# Reminder letters to improve rate of attendance at Community Mental Health Centre

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#### Abstract

Objective: We carried out a naturalistic study to investigate whether reminder letters would improve the rate of attendance in a community-based mental health outparient clinic

Methods: We prospectively compared the attendance rates between the experimental and control group over a period of 18 months.

Results: The results from this study confirm that reminder letters within a week before the appointment can improve attendance rates in community mental health clinics for follow up patients.

Conclusion: Non-attendance is an index of severity of mental illness and a predictor of risk. The reasons for non-attendance in mental health clinic are complex. More large, well-designed randomised studies are desirable. We also recommend periodic evaluation of outpatient non-attendance in order to identify high-risk individuals and implement suitable measures to keep such severely mentally ill patients engaged with the services.

### Introduction

Non-attendance in outpatient clinics accounts for a significant wastage of health service resources. Psychiatric clinics have high non-attendance rates and failure to attend may be a sign of deteriorating mental health. Those who miss psychiatric follow-up outpatient appointments are more ill with poor social functioning than those who attend (1). They have a greater chance of drop out from clinic contact and subsequent admission (1). Non-attendance and subsequent loss to follow up indicate possible risk of harm to the patient or to others (2).

Prompts to encourage attendance at clinics are often used and may take the form of reminder letters (3), telephone prompting(4) and financial incentives (5). Issuing a copy of the referral letter to the appointee may prompt attendance for the initial appointment (6). Contacting patients by reminder letters prior to their appointments has been effective in improving attendance rates in a number of settings, including psychiatric outpatient clinics and community mental health centres (3).

Studies investigating the efficacy of prompting for improving attendance have generated contrasting findings and non-attendance remains common in clinical practice. We, therefore, carried out a naturalistic, prospective controlled study to investigate whether reminder letters would improve the rate of attendance in a community-based mental health outpatient clinic.

## Design and Methods

The study was carried out at the Community Mental Health Centres based in Runcorn and Widnes in Cheshire, UK. The community mental health team (CMHT) provides specialist mental health services for adults of working age. Both CMHTs are similar in demographics, socio-economic need and, have relatively higher non-attendance rates in the clinic. In the week prior to the appointment, clerical staff from community mental health team sent a standard letter to some patients reminding the date and time of the appointment and name of the consulting doctor. They recorded whether patient attended, failed to attend or cancelled the appointment irrespective of whether they had received a reminder letter or not.

We compared the attendance rates between experimental group (those who had received the reminder letters) and the control group (those who had not received the reminder letters) over a period of 18 months. Throughout the study period, the same medical team held the clinics and there had been no major change in the outpatients' clinic setting or administrative and procedural changes influencing outpatients' attendance. Care Planning Approach (CPA) was implemented and in operation even before the introduction of reminding letters at both the sites.

Attendance rates for all the clinics held during the study period were obtained from medical records. For all subjects who failed to attend, age and gender, was obtained from patients' database. Patients whose appointments were cancelled were also included in the study.

# Statistics and Data analysis

The data was analysed using SISA - Simple Interactive Statistical Analysis (7). Chi -squared tests were used to investigate the attendance rates between the groups, new patients and follow-ups, with the P value for statistical significance set at 0.05. Odds ratios were calculated to measure the size of the effect. In addition, we examined how age and

gender may have influenced the effect of the text based prompting on attendance.

### Results

In the experimental group a total of 114 clinics were booked, with clinic lists totalling 843 patients. Of these, 88 were new referrals and 755 were follow-up appointments. 65 of 114 clinics had full attendance. A total of 228 patients failed to attend the clinic. Of those who failed to attend, 25 patients were new referrals and 203 were follow-up patients. 28 follow up patients and 2 patients newly referred to the team called to cancel their appointments.

In the control group, a total of 71 clinics were booked amounting to a total of 623 patients. Of these, 86 were new referrals and 537 were for follow-up patients. Only 25 out of 71 clinics had full attendance. A total of 211 patients failed to attend. Of those who failed to attend, 32 were new referrals and 179 were follow-up patients. 55 follow up patients and 13 patients newly referred to the team called to cancel their appointments.

Of those who failed to attend in the experimental group, 98 (43%) were women. The mean age of non-attendees was 38 years; with a range of 18-76 yrs .Of those who failed to attend in the control group110 (52%) were women. The mean age of non-attendees was 32 years; with a range of 19-70 yrs.

In our study, failure to attend was not distributed evenly but had seasonal peaks at Christmas and during the summer vacation period.

The outcome from prompting in the experimental group is compared with the control group and displayed in Table 1.

Outcomes	Control group n (%)	Experimental group n (%)	2 (df)	P	OR (CI)
No of clinics with full attendance	25	65	8.32	0.0039	2.44(1.32- 4.50
Total No of Pts attended	344	585	15.05	0.0001	1.57(1.25- 1.98)
No of new Pts attended	41	61	3.743	0.053	1.9 (0.98- 3.67)
No of follow up Pts attended	303	524	11.39	0.0007	1.52(1.19- 1.94)
No of Cancellations	68	30	38.63	0	3.85(2.46- 6.04)

Table 1.  $\chi^2$  = Chi square, df = degree of freedom, OR= Odds Ratio, CI= Confidence Interval

The attendance rate in the experimental group was 71.95% (585/813) as opposed to 56.57% (344/555) in the control group (OR=1.57; p=0.0001).

The attendance rate for new patients in the experimental group was 70.9%( 61/88) as opposed to 56.16 %( 41/86) in the control group (OR=1.9; p=0.053).

The attendance rate for follow up patients in the experimental group was 72.0% (524/727) and 62.8% (303/482) in the control group (0R=1.52; p=0.0007).

In addition, there were significantly more (by 22%) number of clinics with full attendance in the experimental group (OR= 2.44, P=0.003).

The observed difference was not influenced by patient's age or gender.

#### Discussion

The results from this study confirm previous findings that reminder letters within a week before the appointment can improve attendance rates in community mental health clinics. Our results are similar to those of the Cochrane systematic review, which has suggested that a simple prompt in the days just before the appointment could indeed encourage attendance (8).

Although it has been reported elsewhere(8) that text based prompting increases the rate at which patients keep their initial appointments, our study did not show a similar result for new patients.

It is already demonstrated that new patients and follow-up patients in psychiatric clinics are distinct groups with different diagnostic profiles, degrees of mental illness and with different reasons for non-attendance. Follow-up patients are severely ill, socially impaired and isolated than new patients. (1). Forgetting the appointment and being too unwell are the most common reasons given for non-attendance by follow-up patients, while being unhappy with the referral, clinical error and being too unwell are the most common reasons in the new patient groups (1). In addition, it has also been observed that increased rate at which patients keep their first appointments is more likely related to factors other than simple prompting (4) This explains our finding that prompting was more beneficial for follow-up patients as opposed to new referrals to the Community Mental Health Team.

We also identified several patients with severe mental illness who 'did not attend' for three successive outpatient appointments. Their care plans were reviewed and arrangements made to follow up with their community psychiatric nurses as domiciliary visits at regular intervals. Such measures should reduce duplication of the services and shorten

the waiting times for psychiatric consultation, which are well-recognised factors associated with non-attendance (9).

Non-attendance is an index of severity of mental illness and a predictor of risk (1). In addition to reminder letters, telephone prompts are also known to improve attendance (4). Successful interventions to improve attendance may be labour intensive but they can be automated and, ultimately, prove cost effective (8)

We noticed that there is limited research and lack of quality randomised controlled trials in the area of non-attendance and the effectiveness of intervention to improve attendance in mental health setting. More large, well-designed randomised studies are desirable. We also recommend periodic evaluation of outpatient non-attendance in order to identify high-risk individuals and implement suitable measures to keep such severely mentally ill patients engaged with the services.

There was no randomisation in this study and we relied on medical records. We have not directly compared the characteristics of non-attendees with those patients who did attend the clinics. We did not evaluate other clinical and socio-demographic factors (e.g. travelling distance, financial circumstances, etc) that are known to influence the attendance rates in mental health setting. Hence, there may be limitations in generalising the results beyond similar populations with similar models of service provision.

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#### Competing Interests

None declared

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#### REFERENCES

- 1.Killaspy, H., Banerjee, S., King, M & Lloyd, M. Prospective controlled study on outpatient non-attendance. Characteristics and outcome. British Journal of Psychiatry 2000;176:160-165.
- 2.Royal College of Psychiatrists. Steering committee of confidential inquiry into homicides and suicides by mentally ill people: Report of the confidential inquiry into homicides and suicides by the mentally ill people. 1996; London.
- 3.Kluger, M & Karras, A. Strategies for reducing missed initial appointments in a community mental health centre. Community Mental Health Journal 1983,19(2): 137-143.
- 4.Burgoyne, R., Frank, A. & Yamamoto, J. Telephone prompting to increase attendance at psychiatric outpatient clinic. American Journal of Psychiatry 1983; 140:345-347.
- 5.Giuffrida, A. & Torgerson, D. Should we pay the patient? Review of financial incentives to enhance patient compliance. British Medical Journal, 1997: 315: 703-707.
- 6.Hamilton, W., Round, A. & Sharp, D. Effect on hospital attendance rates of giving patients a copy of their referral letter: randomised controlled trial. British Medical Journal 1999; 318(7195): 1392–1395.
- 7.Uitenbroek & Daan, G. Binomial SISA. http://home.claa.net/sisa/binomial.htm, 1997.
- 8.Reda, S. & Makhoul, S. Prompts to encourage appointment attendance for people with serious mental illness. The Cochrane database of systemic reviews.2001; (2): CD002085.
- 9.Gallucci, G., Swartz. & Hackerman, F. Impact of the wait for an initial appointment on the rate of kept appointments at a mental health center. Psychiatric Services 2005; 56: 344-346.