

THE DEVELOPMENT OF DENTAL PRACTICE BEFORE 1850Christine Hillam

It is quite possible to find evidence of interventional treatment of the teeth in the remains of a number of historic populations, but whether ancient Egyptian or Etruscan dentures were ever meant to be functional in this life as opposed to spare part replacement for the next, is a matter open to question. Certainly from the earliest of times man has been plagued by trouble of some kind or other with the teeth, often in the form of pulp exposure resulting from a very coarse diet, but that does not mean to say he was either able or willing to do anything about it. By the Middle Ages, however, the emergence of a group of professional toothdrawers suggests changes taking place. Dental decay (caries) was beginning to be more widespread but even then extraction of teeth as a remedy for toothache rather than because they had become loose through periodontal (gum) disease, was a considerable rarity. Not too surprising, perhaps, considering the instruments available and the lack of any anaesthetic agents bar alcohol.

Little attempt was made in the real world to make good deficiencies until the end of the 17th century. There then appeared on the scene a group of individuals calling themselves 'operators for the teeth' and offering to make prosthetic appliances to replace lost teeth. By the early 18th century, filling of cavities was being more commonly practised and in the 1750s the word 'dentist' entered the English language. 'Dentistry' in its modern sense had arrived, for the repertoire of the practitioner of the day comprised, in theory at least, preventive advice, treatment of the gums, filling of teeth with gold, lead or tin, partial and full dentures, crowns and bridges, root canal therapy, transplants, orthodontics, obturators and minor oral surgery. The 18th century dentist set himself the same tasks as his modern counterpart, but without benefit of scientific knowledge, technology or anaesthetics. Dental practice has been trying ever since to bring to perfection these goals set 200 years ago.

The available sources suggest that dentistry appeared initially in London and was taken to the provinces from the 1750s onwards by practitioners from the capital who took advantage of the contemporary improvement in the road network to regularly go on tours lasting several weeks to such places as were likely to provide them with patients; for, other factors apart, the economics of producing dental work in gold and ivory with the average denture costing 20gns (a year's wages for an agricultural worker) severely circumscribed the demand for their services. The return from these visits was maximised by efficient use of that other burgeoning organ of communication in the 18th century, the provincial press. By the 1760s, the provinces were producing resident dentists of their own, again going on tours from time to time. The accolade of earliest resident dentist discovered outside London is currently awarded to Birch Hesketh of Liverpool.

Nevertheless, the numbers of such men remained very low indeed. By 1800 there were still probably not more than 20 dentists in the provinces with perhaps twice that number in London. By 1850, however, most major towns had their own dental practices, and numbers had reached over 350 in the provinces with nearly 300 in London.¹ It can be argued that this remarkable upsurge was related to the growth of the consumer society, with surplus money chasing novelty and the niceties of life rather than the mere necessities. There is evidence to suggest a change in attitudes towards care of the teeth based less on modern criteria of health than of social desirability and emulation.² When this interacted with an undoubted increase in dental disease in the population (relatable to a considerable rise in the consumption of sugar among more social groups),³ with the technological revolution which produced porcelain teeth and with the entrepreneurial spirit of the day which learned fast how to identify and foster a latent consumer demand, then the scene was set for the growth of such specialist treatments as dentistry.

The spread of this new phenomenon was not even, in chronological, geographical, social or simple numerical terms. The substantial increase in numbers of dental practices at any one time did not really begin until

about 1810 in the provinces; thereafter numbers doubled every ten years. Such an apparently simple statement conceals the fact that there was a very high turnover. It may come as no great surprise to find that in an expanding profession, 60-70% of practitioners in each decade were new recruits; a simultaneous drop-out rate of 40% is rather striking to the modern observer. It can be calculated that only about 55% of the practices in existence in one decade were likely to still be in operation in the next. In fact, just over 30% of all provincial dentists before 1850 survived only one year and just over 40% no more than five, although the rates were somewhat lower for the end of the period. So, the total number of dentists in practice at some time during a decade, say, is always considerably in excess of numbers which can be calculated for any one year during that same decade.

Nor is the geographical pattern of spread straightforward. The first places to boast resident dentists outside London were the ports and developing cities (such as Liverpool, Manchester, Birmingham) and the important towns of the old, pre-industrial society (such as Norwich). It might easily be concluded that dentists set up practice in major centres of population, but, for the whole of the hundred years up to 1850, new practices were being set up in places of exceedingly modest population size (as low as 2,000 in some cases), and that at a time when contemporaries were saying that no dentist could expect to keep body and soul together if they stayed put in a place of only 10,000.⁴ Simultaneously, the new urban centres of the industrial areas were being consistently and almost studiously ignored. Stoke-on-Trent, for example, had no resident dentist until its population numbered 89,000. Although new towns were being added all the time to the list of those where dental treatment could be obtained, 70-80% of the new practices being established were being located in towns which already had a dental presence. Basically, the choice of location for a practice was related to wealth and this was more likely to be found in a city such as Manchester, with its merchants, than it was in neighbouring Oldham, with its largely working population, which, despite its size, still had no resident dental practitioner by the middle of the century. An element of personal choice also entered into the equation, just as Catherine Robinson has shown to be

the case in modern times.⁵ It would seem that a dentist selected his geographical area of operation and then chose where to base himself within that area according to his personal preference of life style. He was prepared to travel around the district if necessary, to obtain patients, just as the country apothecary was. He was, moreover, helped by the fact that people are willing to travel to seek dental treatment in a way which they would not do or are not able to do in search of general medical care.

The first generation of dentists came from the ranks of jewellers, goldsmiths, hairdressers, patent medicine sellers, perfumers, cuppers and bleeders and watchmakers. A very small number emanated from the medical profession, mostly from among apothecaries, but it should be emphasised that, in the provinces at least, no more than 5% of all dentists of the period we are looking at had any formal medical training and that 5% includes a number of dentists who acquired the MRCS with no intention of practising any other calling than that of dentist.⁶ Treatment of the teeth formed no part of the education of a surgeon of the period and it was considered by many dentists, probably justifiably, that the medical education then available was of little use as a preparation for dentistry. The end of the 18th century saw the first generation of dentists taking on their own apprentices and training sons to carry on the business. Some of these family firms continued for a good three generations and a few are still in existence today.⁷ The available evidence suggests that up to a half of all provincial dentists up to the 1850s were trained by apprenticeship or 'regularly educated', as they would have put it. These were the ones who stayed in dentistry for careers every bit as long as their modern counterparts. As for the rest, there was no legal sanction at the time against anyone calling themselves a dentist, from the chemist and druggist who routinely acted as toothdrawer for the poor⁸ to the man in search of a new means of earning a living. No training was necessary, nor was it always sought. Some dentists made quite a business of providing short crash courses and others, particularly in London, operated a kind of franchise system, teaching new recruits a few tricks of the trade before letting them loose on an unsuspecting public. A fair proportion of those who took up dentistry at a mature age probably continued, at least at first, to carry on their original trade part-time.

Yet others, perhaps by virtue of their training as watchmakers or jewellers, became employed by dentists to carry out the mechanical work of the practice and later branched out on their own. Plenty of these assistants stayed with their firms for many years and were involved in the clinical side of the work. The experience they gained probably made them just as well trained for dentistry as the young man who had served a conventional apprenticeship.⁹

With such a wide diversity of elements contained within one blanket term 'dentist' and no professional organisation to act as a forum for the exchange of ideas, clinical or ethical, it is perhaps not surprising that self-interest prevailed over unity. The 'respectable' were alarmed by the influx of incomers in the early part of the 19th century and accusations of quackery were rife.¹⁰ But this raises the perennial riddle, 'When is a quack not a quack?' to which the answer is usually 'When he is somebody else but me'. By the 1850s the group had probably reached that stage in the life of any body where some organisation becomes inevitable, where boundaries have to be drawn, if only for the self-preservation of its most influential members.

The first hints at reform came in the late 1830s when suggestions, made by dentists, appeared in the medical press that there should be a Faculty of Dentistry. Perhaps with a sidelong look at the professionalising medical and pharmaceutical professions, in the 1840s attempts were made to interest both Parliament and the Royal College of Surgeons in dental reform, to found a dental society and start dental journals, but to no avail, largely because of the inability of a few individuals to overcome the self-interest and inertia of the majority. The years around 1850 were the lull, or perhaps the complacency, before the storm. In 1855 a young 22 year old dentist from Croydon called a public meeting of the profession which was to lead within a very few years to the establishing of two rival professional bodies, the two dental journals which supported them, a Licence in Dentistry awarded by the Royal College and two dental schools. Complete autonomy for the profession took a little longer; the General Dental Council was not established until 1956.

A detailed examination of the provincial dentists in practice before 1850 suggests that, despite an undoubtedly shady penumbra, there was at the centre a very solid and substantial core of ethical and well-intentioned practitioners who were well on the way to establishing themselves as a profession. Census records indicate that their socio-economic standing was on a par with that of the qualified surgeon and the Member of the Pharmaceutical Society and that, as a group, they did not enjoy the lowly status often ascribed to them; certainly in purely monetary terms they were better off than the average medical man of the time.¹¹

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NOTES

- 1 Calculated from trade directories for London (by D. W. Wright) and the provinces (by Christine Hillam).
- 2 Dental tracts and newspaper advertisements of the period persistently lay emphasis on the restoration of appearance.
- 3 M. E. Corbett and W. J. Moore, 'The distribution of dental caries in ancient British populations: IV, 19th century', *Caries Res.*, 10(1976), pp. 401-414.
- 4 'Suaviter et fortiter', 'Quackery and country practice', *Br. J. dent. Sci.*, 2(1858), p. 49.
- 5 C. Robinson, 'Dental manpower ratios: factors influencing dentists' choice of practice location' (unpublished M.Sc. (Community Dentistry) dissertation, University of Manchester, 1978), p. 51.
- 6 Based on a comparison between a list of provincial dentists in practice before 1855 with P. J. and R. V. Wallis, *18th century medics; subscriptions, licences and apprenticeships* (Newcastle upon Tyne, 1985); *London and provincial medical directory* (London, 1847); *Medical register* (London, 1779, 1780, 1783); *List of members of the Royal College of Surgeons in London* (London, 1805, 1825, 1835, 1845); *A list of persons who have obtained certificates of their fitness and qualification to practise as apothecaries from Aug 1 1815 to July 31 1840*; *ibid.,...from Aug 1 1840 to July 31 1852* (London, 1852); *Register of Pharmaceutical Chemists and Chemists and Druggists* (London, 1869); *Dentists Register* (London, 1879).

- 7 At least 30% of all provincial dentists in practice before 1855 headed or belonged to family firms. Many others went on to found their own 'dynasties' after this date.
- 8 This was a universal practice and accounted for a substantial part of the income of some chemists and druggists. However, work in progress suggests that chemists and druggists of this period may not have called themselves 'dentists' unless they offered a full range of dental treatment.
- 9 see Christine Hillam, 'Professional education for dentistry before 1859', *Br.Dent.J.*, 163(1987), pp. 204-207.
- 10 see especially the columns of *Forceps* (1844-45) and the prefaces to most dental tracts especially those published between 1830 and 1850.
- 11 Based on a survey of probate records (positive and negative) of 189 provincial dentists in practice for more than 10 years before 1855.

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