Medical Education

Training needs of postgraduates in dental general anaesthesia

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Abstract

Questionnaires given to 25 dentists and eight doctors attending a course on dental general anaesthesia showed that only four of the eight doctors had a diploma in anaesthetics. One of the doctors and eight of the dentists had had no postgraduate instruction in anaesthesia. More short courses of postgraduate instruction should be provided and some of these should be designed for the team of dental operator, anaesthetist, and dental surgery assistant.

Introduction

Criticism is often made of the standards and training of general medical and dental practitioners who practise outpatient anaesthesia. General dental practices in the National Health Service in Salford (population 242 000) provided about 7000 dental general anaesthetics in 1982. The Salford dental advisory committee decided to find out how many of these anaesthetics were given by persons other than consultant anaesthetists and how much postgraduate training should be arranged and offered to the doctors and dentists concerned.

Methods

A questionnaire was sent to all dentists in Salford asking if they provided general anaesthesia in their practices and, if so, who gave it and in what numbers. Dentists, it was found, administered one third of all anaesthetics.

A one day refresher course covering a wide range of interests was agreed to by the regional medical and dental postgraduate committees. Subjects covered included cardiopulmonary resuscitation, equipment for dental anaesthesia, pharmacology of anaesthetic agents, history taking and selection of patients, techniques of anaesthesia, sedation, and an overview of dental anaesthesia. All family practitioner committees in the North Western region sent notices to the general practitioner doctors and dentists on their lists, of whom 64 applied for the course.

Biographical details of those who attended the course were recorded beforehand, and the course itself was evaluated afterwards by means of questionnaires; both were completed anonymously.[1,2]

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Results

Of 59 practitioners registered for the course, 50 completed questionnaires (36 dentists and 14 doctors). Thirty three reported that they currently administered dental general anaesthetics (25 dentists and eight doctors). As the course itself and any future postgraduate activities arising from it were intended only for updating purposes and not for the initial training of practitioners the analysis that follows used findings from these 33 questionnaires only.

ATTRIBUTES OF THE PRACTITIONERS

The table compares the doctors' and dentists' postgraduate training. Four of the doctors had a diploma in anaesthesia: two of these four had not attended any postgraduate courses, one had attended 30, the other had attended 16. One of the four doctors without a diploma in anaesthesia had not received any postgraduate instruction in dental general anaesthetics. The least experienced doctor had been qualified for 16 years. Five doctors (of whom three had a diploma in anaesthesia) said that the number of postgraduate courses in dental general anaesthetics was too low and three thought the number was about right.

Experience and training of practitioners. Values are means (and ranges)

	Years since qualification	Half day postgraduate meetings attended each year	One hour postgraduate meetings attended each year	Postgraduate meetings related to general anaesthesia attended previously	Additional qualifications
Doctors (n=8)	22 (16-32)	8·5 (2-20)	35 (0-100)	12 (0-30)	4
Dentists (n=25)	17 (3-48)	5·3 (0-15)	11 (0-36)	7 (0-62)	

Three of the dentists had been qualified for only three years, and two of these had had no postgraduate training in dental general anaesthetics. Of the remaining 22 dentists, six had not attended any postgraduate courses, and thus 32% of dentists had not received any postgraduate instruction in dental general anaesthetics. Eighteen thought that the number of postgraduate courses was too low, and seven thought the number to be about right. Of the dentists who considered the number to be about right, two had not attended any courses.

All the doctors and 16 dentists said that too few short professional meetings on dental general anaesthetics were provided; seven dentists thought the number was about right and two did not respond.

ATTRIBUTES OF THE PRACTICES

Four of the doctors each attended only one practice and another four attended more than one practice. Only three of the dentists gave anaesthetics

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at practices in addition to their own. The doctors reported that they administered on average 19 dental general anaesthetics each week (range 5-60) and the dentists 12 each week (range 4-30). The overall number of patients given dental general anaesthetics each week by doctors was 154 and by dentists 292.

To assess the importance of the role of dental surgery assistants in dental general anaesthetics course members were asked if they thought a suitable refresher course for dental surgery assistants would be extremely worth while, worth while, of doubtful value, unnecessary, or a complete waste of time. The practitioners' responses to this question were scored from five to one, and a mean of 4·25 was obtained. Two dentists said an updating course for the dental surgery assistants in their practices was unnecessary.

Discussion

In 1982 the general dental services in the North Western region (population 4 035 000 in the 1981 census) provided about 83 000 dental general anaesthetics. The number of dental general anaesthetics reported to be given each year by practitioners on this course was about 23 000 (28% of the total).

Dinsdale and Dixon reported that in England and Wales in 1976 a third of dental general anaesthetics were given by doctors specialising in anaesthesia (nearly always a consultant), a quarter by some other doctor (nearly always a general medical practitioner), and the rest by dentists.[3] We found the proportion of doctors excluding consultants to be 34%. Further evidence that about one third of dental general anaesthetics are provided by dentists was found by Sarll, who reported that 63% of dentists in Greater Manchester in 1979 employed a consultant or general medical practitioner anaesthetist in their practice.[4]

Eleven dentists and six doctors attended the course even though they were not currently practising as dental anaesthetists; many of the doctors said that they hoped to give anaesthetics, and the dentists said that they were colleagues in the practices of dental anaesthetists. Dental general anaesthesia was seen as team work, which suggests that postgraduate courses should be designed with this in mind if they are to meet practitioners' needs.

The fact that many of the anaesthetists were without postgraduate instruction of any kind must give cause for concern. Not only were the doctors likely to have obtained the diploma of anaesthesia when only six months' experience of anaesthesia was required but two of the four had had no further instruction. Even more disturbing was that three of the dentists had qualified recently and almost certainly their undergraduate experience had been extremely limited. Hutton *et al* reported that in 1978 among a random sample of experienced dental practitioners providing more than 10 dental general anaesthetics a month 46% had not attended a postgraduate course in the previous 10 years.[5] Their sample had, however, received their undergraduate training at a time when they would have been thoroughly trained as large numbers of patients then received a dental general anaesthetic. The authors drew particular attention to the changed circumstances at their time of writing, pointing out that opportunities for undergraduates to obtain skill in administering dental general anaesthetics were then noticeably less. In the seven years since then the average student's experience will have been even further curtailed.

Although a few doctors and dentists thought that the present postgraduate opportunities were about right, most disagreed. The fact that all doctors but only 16 of 25 dentists wanted more short professional meetings may reflect not only the different work patterns of the dentists but also their remuneration by payment of fees for items of service instead of capitation. These may discourage dentists from attending certain types of refresher activities and explain the variation between the professions. The generally lower attendance by dentists may be a result of too few short postgraduate meetings at the right time of day. If loss of earnings is the explanation then more generous payments to dentists under Section 63 regulations might be made to encourage attendance, even to the extent of selecting dental general anaesthetics only. If it were agreed that team teaching was desirable a further claim on postgraduate resources would arise. It has also been suggested that putting into practice changes that are complicated or difficult to understand requires the teacher to go to the practitioner's place of work[6]; this is likely, as recognised in the Seward report,[7] to be true for dental general anaesthetics and may merit a pilot study.

The importance of the dental surgery assistant has already been commented on in relation to the need for team teaching of dental general anaesthesia. Practitioners are aware of their staff's deficiencies and, by implication, their own inability to correct them. The welfare of patients undergoing anaesthesia may depend heavily on dental surgery assistants being properly trained, and retrained as changes occur in good anaesthetic practice. The Wylie report drew attention to the need for the training of staff,[8] but although refresher courses for dental surgery assistants can be provided by health authorities, there are no reports of any courses related to dental general anaesthesia. One course of a general nature has been provided by the North Western Regional Health Authority. There appears to be a need for dental surgery assistants to be included in updating courses in techniques and procedures associated with dental general anaesthesia; this was also recommended by Dinsdale and Dixon.[3]

In conclusion, therefore, our analysis of responses to questionnaires at a postgraduate course confirms the results of other studies showing that about one third of dental general anaesthetics are given by each of three types of anaesthetist: consultants, medical practitioners (with and without formal qualifications), and dental practitioners. Though this pattern may and perhaps should change in favour of the consultant, there is an urgent need to provide suitable courses for medical and dental practitioners practising as anaesthetists. Courses should be designed for the dental team: the dental operator, the anaesthetist, and the dental surgery assistant. Finally, postgraduate committees might consider examining the patterns of take up of courses by doctors and dentists to see if they are as different as suggested here and, if so, take steps to improve them.

References

1 Murfin DE. Have we overemphasised our needs? *Br Med J* 1983;**287**:1772-4.
2 Nuffield Foundation. *Dental education*. London: Nuffield Foundation, 1980.
3 Dinsdale RCW, Dixon RA. Anaesthetic services to dental patients: England and Wales, 1976. *Br Dent J* 1978;**144**:271-9.
4 Sarll DW. An investigation into some effects of the organisational structure of the dental profession on the ability of general dental practitioners to respond to change. Manchester: University of Manchester, 1980. (MDS thesis.)
5 Hutton AM, Wedley JR, Seed RF. Teaching of anaesthesia to dentists. *Br Dent J* 1978;**144**:35-9.
6 Sarll DW, Holloway PJ. Safety in dental practice. *Br Dent J* 1983;**155**:390-1.
7 Royal College of Surgeons interfaculty working party. *Report of the interfaculty working party formed to consider the implementation of the Wylie report*. London: Royal College of Surgeons, 1981. (Seward report.)
8 Royal College of Surgeons working party. *Report of the working party on training in dental anaesthesia*. London: Royal College of Surgeons, 1978. (Wylie report.)

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What prophylaxis is recommended against neonatal ophthalmia in infants born to mothers with gonococcal infection?

This condition is unusual in the United Kingdom, where, usually, it is ophthalmia neonatorum that shows that the mother is infected. In practice here ophthalmia neonatorum due to *Chlamydia trachomatis* is about seven times as common as that due to gonorrhoea and the infections may be associated.[1] Because the diagnosis has already been made for the mother the sensitivity of the gonococcus to penicillin should be available and she should have been tested for *C trachomatis*. If the mother has a gonococcus that is not a penicillinase producer effective prophylaxis for a small baby would be procaine penicillin G 150 000 IU (0·5 ml) intramuscularly but for a large baby 300 000 IU (1 ml) would be needed. If she has a penicillinase producing gonococcus effective prophylaxis for the baby would be with cefotaxime 100 mg/day/kg divided into two doses with eight hours between. If *C trachomatis* is also present treatment with penicillin or cefotaxime should be followed with erythromycin (erythrocin, erythroped) suspension 50 mg/kg/day for 14 days, given in divided doses before feeds four times a day.—E M C DUNLOP, consultant venereologist, London.

1 Rees E, Tait A, Hobson D, Johnson WA. Perinatal chlamydial infection. In: Hobson D, Holmes KK, eds. *Nongonococcal urethritis*. Washington, DC: American Society for Microbiology, 1977:140-58.

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