

Patient attendance at a UK dental hospital emergency clinic

S. Nayee,¹ S. Kutty¹ and D. Akintola*¹

IN BRIEF

- Highlights the need for urgent dental care services in areas of high deprivation and poor uptake of dental care.
- Explores factors which encourage patients to seek urgent dental care via secondary/tertiary care providers.
- Highlights the scope for urgent dental care service providers to provide oral health promotion within their clinics.

A questionnaire survey was performed within a dental emergency clinic at a London teaching hospital to determine patients' reasons for attendance and satisfaction with their care. Questionnaires were distributed to all patients registering for the dental emergency clinic over a four week period. A total of 1,058 questionnaires were returned, with an average satisfaction score of 9.3/10. The majority of patients (58%) reported symptomatic dental attendance. Common reasons for irregular attendance were lack of perceived 'need' for care and concerns about cost of care. Patients with irregular attendance were significantly more likely to report their past dental care had been affected by cost than regular attenders. Fifty-one percent of all respondents had tried to make an appointment with a dentist prior to attending the emergency clinic, and 21% of patients with a GDP reporting difficulty accessing urgent care at their practice. Forty-nine percent of patients attending the emergency clinic were referred to oral surgery clinics. Overall, this survey revealed high levels of satisfaction with care in this dental emergency clinic. Patients' reasons for attendance at the clinic can be considered in terms of 'push' and 'pull' factors, deterring them from primary dental care and drawing them into secondary/tertiary care environments.

INTRODUCTION

All UK dental teaching hospitals provide a limited dental emergency service for patients presenting with orofacial pain and/or trauma. The acute dental care (ADC) clinic is a walk-in dental emergency service at King's College Hospital NHS Foundation Trust in South East London, serving an area with high levels of deprivation and low uptake of dental care.^{1,2} The clinic is one of the busiest dental emergency clinics in a UK dental teaching hospital, providing care for approximately 18,000 adult patients each year. The ADC department is classified as a Type 2 accident and emergency (A&E)/emergency department (ED) by the trust (Table 1), and is required to meet the four-hour target applicable to all EDs in England.³ This Department of Health (DoH) target stipulates that 95% of patients attending an ED must be seen, treated, admitted or discharged in under four hours.

The ADC clinic operates a walk-in service available from Monday–Friday between 8.30 am to 4.30 pm. The majority of patients attend as self-referrals, whilst

a small proportion of patients are referred to the service by general dental practitioners (GDPs) and other health professionals. Patients attending ADC can receive temporary restorative treatment such as dressings/temporary fillings; undergo dental extractions in Oral Surgery clinics; and access other specialist services if there is an urgent medical indication. Other specialist services cannot be accessed without a referral letter from a GDP. All patients attending ADC are triaged upon arrival and those not requiring urgent care are directed to appropriate primary care services.

The ADC department has numerous responsibilities encompassing both education and service delivery. These include: chair-side teaching to final year dental undergraduate students; provision of emergency dental treatment to the local community; and recruitment of patients for dental undergraduate treatment clinics and trainee dental hygienist/therapist clinics. The majority of patients are

examined and treated by final year dental undergraduate students and dental core trainees, with supervision provided by specialty dentists, clinical tutors (part-time GDPs) and a consultant who has overall responsibility for the department.

AIM

The aim of this survey was to: (1) identify patients' reasons for attending the ADC department, including key barriers to accessing routine and emergency care in primary dental care; and (2) determine patients' levels of satisfaction with their care in ADC.

METHOD

The data were collected prospectively using a questionnaire survey (Appendix 1 in online supplementary information). A total of 1708 consecutive patients received a copy of the questionnaire whilst registering to be seen in ADC, with return of the completed questionnaire upon discharge from the clinic.

Table 1 Types of A&E departments³

Type 1 A&E department	A consultant-led, 24-hour service with full resuscitation facilities and designated accommodation for the reception of accident and emergency patients.
Type 2 A&E department	A consultant-led, single specialty accident and emergency service (eg ophthalmology, dental) with designated accommodation for the reception of patients.
Type 3 A&E department/ Type 4 A&E department/ urgent care centre	A type 3 department may be doctor led or nurse led. It may be co-located with a major A&E or sited in the community. A defining characteristic of a service qualifying as a type 3 department is that it treats at least minor injuries and illnesses (for example, sprains) and can be routinely accessed without appointment.

¹Kings College Hospital, Denmark Hill, London, SE5 9RW
*Correspondence to: Mr Dapo Akintola
Email: dapoakintola@nhs.net

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Patients requiring dental extractions (either under local anaesthetic or local anaesthetic with intravenous sedation) completed the questionnaire following completion of their care in ADC, prior to provision of treatment within oral surgery clinics. All questionnaires were anonymous.

The questionnaire comprised a mixture of quantitative and qualitative questions, including previously validated questions from the Adult Dental Health Survey 2009.⁴ The information collected included specific dental complaints, past dental history and dental anxiety levels, assessed using questions from the modified dental anxiety scale.⁵ Patient satisfaction was assessed using a satisfaction scale from 0–10 (0 = not satisfied with care; 10 = very satisfied with care).

The questionnaire was piloted for one week in February 2014 and modified following feedback from patients and staff. The definitive survey was conducted for four weeks in March 2014. Descriptive statistical analysis was performed using Microsoft Excel and further statistical analysis (chi-square testing for association) was performed using SPSS (Version 22).

RESULTS

In total, 1,058 completed questionnaires were collected, achieving a response rate of 62%. The average patient satisfaction score for all patients was 9.3 (maximum score of 10). Approximately 51% of respondents were female, with the most common age category 25–34 (Fig. 1). The most common single ethnic group was White British (28%), although overall the respondents were ethnically diverse, with approximately 40% of respondents self-identifying as being of Black Caribbean/African/other ancestry and 7% of respondents self-identifying as being of Asian Indian/Pakistani/Bangladeshi/Other ancestry (Fig. 2).

Approximately one third of respondents had travelled between 20–40 minutes to reach ADC, suggesting that they were local residents or workers, although 15% reported travelling more than one hour to attend the clinic.

Whilst the majority of respondents (59%) reported that they have a dentist, only a minority of all respondents (18%) attended the dentist for regular check-ups. Women were significantly more likely to state that they have a dentist ($p = 0.003$) and were also more likely to report a history of regular dental attendance ($p < 0.001$). Overall 58% of respondents reported only attending the dentist when having problems with their teeth, whilst 3% reported they had never been to the dentist before.

Amongst all respondents who had previously been to the dentist, 26% had not seen a dentist for more than 24 months. Amongst

this subgroup of patients, the most common reasons cited for non-attendance in the last 24 months were: not needing to go to the dentist (32%); fear of the dentist (27%); and concerns about the cost of care (23%). Overall, 47% of all respondents reported that they had delayed dental treatment in the past due to the cost of dental care. However, respondents with irregular dental attendance patterns were significantly more likely than regular attenders to report that the cost of dental care had caused them to delay dental treatment ($p < 0.001$) (Fig. 3), or affected the type of treatment they had received in the past ($p < 0.001$).

The majority of respondents had self-referred to ADC (88%). Amongst the 12% of patients referred to ADC, the majority were referred by GPs with only a small number of patients referred by general medical practitioners. Approximately 51% of respondents

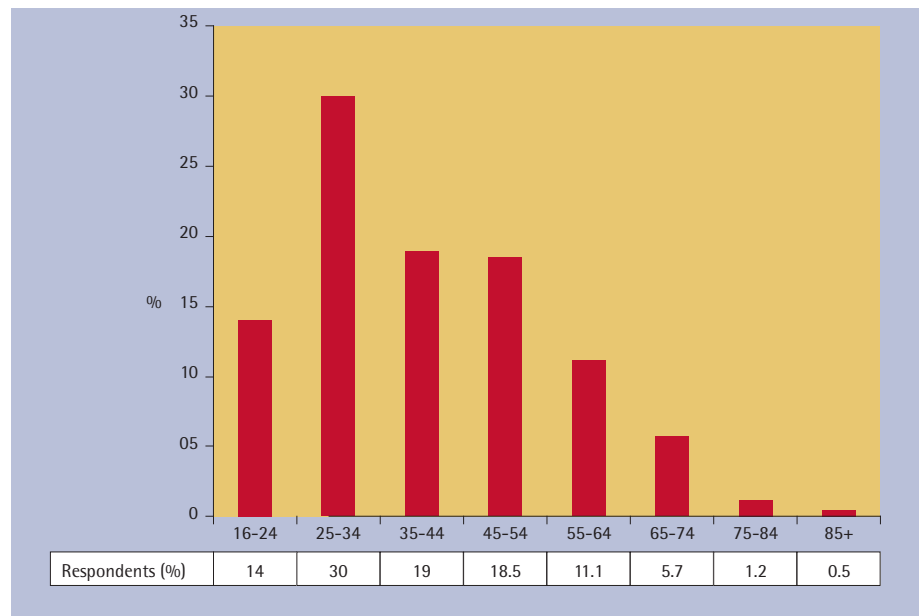


Fig. 1 Age profile of respondents

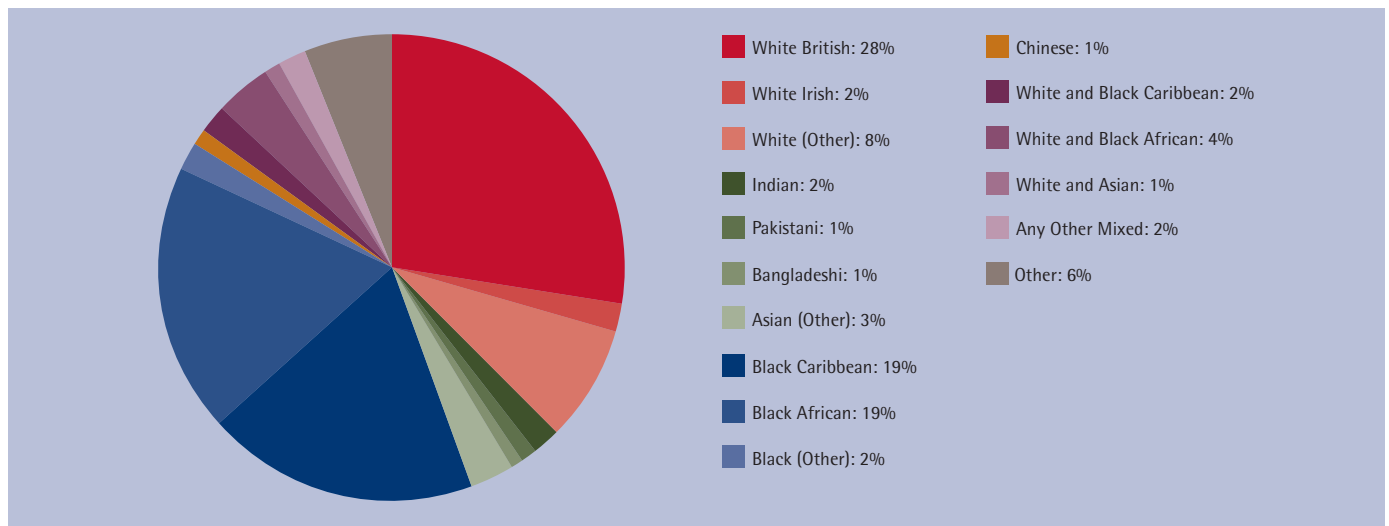


Fig. 2 Self-reported ethnic background of respondents

had attempted to make an appointment with a dentist before attending ADC, with women significantly more likely to have tried to make an appointment than men ($p = 0.013$). Amongst respondents with a dentist, 21% reported difficulty accessing urgent/emergency appointments at their practice.

Pain was the most commonly cited reason for attending ADC (73%), although 26% of respondents reported intra-oral or extra-oral swelling. Patients reporting facial swelling were significantly more likely to have tried to make appointment with a dentist before attending ADC ($p = 0.025$), and were also more likely to report anxiety about simple dental treatment, such as a scale and polish ($p = 0.026$).

The most common treatment outcome was referral to the department of oral surgery for dental extractions (49% of all respondents).

Within this subgroup of patients referred to oral surgery, 72% underwent extractions performed by supervised undergraduate students, where 60% received treatment under local anaesthetic alone and 12% received treatment under local anaesthesia with intravenous sedation with midazolam (Fig. 4). Approximately 9% of all respondents did not require any operative intervention or treatment, having been fully assessed by a clinician.

DISCUSSION

The ADC department provides emergency dental care within a tertiary care environment, where supervised undergraduate dental students provide the majority of patient care. There is high demand for the services provided by ADC, with 1,708 patients seen by the clinic over a four-week period.

This survey has shown that the clinic treats a high proportion of young adults, from ethnically diverse backgrounds, reflecting the demographic profile of the local population.⁶ In common with previous studies of urgent care dental services the majority of patients appear to be local residents or workers.⁷

We report high levels of patient satisfaction amongst our respondents (average score 9.3/10), mirroring previous studies of dental hospital emergency care facilities.⁸ However, this satisfaction score should be considered in the context of some caveats. Firstly, it is acknowledged that respondents dissatisfied with their care may have been less likely to complete the survey than those who were satisfied with their care. Secondly, this score reflects patient satisfaction for care provided in ADC rather than oral surgery clinics, where dental extractions were performed. Finally, it is noted that this survey did not record whether patients were seen in ADC by staff members or supervised undergraduate students. It is possible that the grade of the treating clinician might have affected respondent satisfaction levels. However, the majority of care within ADC is provided by supervised undergraduate students, and the findings of this survey therefore primarily reflect satisfaction with undergraduate care.

This survey also provides insight into why patients might choose to attend services such as ADC, including irregular dental attendance, concerns about the cost of treatment and dental anxiety. A high proportion of respondents in this study described irregular or symptomatic dental attendance, with 30% of patients reporting they had never seen a dentist before. Only 18% of patients in this survey reported regular dental attendance, in contrast with 61% of dentate adults in the general population.⁹ The most common reason for irregular attendance was lack of perceived 'need' for dental care. These findings are suggestive of poor awareness of preventive dental care amongst this cohort of patients. One implication of this finding is that emergency dental care facilities may represent a key source of oral health information for patients who otherwise have little interaction with dental care professionals, or have never seen a dentist before. There may be substantial scope for emergency dental care facilities to promote uptake of primary dental care services amongst this otherwise 'hard-to-reach' group of patients. Of course, enhancing the scope of emergency dental care services in this manner must be considered in the context of current pressures on these services. The ADC department reaches capacity on a daily basis, with increasing demand for its services each year.

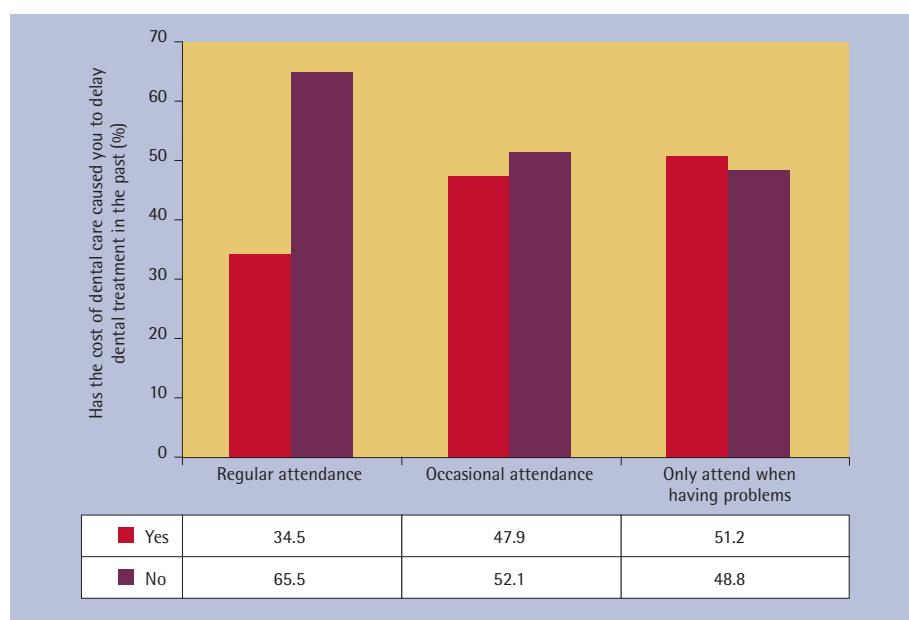


Fig. 3 Dental attendance pattern and cost-related delayed dental care

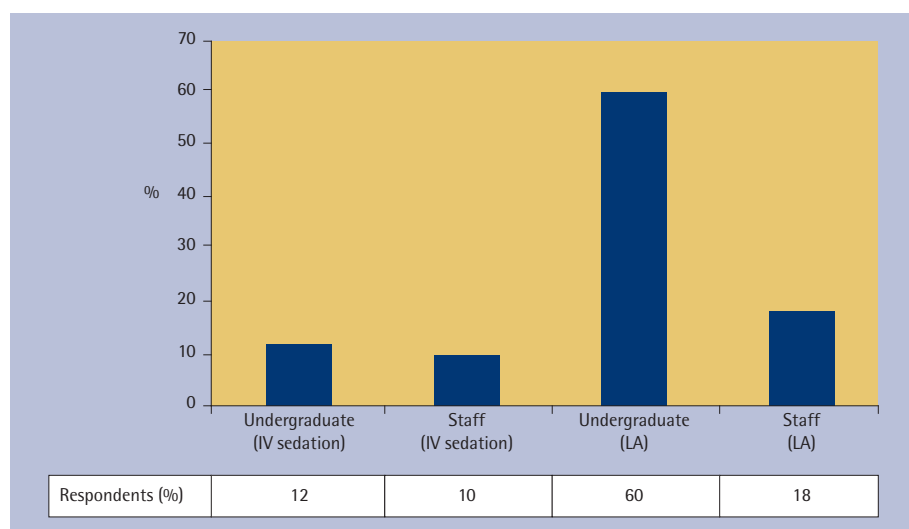


Fig. 4 Clinic destinations of respondents referred to department of oral surgery for dental extraction

High demand for dental treatment in ADC may in part reflect limited access to emergency dental treatment in primary care, an important consideration with respect to future dental contract reforms. Exploration of the availability of emergency dental services in primary care is beyond the scope of this article, although the findings of this survey are suggestive of difficulties accessing care, as 51% of respondents had tried to make an appointment with a dentist prior to attending ADC. This survey has revealed additional barriers, such as cost and dental anxiety, which may deter or 'push' patients away from seeking emergency treatment in primary dental care. Whilst it is acknowledged that these barriers have been widely reported in the dental literature, it is nevertheless striking that 47% of patients in this survey reported delaying dental treatment due to the cost of care, compared with 19% of adults in the general population, a finding that might reflect high levels of deprivation within the local community.^{1,9} Moreover, amongst patients who had not seen a dentist for two or more years, 'fear' of the dentist was the second most commonly cited reason for not seeking dental care. In addition, patients with facial swelling reported significantly higher levels of dental anxiety about simple dental treatment than those without swelling, suggesting that anxiety might be a contributory factor in delaying dental treatment. These findings are in accordance with the Adult Dental Health Survey 2009, which demonstrated a relationship between high dental anxiety status and higher prevalence of urgent dental conditions.⁹ These barriers to care must be considered if we are to succeed in promoting regular dental care in this community, and similar communities.

An alternative argument is that patients themselves may give preference to treatment in ADC over primary care. Patients are able to receive same-day dental extractions in the oral surgery undergraduate clinics and in light of concerns about the cost of dental care, the opportunity to receive emergency dental treatment without associated NHS or private dental fees may also draw some patients to ADC. Moreover, the possibility of recruitment to dental undergraduate restorative clinics may be an additional 'pull' factor encouraging patients to attend ADC.

Finally, the presence of this emergency clinic may in itself discourage provision of emergency dental treatment in local primary care services. Awareness of the availability of a walk-in service may prompt some primary care providers to encourage patients to attend ADC, with anecdotal evidence that some patients receive an 'informal' referral to ADC from their GPs. This may be due to reluctance to perform oral surgery procedures in primary care, with suggestions that young practitioners have limited exposure to these procedures during their undergraduate years and foundation training.^{10,11} There are also concerns about unsatisfactory remuneration for these procedures in primary care.¹⁰ Certainly, our survey has highlighted that much of the pathology encountered in ADC is sufficiently routine for undergraduate dental treatment, with referral to undergraduate oral surgery clinics the most common treatment outcome for our patients.

CONCLUSION

In summary, this article has demonstrated that services such as ADC are popular with patients, with high satisfaction levels recorded in this survey. Patients are likely to

seek treatment in ADC due to a mixture of 'push' and 'pull' factors, with barriers such as lack of appointments, cost and dental anxiety 'pushing' patients away from emergency treatment in primary care, and the opportunity to have immediate, fee-free treatment drawing patients to services such as ADC. These factors should be considered when planning for provision of emergency dental care in future dental contract reforms.

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