lack of accurate details, perhaps due to a mobile city population and by the time needed to telephone patients on such a large scale. Although not tested in this study, it would seem reasonable that telephone calls after 6 pm may be more likely to be answered but this entails employing someone after hours to contact patients. Unless referrals contain current contact details, including a mobile number where possible and trusts are willing to employ the necessary out-of-hours staff, telephone reminders are of little or no use in reducing non-attendance. It may be that those who were contactable by telephone or post were those individuals who kept their hospital details up-to-date, thus perhaps biasing the results against those with poor English who may not be able to respond, cancel the appointment or update their records. We attempted to ensure up-to-date contact details by contacting GPs and the accident and emergency department, but to no avail. Clearly, a policy of telephone reminders requires up-to-date numbers; if all patients had been contactable, the telephone reminders may have had an impact. Perhaps referrals should be returned to the referrer if such details have not been checked and available on the referral letter.

It is clear from this study that many patients do attempt to contact the hospital to cancel appointments they cannot attend and fail to do so (although those who answer the questionnaire may be more likely to have encountered a hospital error whereas those who feel the blame lies with themselves may be less likely to return the questionnaire). Hospitals must address issues such as regularly checking answer phone messages and clearing them to allow space for further messages and ensuring patients know whom to contact should they wish to cancel. Should the cancellation message reach a team member, such as a secretary, not directly involved in out-patient bookings, details of the cancellation must be passed on to the appropriate person. These simple measures may well decrease the 'did-not-attend' rate. It will be interesting to observe whether patient choice of hospital and the choose-and-book system recently introduced reduces the 'did-not-attend' rate. However, it seems likely that the inner city 'did-not-attend' is here to stay unless city populations become more stable and public attitudes to the NHS change. Imposing financial penalties should the patient miss the appointment may encourage attendance but will be subject to the same administration errors discussed above: patients may have tried to cancel the appointment and, thus, be unfairly charged. If contact details are not correct, it is difficult to see how the penalty would be collected. An alternative would be to charge all patients a nominal amount for the appointment which is then refunded on attendance. However, this is likely to discourage some from seeking medical help, particularly those from lower income groups. The onus is on the patient to take a reasonable amount of responsibility for cancelling appointments and on trusts to have adequate administration systems.

Acknowledgement

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