Student evaluation of clinical outreach teaching in Community Special Care Dentistry

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Abstract

Aim: To describe the content of an outreach teaching programme in Community Special Care Dentistry (CSCD) and assess the students’ feedback. Design and subjects: The content and operational arrangements of the outreach programme are described. A random sample of 120 student evaluation sheets from a three-year period was analysed for recurring comments. Information collected on student attendance and number and type of patients seen were also reviewed. Results: A high attendance rate was noted throughout the three-year period. An average number of six patients was seen by each pair of students, per day. The percentage of special care patients as opposed to vulnerable (high caries) groups increased each year. The majority (81%) of student evaluation forms had positive comments only, with the most commonly recurring items being the tutors’ skills, the chance to get an insight into CSCD and the range of patients treated. Conclusion: The programme has been both well attended and received by students. There are inevitably, limitations on extrapolating this information, based as it is, on students’ perceptions.

Keywords: Outreach, teaching, Special Care Dentistry, students, feedback

Introduction

The shortage of NHS dental care has been well documented (Gorham and Galloway, 2000; Boulos and Phillpps, 2004; Department of Health, 2004). The government has responded by pledging an increase in the number of NHS dentists. Part of this plan is an increase in the number of undergraduate places. With pressure being placed on the dental schools to accept more student numbers, there is the potential for greater utilisation of clinical outreach teaching. The UK General Dental Council states in its document ‘The First Five Years’ that “outreach teaching can potentially broaden the base of available clinical material and enhance the educational experience” (General Dental Council, 2002). It goes on to suggest that suitable locations will include approved community dental clinics.

The advantages of outreach teaching have been documented. Skelton et al. (2001) stated that they felt that community-based field experience provides students with an immersion experience into the professional community they will be entering that cannot be replicated within an educational institution. Elkind (2002) concurred with this view, and went on to suggest that as well as the students gaining from the experience, the dental school enhances links with their local community and can gain an opportunity for research. In return, the host organisation is offered a link with an academic centre, providing an opportunity to develop local service provision in a seamless way across the community and hospital interface. Cross et al. (1996) have documented a number of benefits for those students attending outreach teaching including a positive impact on self-confidence, motivation, skill development, clinical competence and decision-making. Other authors (Kiyak and Brudvik, 1992; Kuthy et al., 2005) report similar findings with improving confidence in the management of older patients and a willingness to treat special care patients as a consequence of such programmes. However, Bailit (1999) concluded that cautious optimism should be applied to community programmes in dental education, mostly because of the paucity of available evidence.

The Department of Community Special Care Dentistry (CSCD) of King’s College London Dental Institute initiated a programme of clinical outreach teaching in 2002.
This has been in operation for three years. This programme complements the course designed by the Department of Sedation and Special Care Dentistry (Boyle, 2005). It offers the opportunity to undergraduates to gain experience in treating patients in need of special care, thus giving them confidence to manage such patients in the primary care setting (Joint Advisory Committee in Special Care Dentistry, 2003).

The aims of this paper are to describe the course content and the operational arrangements involved in setting up a clinical outreach teaching programme in Community Special Care Dentistry and to identify through the students’ feedback how teaching Special Care Dentistry in a community setting was received.

The Community Special Care Dentistry Course at King’s College London Dental Institute and the clinical experience

The Community Special Care Dentistry course at King’s College London Dental Institute started in September 2002 and runs annually. It was set up and organised by the Head of Community Special Care Dentistry who is responsible for the running of the community dental clinics. Prior to this date (between October and December 2001) a small number of fifth year students were allocated to community dental settings, to observe the care of patients. The feedback was very positive and the recommendation made by those who attended for observation was to provide hands-on experience. This teaching opportunity was then extended to the full student year, now forming an important part of the student’s undergraduate education.

**Aim of the course**

To introduce the student to the concept of Special Care Dentistry in the community setting.

**Course objectives**

By the end of the sessions the student should:
- Understand the concept of Special Care Dentistry in the community as opposed to a hospital setting
- Understand which types of patient require such care
- Understand the importance of, and be able to complete records including a good medical history
- Understand how to plan care for patients seen in the community dental settings
- Have knowledge of cross infection, consent and confidentiality issues
- Gain experience of providing care in the community setting in conjunction with a senior clinician
- Be able to work as part of a team.

**Course format**

The course is delivered in two stages:

- **Stage I**: Two lectures entitled ‘Introduction to Community Special Care Dentistry’ are delivered at the outset of the course, in September at the start of the fifth and final year.

The following points are covered in the lectures: Aim of clinical outreach visit; Role of Community Special Care Dentistry; Types of patients seen in the community setting; Importance of team approach; Infection control; Medical history taking; Consent; Confidentiality; Treatment planning; Treatment modalities; Importance of good timekeeping when visiting the clinics; Importance of reporting to CSCD offices if unable to attend; Importance of professional conduct.

A handbook is given to the student at the end of the second lecture. This includes the timetable, address and map of clinic locations.

Stage II consists of a one-day clinic visit. This occurs between September and February each year over four days per week, accommodating two students per day (a total of eight students per week). This is organised as follows: The students are allocated to one of the three clinics where special care patients are seen. The types of patients to be seen by the students are assigned to eight categories which have been devised during a teachers’ meeting and piloted over a period of three months, to ensure that they were appropriate and easy to interpret. These categories are: Vulnerable children; Phobic/uncooperative children; Children with special needs; High risk groups (all ages); Adults with special needs; Patients with complex medical histories; Phobic/nervous adults; Emergencies.

All clinics have two surgeries. Students are organised to attend in pairs to provide peer support. Students work in one surgery in pairs with one providing treatment and the other acting as assistant. A dentist or hygienist works in the second surgery while a senior clinician is supervising the students in the first surgery. Patients are reminded of their visit 2–3 days in advance.

On the day, the students arrive at 8:50am and the first patient is booked at 9:30am. During this time the students prepare for the morning session by reading the clinical notes in advance to see what is to be done and prepare themselves prior to the patient arriving in the surgery. Consent is obtained by the senior clinician for students to examine/treat patients under supervision. A dental nurse is available to assist with very difficult patients and with location of equipment and materials.

The staff involved in the teaching programme are also demonstrators in the Department of Primary Dental Care in the Dental Institute, one day per week. A fourth senior clinician is available to ensure that the teaching programme can be delivered in the event of sickness absence of a teacher. If a session has to be cancelled, the students are notified in good time and reallocated. At the end of each clinical day, all students are asked to write a reflective essay. In order to ensure anonymity the students are asked to exclude from their essays any information about their identity or that of the clinic or the teachers.

The clinician explains to the students what to do,
Table 1. Number of students who attended the outreach community dental visit

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of students attended</th>
<th>Number of students who failed to attend</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–2003</td>
<td>120 (94%)</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>2003–2004</td>
<td>123 (88%)</td>
<td>17 (12%)</td>
</tr>
<tr>
<td>2004–2005</td>
<td>124 (94%)</td>
<td>8 (6%)</td>
</tr>
</tbody>
</table>

Table 2. Types of patients seen by students per year of outreach teaching

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerable children*</td>
<td>95 (27.2%)</td>
<td>88 (22.0%)</td>
<td>38 (10.0%)</td>
</tr>
<tr>
<td>Phobic/uncooperative children</td>
<td>48 (13.7%)</td>
<td>38 (9.5%)</td>
<td>11 (2.9%)</td>
</tr>
<tr>
<td>Special care children</td>
<td>13 (3.7%)</td>
<td>26 (6.5%)</td>
<td>21 (5.5%)</td>
</tr>
<tr>
<td>High risk groups (all ages)</td>
<td>91 (26.1%)</td>
<td>92 (23.0%)</td>
<td>68 (18.0%)</td>
</tr>
<tr>
<td>Special care adults</td>
<td>31 (8.9%)</td>
<td>49 (12.2%)</td>
<td>111 (29.2%)</td>
</tr>
<tr>
<td>Patients with complex medical history</td>
<td>49 (14.0%)</td>
<td>78 (19.5%)</td>
<td>107 (28.2%)</td>
</tr>
<tr>
<td>Phobic/nervous adults</td>
<td>15 (4.3%)</td>
<td>22 (5.5%)</td>
<td>14 (3.6%)</td>
</tr>
<tr>
<td>Emergencies</td>
<td>6 (1.7%)</td>
<td>7 (1.7%)</td>
<td>9 (2.3%)</td>
</tr>
<tr>
<td>Total number</td>
<td>348</td>
<td>400</td>
<td>379</td>
</tr>
</tbody>
</table>

* Children with a mean decayed component of dmf > 3

Results

Table 1 shows the number of students who attended in each academic year. Ninety four per cent, 88% and 94% attended in the years 2002–03, 2003–04 and 2004–05, respectively. The total number of patients seen by the students in each academic year were 348, 400 and 379 for the years 2002–3, 2003–4 and 2004–5, respectively, with an average of six patients seen per student pair.

Table 2 identifies the types of patients seen by the students in each of the years. In 2002–03, 95 (27.2%) of patients seen were vulnerable children. This number reduced in 2003–04 to 88 (22%) and in 2004–05, to 38 (10%), while the special care patients increased in each successive year (72.8%, 78% and 90%, respectively).

Student feedback from evaluations

A random sample of 120 essays (one third of the total) was selected from all three years of outreach teaching and content-analysed for recurring items. The items were chosen following the three-month pilot study (October–December 2001) examining similar essays from the fifth year dental students, who had attended during this period. Thirty items emerged, each of them identified as ‘positive’ if they suggested satisfaction, and ‘negative’ if they reflected programme deficiencies and a need for improvement.

A review of comments was performed by a dental public health specialist who transcribed the selected essays into items and produced tables based on the collected data. In order to increase reliability and reduce bias introduced by the specialist’s interpretation, a 10% sample of the essays were transcribed by a non-participating teacher from King’s College London Dental Institute. The analysis demonstrated a high degree of agreement between the two teachers. Tables 3 and 4 demonstrate the most frequently occurring comments (positive and negative) as well as the number and percentage of students who had included that comment in their evaluations.

Positive comments

Of the 120 evaluations analysed, 97 (81%) had positive comments only. The most commonly recurring comments are shown in Table 3. Other comments were:

- “Had the chance to see the real world outside the hospital”
- “Alleriated prejudices”
- “Was taught how to communicate with medical colleagues, how to write letters and reports”
- “Will consider career in special care dentistry”

Criticism/negative comments

Twenty-three of the evaluations analysed (n = 120, 19%) had some criticism or negative comments on the outreach programme. The most commonly recurring comments are shown in Table 4. Other comments were:

- “Did not carry out much treatment”
- “Facilities could improve”
- “Should have come as a pair” (this comment was made when one of the two students did not attend).
Table 3. Positive comments by students – number and percentage of students including each comment

<table>
<thead>
<tr>
<th>Comments</th>
<th>No. of students</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor/dental team with excellent skills and expertise</td>
<td>51 (42%)</td>
<td></td>
</tr>
<tr>
<td>Gained insight into Community Special Care Dentistry</td>
<td>45 (37%)</td>
<td></td>
</tr>
<tr>
<td>Saw a wide range of patients</td>
<td>36 (30%)</td>
<td></td>
</tr>
<tr>
<td>Would like further exposure/more sessions</td>
<td>34 (28%)</td>
<td></td>
</tr>
<tr>
<td>Gained skills in management of patients with special needs</td>
<td>32 (26%)</td>
<td></td>
</tr>
<tr>
<td>Exposure to types of patients not seen before</td>
<td>31 (26%)</td>
<td></td>
</tr>
<tr>
<td>Valuable learning experience</td>
<td>22 (18%)</td>
<td></td>
</tr>
<tr>
<td>Enjoyed the “hands-on” aspect of the day</td>
<td>17 (14%)</td>
<td></td>
</tr>
<tr>
<td>Well-organised day</td>
<td>11 (9%)</td>
<td></td>
</tr>
<tr>
<td>Dealt with patients, not just dental conditions</td>
<td>10 (8%)</td>
<td></td>
</tr>
<tr>
<td>Improved cross infection awareness</td>
<td>8 (6%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Negative comments by students – number and percentage of students including each comment

<table>
<thead>
<tr>
<th>Comments</th>
<th>No. of students</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of clarity in directions/unclear map/difficulties with transport</td>
<td>10 (8.0%)</td>
<td></td>
</tr>
<tr>
<td>Not wide enough range of patients seen</td>
<td>6 (5.0%)</td>
<td></td>
</tr>
<tr>
<td>Lack of lunch-break/too intense</td>
<td>2 (1.6%)</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

The clinical outreach experience in Community Special Care Dentistry has been running for three years (2002–2005) and, on the whole, has been viewed favourably by the students. This finding is supported by others (Holloway et al., 1977; Blinkhorn, 2002; Lennon et al., 2004). Whilst attendance is compulsory, some students fail to attend such teaching sessions. However, in each year, nearly all the students attended the clinics. The average number of patients seen per pair of students, per day, was six. This compares favourably to the average number seen in a hospital setting where four patients are booked per day.

The categories of patients seen by the students indicate that since the inception of the teaching programme the numbers of vulnerable children seen decreased. These are the children with high decay rates mainly from lower socioeconomic backgrounds. While they are not strictly under the category ‘special care’ they offer the students the opportunity to practice their behaviour management skills, as many of these patients have not received dental treatment before. In each successive year, the number of special care patients seen (children and adults) increased, reflecting the increasingly specialist nature of the service.

The students’ comments, on the whole, were positive. They enjoyed the experience, they were able to treat this category of patient for the first time and some stated that, if anything, the experience was not enough. Not all the students saw exactly the same patient mix. This would not be possible as the department is responsible for delivering a clinical service to the local population and the clinics are scheduled to meet this need. The teaching programme has been organised around this. The common factor however, was the need to provide special care to these patients.

One of the negative comments cited was: “did not carry out much treatment”. The reason for this was the need to carry out initial assessments. Clearly, what the students enjoy most is treatment of special care patients. Again, it is not possible to provide treatments only, during a one-day visit. A way to improve this would be to accommodate each student for six, one-day visits, giving them the opportunity to assess and treat patients and complete treatments. This however would require additional resources.

One of the positive features of this programme has been the close contact with the Department of Primary Dental Care within the Dental Institute. The fact that the teachers supervise students in their fourth and fifth years for one day per week within the Institute, allows the students to get to know the teachers while at the same time the teachers are kept up to date with the academic matters of the Dental Institute.

Conclusion

The clinical outreach teaching programme of CSCD has been running for three years. The students find this experience mostly useful, while the staff are able to keep up to date through the teaching rotation with the Dental Hospital. Our findings indicate that clinical outreach teaching in Community Special Care Dentistry has on the whole been a positive experience for the fifth year students and the staff at King’s College London Dental Institute.

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References


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