Henry Noble History of Dentistry Research Group

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The Struggle for Professionalism in Dentistry*

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THE event which this conference celebrates was one of a series of significant events in a long struggle. It was a struggle in which attempts to reform and improve dentistry were resisted by almost equally powerful forces; groups who felt threatened by change and who did everything in their power to delay, dilute and minimise the outcome.

This struggle was for professional status for dentists and dentistry and to begin with it was believed that legal controls, a monopoly of entry to the profession and constraints over who practised dentistry would ensure this professional status. Many thought that when these objects had been obtained by the 1921 Dentists Act dentistry had become a profession. Dr Helen Marlborough (1) suggests that even after the 1921 Act dentistry still did not have the professional status which it sought and that university dental education and research in the 20th century have been far more significant factors in establishing our credentials as a profession concerned with the health of the nation.

The development of university dental education and research had the following effects: it convinced the British public and the Government of the importance of dental health, established dentistry as an essential part of the National Health Service, promoted an understanding of the relationship between oral and systemic disease and advanced an understanding of the aetiology and pathology of dental disease, its prevention and control.

The amalgamation of the Hospital and the Victoria University College in 1899 was brought about by a series of events stemming from an alteration in the regulations of the LDS RCS (Eng). Diploma. This required that candidates for the examination should attend practical classes in Dental Mechanics and have inserted a minimum of six dentures, conditions which could not be met due to lack of Dental Hospital funds or endowments, especially as there would be no charitable benefit to the patients. Furthermore there was little possibility that the College Medical Faculty would finance this specialised dental requirement. The construction of a dental laboratory was therefore out of the question and the Staff resolved that from 1st July (1898) no more students would admitted.

As a result of this resolution, the Dean of the Medical Faculty called a meeting with the Staff, the outcome being that a request was made to the Senate of the University inviting them to take over the management of the Dental Hospital. This was agreed and a Conjoint Management Committee was formed to incorporate the Dental Hospital and School into the University framework. One curious result was that planning permission by the Dental Hospital to build a laboratory which had been refused by the Civic authorities, was granted to the University to build the required laboratory on exactly the same site.

The Conjoint Management Committee quickly assumed responsibility for collecting, holding and distributing the fees of the students and appointed a demonstrator responsible for attendances, instruction and the conduct of the students. The Committee also supervised the construction of the mechanical laboratory and employed a dental mechanic to staff it. That the supervision was successful was confirmed in the Annual Report three years later which showed that the dental

department was self-supporting and had paid off the capital sum expended in the construction of the laboratory, additionally there was a credit balance of £104.

The relationship between the two institutions was cemented in 1921 when the Dental Hospital and School handed over its assets and liabilities in perpetuity to the University of Liverpool.

The amalgamation was all the more remarkable when one considers that there were several powerful voices claiming that "dentistry was not a subject of such depth of scope as to justify the award of a university degree; " evidence given by the RCS (Eng) to the Royal Commission on University Education in 1912. Dr John Smith of Edinburgh, examiner to the RCS added his opinion that "dentistry was not big enough for a degree" and that "in comparison with medicine or surgery it was not a very extensive subject …easily defined." The BDA weighed in with the opinion that many dentists would see the degree as "an insult to their diploma."

The background to the debate lies in the history of the development of dentistry around 1898 when there were several disparate factions each with its own ideas on the way forward. Firstly, the descendants and successors of the Reform group; secondly a small but powerful group of dental surgeons with surgical and medical qualifications - the Association of Surgeons Practising Dentistry, a third group was those who had acquired the diploma at some expense and often at a disadvantage with the unqualified A further group of practitioners were those registered under the 1878 Act but found themselves barred from joining the BDA and eventually became the Incorporated Dental Society. Finally the vast majority of unqualified and unregistered practitioners who continued with ease to cream off the unsuspecting public quite unaffected by the restrictions placed on their activities by the 1878 Act.

Although London was the focus of attention in dental education at the end of the 19th century attempts by the London School of Dentistry to introduce a Faculty of Dentistry or a BS degree came to nothing due to opposition by the RCS(Eng.). One result was that the University of London would have a Board of Dental Studies.

The Royal College did not have the same influence in the provinces and in 1900 the University of Birmingham Medical Faculty incorporated a Dental Faculty which was empowered to examine and confer the degrees of Master of Dental Surgery and Bachelor of Dental Surgery. The right to do so had been given in the 1878 Act to all British Universities and to both the Glasgow Faculty of Physicians and Surgeons and the Edinburgh Faculty, but the action by Birmingham established the University as the first University to exercise this right in the United Kingdom.

At this time the BDS was looked upon as a higher degree and prospective candidates were expected to have previously acquired the LDS. The initiative taken by Liverpool was soon followed by other provincial universities but the LDS diploma taken at a university and the diploma granted by the LDS RCS (Eng.) was still the choice of the majority of candidates.

However the introduction of the university LDS was not universally welcomed as it was thought that a two tier profession would result which would diminish the status of the College diploma.

But the opportunity to acquire qualification was not generally accepted as reflected in a survey of the Dentists Register. Indeed there was no incentive for young men to take qualification of any kind. In the four decades following the 1878 Act, the number of dentists on the Register hardly increased whereas the number of unregistered dentists rose to between 25,000 and 30,000 in line with population increase and the increased demand for dental treatment. One of the many causes was the inadequate protection afforded to the qualified dentist, a legal consideration which had a bearing on university dental education.

That the LDS RCS (Eng.) was still the most popular choice can be seen from the fact that in session 1913-14 only ten out of one hundred students at Liverpool took the degree course.

As the first World War drew to a close, there was growing concern at the proliferation of the unregistered and the shortage of the qualified, patently manifest when at the outbreak of hostilities, there were no adequate facilities available to treat the dental requirements of the forces. As a result, in 1917 the Government appointed a committee headed by Francis Dyke Acland to "enquire into the extent and gravity of the evils of dental practice by persons not qualified under the Dentists Act."

Among the many recommendations of the committee published in 1919 was the acknowledgement that the training in basic science for the dental student should be the same as that required by the medical student and that instruction in dental mechanics should be undertaken in a dental school and not in private pupillage. The need for research into the causes and effects of dental caries and other diseases of dental origin was emphasised and the role of universities in this field would be a major factor in the eventual establishment of a dental degree. Other measures advocated were that the dental profession should be governed by a Statutory Board, subordinate to, but independent of the General Medical Council, that the profession should be regarded as one of the outposts of preventive medicine and as such encouraged by the State and that treatment should be available to all who needed it. The reference to the role of dentistry in the field of prevention was a major influence on dental education and research.

The registration of unqualified practitioners under the 1921 Act was opposed by many but all had to admit that the priority was to make efficient dental services available to the majority of the population rather than the most comprehensive service. Thus initially a large number of unqualified dental practitioners were registered as "dentists 1921" and the proportion of the qualified on the Register in 1921 once more declined to 40% with dentists 1878 and dentists 1921 predominating as an unqualified 60%. Although the establishment of the Dental Board of the United Kingdom was an important step on the road to professional autonomy, the setting-up of the University Grants Committee (UGC) in 1919 played an increasingly significant role in the financing of medical education, funding whole-time clinical teaching units directed by university professors.

The improvements in university dental education were due in no small measure to financial assistance from the Board although it received no monies from the Government. Its funding relying on subscriptions received from dentists in order to retain their names on the Dentists Register. In 1928 the Board offered to pay £500 per annum towards the salary in each university and two sums of £250 per annum towards the appointment of two full-time lecturers in each dental school.

When W H Gilmour MDS LDS RCS(Eng.) was appointed in 1920 to the Chair in Dental Surgery in the University of Liverpool, he gave up a lucrative practice to become the first and for many years the only salaried, full-time dental professor in the UK. His appointment would not have been possible without a generous endowment by a benefactor. The Dental Board's insistence on academic qualifications led to the appointment of candidates who did much to promote teaching and research. G L Roberts MB ChB BDS was appointed to a dental chair in 1935 funded by the Board; his appointment was followed by a change in the curriculum, expansion of facilities and an increase in the number of students. Likewise H H Stones MD MDS ChB FDS (Eng.) who succeeded W H Gilmour emphasised the biological sciences and developed dental research.

In Durham grants from the Board established the first Chair in 1936 but a year later a research scholarship was privately endowed with assistance from the Medical Research Council. Thus although significant Board funding was still meagre leaving the universities relying on charities which invariably regarded medicine as more deserving than dentistry, consequently the establishment of dental chairs was slow. This was particularly true of chairs in oral pathology where Professor R V Bradlaw's appointment in 1936 to the Chair of Oral Pathology in Durham was the

first of its kind in the UK and continued to be the only one until 1961 when Professor J J Hodson BDS PhD LDS RCS(Eng.) was appointed to the Chair in Dental pathology in Manchester.

Surprisingly, dental education was conducted in some universities for twenty or thirty years without the guidance of salaried full-time professors or deans. Initially many of the staff were neither graduates or dentally qualified. J Osborne LDS Univ. Birmingham, the first full-time lecturer at Sheffield in 1937 was neither a graduate nor a BDS and W Malcolm Gibson MB ChB LDS was appointed a full-time lecturer and demonstrator in Dental Prosthetics and Mechanics at Glasgow but did not have a dental degree. Later, in 1951 James Aitchison LDS HDD RFPS(Glas.) was awarded a BSc degree without examination in order to facilitate his appointment to the newly-established Chair of Dental Surgery at the University of Glasgow. Such pragmatism highlights the dearth of suitably qualified candidates for teaching positions in dentistry in the first half of the twentieth century.

Improvements in secondary education assisted the development of the professional curriculum as students were better prepared for a science-based professional training. In Liverpool students who had equivalent higher school certificates in basic sciences were exempted from the first professional BDS examination thus allowing the extension of the professional curriculum.

Dentistry benefited from many of the university-led curricular recommendations which the General Medical Council (GMC) made at this time even although they were designed to improve the medical course and did little to improve the clinical training of a dental surgeon. Thus the minimum requirement now covered science, medicine, general pathology and bacteriology plus clinical medicine and surgery at a general hospital; attendance in out-patient or casualty departments, instruction in and administration of general anaesthesia and courses in morbid histology, materia medica and therapeutics. The certificate of instruction in venereal diseases reflected public health legislation and awareness of the relationship between oral and systemic disease. However, although many of theses changes were initiated by the universities, there was great variation between them and occasionally a university might not fulfil the GMC recommendations.

The differences between the LDS and the BDS at this time were that the degree course was one year longer and considered to be of a higher standard in practical examinations and in clinical dentistry. Thus the course was therefore aimed at general practitioners or teachers of clinical dentistry rather than research scientists.

The GMC Report of 1933 recognised that universities were more likely to initiate curricular change, for example the Universities of Birmingham Liverpool and St Andrews were the only centres to hold separate examinations in dental pathology and bacteriology in accordance with GMC recommendations. As far as the colleges were concerned the GMC expressed criticism in two respects. Firstly they played no part in regulating teaching for its examinations and lacked control over the education of its candidates. Secondly, compared with the universities college standards were low. It was noted that the standards of Scottish and Irish colleges although adequate did not reach the standard at universities. Such criticism signalled the beginning of the end for the previously unassailable supremacy of college qualifications in dental surgery.

The formation of the Education Consultative Committee of the Dental Schools of Great Britain in 1931 which became the Dental Education Advisory Council of Great Britain and Ireland in 1937 enabled the university teaching staff represented by dental deans to play a greater role in determining and co-ordinating standards in dental curricula and examinations.

In 1947 on the eve of the establishment of the National Health Service, an analysis of the Dentists Register shows that the majority of dentists (69%) were now qualified, only 20% having taken a university qualification and only 2% had taken the BDS as a first qualification.

The University Grants Committee (UGC) assumed responsibility for the funding of dental schools and recurrent grants were substantially increased. The dental profession was thus released from its obligation to finance professional education opening an new epoch in the financing of British universities. A sounder financial footing was established which finally enabled dentistry to catch up with medicine in training and research.

In 1951, Birmingham University abolished its LDS diploma in an attempt to raise the academic status of dentistry. It was considered that the undergraduate dental course had advanced from its largely technical nature when a diploma was the appropriate award to a stage when the basic qualification should be a university degree. Consequently, after October 1951 only students studying for the degree of BDS were admitted. At that time the policy was in line with that adopted by the Scottish university dental schools and the University of London who had never offered university diplomas in order not to compete with college diplomas.

The most significant clause in the Dentists Act of 1956 was the one which replaced the Dental Board with the General Dental Council (GDC) which now became responsible for maintaining the Dentists Register and assessing and monitoring standards of education and examination in the universities and colleges. The establishment of the GDC confirmed the profession as the separate and responsible body envisaged by Acland more than forty years earlier. The GDC immediately issued revised recommendations on education and examinations.

The University of Liverpool's curriculum was an example of the way in which universities extended the minimum GDC requirements. Many of the changes recommended by that body in 1956 had been adopted by Liverpool at least ten years previously and although the course for 1955-6 was not divided into clinical and pre-clinical, the curriculum was similar to the GDC's recommendation.

There was no reference to apprenticeship, the curriculum for the LDS and BDS was the same and courses in anatomy and physiology exceeded the GDC recommendations by two terms. The course in maxillo-facial surgery suggests a local specialisation in this field. Thus in the universities the foundations for modern dentistry as a graduate profession had been laid prior to 1956 with nearly 70% of practitioners being qualified.

Although, until 1956 the GMC ensured that the scientific foundations for the dental curriculum were firmly established it failed to extend the dental curriculum and restricted the dental profession's development in terms of autonomy and specialisation. In medicine, the status and influence of the profession, principally medicine and surgery were based on their early association with the universities and improvements in university medical education provided the profession with a sound theoretical and scientific base at a time of rapid scientific advance. High standards of professional education invested the medical profession with the credentials necessary to influence those directing health care policy at local levels.

Likewise, measurable standards of competence demonstrably beneficial treatment based on university dental science and advanced by an elite of the dental establishment ultimately enabled dentists to speak with authority to those shaping market forces, be they private patients or government bodies. Professional education was the means by which the dental profession protected itself and the public from the threat posed by poorly trained practitioners. Indeed professional dental education is the single most important factor in determining the oral health of the nation.

The merger of hospital medical and dental schools with universities created a teaching environment capable of providing clinical, laboratory, theoretical and research facilities and staff to educate general dental practitioners, hospital specialists and research scientists. As a result the Dentists Register for 1976 showed that dental graduates were now the largest single group but still did not

exceed the combined numbers of college and university diplomas. Twenty years later university graduates predominated.

I can do no better in summing up than by quoting two sentences in a letter from Bill Allan, Chairman of the BDA to the Prime Minister:

"We believe that dentistry is an integral part of the NHS and welcome this acknowledgement in the new White Paper on Public Health and

We believe that improvements in oral health should be a priority in the Government's third year in office."

Such a letter could not have been written at the beginning of this century by a profession torn apart by disagreement about education, qualifications, registration etc. This is the voice of a profession with the confidence and credibility of university dental education and research behind it. This is what the 'struggle' was all about.

And so it is that in Liverpool as we stand on the threshold of a new century, you can look back with pride at the last hundred years and all the efforts of those who have done so much to gain proper recognition for dentistry as a true medical profession.

*An abridged version of a lecture given at the University of Liverpool School of Dentistry Alumni meeting and Centenary Conference, 17 September 1999

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(1) Helen Marlborough, The Emergence of a Graduate Dental Profession 1858-1937. Unpublished PhD thesis, University of Glasgow, 1995.