



Can “no shows” to Hospital Appointment be Avoided?

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Abstract

Introduction: Non-attendance is a common source of inefficiency in a health service, wasting time, resources, potentially lengthening waiting lists, increases patient suffering, morbidity and has received little attention. Patient failure to attend hospital outpatient appointments has a significant impact on the ability of hospitals to provide efficient and effective services.

Aim of study to analysis risk factor of non-attendance in a group of patients who are unlikely to attend again.

Method & Material: Prospective study of patients referred to surgical clinics Antrim area Hospital Northern Ireland from April 2017 to August 2017. Survey was a structured on a telephonic interview. Including new referrals from General Practitioners, accident & emergency department, and medical department & review surgical patient's.

Results: Fifty patients contributed to the survey 27 were Female & 23 Male ratio 1.17:1. Age range from 17-89 years, mean age 56. There were total 42 clinics sessions and total numbers of the patients to be seen were 504, only 454 were seen in the out-patient clinics but 50 patients were DNA including 22 new patients, 25 review & 3 referrals from other teams.

Discussion: Many follow-up appointments are sent inappropriately to patients who do not want further attention. This study, indicating how risk factor analysis can identify a group of patients who are unlikely to attend again after one missed appointment, though efforts to improve attendance rates seem appropriate to conserve resources, no definite recommendations can be made on the results of this study. Despite optimizing the operation of the clinic, the non-attendance rate remained unsatisfactory, and comparable to the average. Telephone reminders are a very effective method of increasing attendance in a hospital-based adolescent clinic. The reminder is a consistently effective intervention whether the message is delivered to the patient, to the parent or other family member, or to a telephone answering machine. As there is no identifiable predictor for non-attendance apart from a longer waiting time, any maneuvers or interventions to improve attendance rate are unlikely to be significantly fruitful. A significant improvement in the proportion of patients attending outpatient's appointments can be made by a simple reminder telephone call one to three days after attendance at the ED. The poor compliance with attendance at outpatient clinic appointments in patients referred from Emergency Departments (EDs) is a major problem in public hospitals.

Conclusion: system of telephonic calling by clinic receptionist of all the patients should be made prior to Clinic to overcome the issue of DNA. Patient who were given longer appointments than 2-3 weeks should get an additional reminder either by post, electronic mail, mobile (SMS) text messaging where appropriate which may turn up a suitable means of improving patient attendance.

Introduction

Non-attendance is a common source of inefficiency in a health service, wasting time and resources and potentially lengthening waiting lists. Patient failure to attend hospital outpatient appointments has a significant impact on the ability of hospitals to provide efficient and effective outpatient services. High failure to attend result in suboptimal utilisation of clinical and administrative staff, it also extends the period that patients must wait for an appointment booking. Non-attendance at out patients' clinics also increases patient suffering, morbidity & lengthens waiting lists. Outpatient departments lie at a critical interface between primary care and acute services [1-4]. Increasing pressure to ensure efficient and effective health care delivery has resulted in outpatient departments investigating ways to minimise the number of patients failing to attend their scheduled clinic appointments. Persistent problem worldwide with rates of between 5-39% reported in the literature. Missed appointments affect patients' health in addition to reducing practice efficiency. Objective of this study is to explore the rate and reasons of non-attendance.

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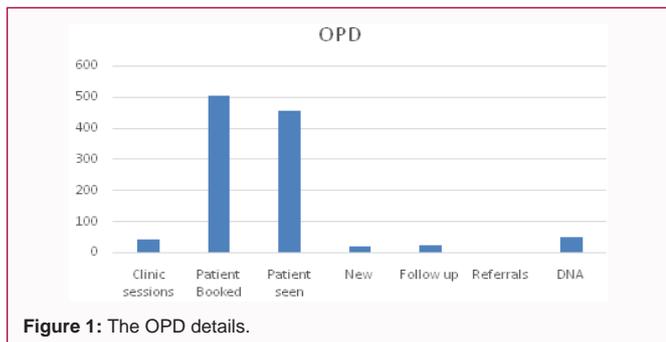


Figure 1: The OPD details.

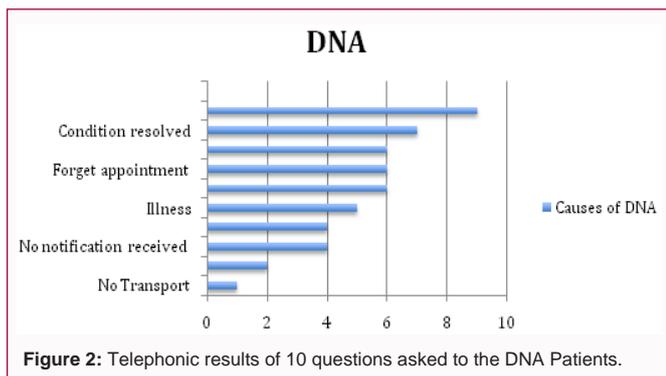


Figure 2: Telephonic results of 10 questions asked to the DNA Patients.

Materials and Methods

Prospective study of patients referred to surgical clinics Antrim area Hospital Northern Ireland from April 2017 to August 2017. Survey was a structured on a telephonic interview including new referrals from General Practitioners, accident & emergency department, and medical department & review surgical patient’s. A missed appointment was defined as a scheduled appointment that a patient did not show up for or come to re-book.

The record of each clinic (DNA) was stored on computer by consultant’s secretaries to retrieve patients’ data & use for rebooking. At the completion of each surgical clinic, the Consultant who carried out this study examined the notes for those patients who did not attend and audit questionnaire was completed in all recruited patients on telephone conversation after their verbal consent. The questionnaire was set up to inquire confirmation of receiving invitation, suitability of appointment, duration, mode of notification, patient related difficulty, cancellation, rebooking, hospital preference & major reason for DNA.

Data Analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS, version 17). Mean values were compared using the Student *t* test. Univariate analysis of categorical variables was performed by the chi-square test.

Results

Fifty patients missed appointment Male 23 and Female 27 ratio 1:1.7. Age range from 17 - 89 years, mean age 56 (Table 1). There were total 42 sessions and total numbers of the patients booked were 504, only 454 attended scheduled appointment 50 patients missed appointment including 22 new patients, 25 review & 3 referrals from other teams, (Figure 1) which means over four clinics time and resources has been wasted due to no show. Cancellations accounted

Table 1: Demographics.

Female	Male	Mean age
27	23	56

Table 2: Patients Factors.

Causes of DNA	
Personal reasons	18%
Condition resolved	14%
Change of address	12%
Forget appointment	12%
Notification & improper timing	12%
Illness	10%
Patient does not think to see	8%
No notification received	8%
Other appointments	4%
No Transport	2%

for 10%, minimum & maximum waiting period was 15 & 90 days respectively and the median waiting period was 51 days, Appointment suitability in terms of day & time was (95%). Wishing to reschedule was (63%). hospital preference was (100%), Causes of (DNA) summarized in (Table 2). Non-attendance was found to be due to a combination of hospital and patient’s factors: faulty communication (21%) condition resolved (14%) patient factors such as forgetting about the appointment (12%) were the primary reasons (Figure 2, Table 2). Clinical speciality, day of the week, the month, availability of transport, was not significantly associated with non-attendance.

Discussion

Increasing pressure to ensure efficient and effective health care delivery has resulted in outpatient departments investigating ways to minimise the number of patients failing to attend their scheduled clinic appointments. Patients who schedule clinic appointments and fail to keep them have a negative impact on the workflow of a clinic in many ways [1]. Missed appointment can lead to worse patient care inefficient use of staff, increased waiting times and waste of NHS resources. In England every year around 1 in 10 outpatient hospital appointments are missed, Failure to keep outpatient appointments is common at all clinics and various explanations may be offered. The missed appointment rate at some hospitals and for some clinics is much higher, missed appointment are reported to vary between clinical specialties and geographical regions [2-4]. While it is difficult to establish the exact financial impact of missed appointments, an estimate by the National Audit Office claimed that missed first outpatient appointments cost the NHS up to £225 million in 2012 to 2013. In 2014 to 2015 around 5.6 million (9% of the total) NHS outpatient appointments were missed in England, according to Quarterly Hospital Activity Data, 2015. Failed appointments at community and university medical clinics have been reported to range between 10% and 30% [5]. As there is no identifiable predictor for non-attendance apart from a longer waiting time, any manoeuvres or interventions to improve attendance rate are unlikely to be significantly fruitful [6]. Persistent problem worldwide with rates of between 5-39% reported in the literature. Similar (DNAC) rates have also been detected in the Australian context. By conducting a prospective comparison of 100 patients who attended their outpatient appointment with 100 patients who did not attend, the major reason

for non-attendance was the patients' opinion about the difficulty in getting to the hospital. Previous non-attendance was found to be the strongest predictor of future (DNAC) [7]. Hospitals often put in place coping measures such as overbooking, but these can introduce their own problems. Many follow-up appointments are sent inappropriately to patients who do not want further attention. This study, indicating how risk factor analysis can identify a group of patients who are unlikely to attend again after one missed appointment, may be a useful model for the reduction of outpatient non-attendance in other specialties [8]. Attempts were made to reduce defaulting rates for new appointments to see a consultant in a general surgical and medical clinic. Despite optimising the operation of the clinic, the non-attendance rate remained unsatisfactory, and comparable to the average. Though efforts to improve attendance rates seem appropriate to conserve resources, no definite recommendations can be made on the results of this study [9]. Telephone reminders are a very effective method of increasing attendance in a hospital-based adolescent clinic. The reminder is a consistently effective intervention whether the message is delivered to the patient, to the parent or other family member, or to a telephone answering machine [10]. The poor compliance with attendance at outpatient clinic appointments in patients referred from emergency departments (EDs) is a major problem in public hospitals. A significant improvement in the proportion of patients attending outpatients' appointments can be made by a simple reminder telephone call one to three days after attendance at the ED [11]. Text messaging reminder system was effective in improving attendance rate in primary care. It was more cost-effective compared with the mobile phone reminder [12]. Patients who had failed to keep their previous clinic appointment were asked the reason for their non-attendance. Many and varied reasons were given but illness (28%), and problems related to appointments (33%) were prominent. They were also asked how they had obtained a further appointment. Stricter follow-up of non-attenders by the hospital including informing the GP, and subsequent GP action if necessary, may improve attendance figures [13]. Using a postal questionnaire to compare the socio-demographic characteristics of non-attenders and attenders is also very important. The main reason given was that they had forgotten about their appointment. Administrative error was the second most frequent category of response explaining non-attendance. Time between notice of an appointment and the way patients received their appointments was associated with non-attendance. Un-kept outpatient appointments reduce clinic efficiency, drain on resources. The explanations for non-attendance by the patients were: forgot to attend or to cancel (30%); no reason (26%); clerical errors (10%); felt better (8%), fearful of being seen by junior doctor (3%); inpatient in another hospital (3%); miscellaneous other (20%). 27% of the review patients had not kept one or more previous appointments. The non-attendance rates for different clinics ranged from 10% to 25% (average 14%). To determine the causes of non-attendance at new outpatient appointments the client factors are less important than aspects of the service in explaining non-attendance at outpatient appointments [14]. A substantial number of non-attenders claimed to have forgotten their appointment or to cancel it. This reflects apathy, no strategy to improve attendance is likely to have great impact. Since the non-attendance rate is reasonably constant, it can be considered when patients are booked [15]. Non-attenders viewed their problem as less serious than attenders [16]. William and Pepper [17]. Reported that DNAs reduce the number of appointment slots in which patients can be served and has the potential to increase recovery time. Lee et al.

[18] reported that the non-attendance of an appointment negatively impacts a patient's recovery time, productivity and learning opportunities. To evaluate the operational and financial efficacy of sending short message service (SMS) text message reminders to the mobile telephones of patients with scheduled outpatient clinic appointments. The observed reduction in (DNAC) rate was in line with that found using traditional reminder methods and a prior pilot study using SMS. The (DNAC) reduction coupled with the increase in patient revenue suggests that reminding patients using SMS is a very cost effective approach for improving patient attendance [19]. The 9.92% DNA rate observed in this study lost opportunities to treat patients. This is in line with the suggestion by Dockery et al. [20] that patient's non-attendance of appointments results in the poor management of clinics, with vacant appointments leading to wasted time, poor utilization of medical, nursing, and clerical staff time; and extended waiting list times because the patients who did not attend are given repeat appointments. From the results of this study, Cancellations accounted for 9.92%, median waiting period was 51 days, the minimum & maximum waiting period was 15 & 90 days respectively. Limitations of the study the rate of DNAs found in this study may have been under or overestimated, the total number of cases in this prospective analysis does not represent the total number of cases seen in the clinic during the study period but the case charts available containing the information required. The results from this study may provide the basis upon which policy relevant to reducing missed appointments and improving access to services can be made. The observed reduction rate to attend clinics was found in line with that using traditional methods, including sending formal invitation letter by post, in some cases well in advance in more than two months & in hand written dates for review clinic in blue booking cards while submitting at reception from previous clinic. However, we recommend that a system of telephonic calling by clinic receptionist of all the patients should be made prior to Clinic to overcome the issue of DNA. Patient who were given longer appointments than 2-3 weeks should get an additional reminder either by post, electronic mail, mobile (SMS) text messaging where appropriate which may turn up a suitable means of improving patient attendance.

Conclusion

Thus, to summarize, this study found that relevant minor post-operative follow-ups may be referred to GP with appropriate information, a system for identifying patients who fail to attend for follow-up. Ensure your practice or clinic has a clear, consistent protocol for making appointments and dealing with missed appointments. Make sure all clinical, reception and administrative staff are familiar with it. Hospital administration should be actively involved to educate patient by displaying pamphlets & erecting wall posters in outpatient area & setting information on line internet.

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