The future dental workforce?

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OPINION

IN BRIEF

- Raises important issues that impact on the future dental workforce.
- Highlights the changes taking place in wider healthcare and the need for dentistry to keep pace.
- Examines the need for coordinated ongoing workforce planning nationally.
- Provides practitioners with an overview of the drivers for change and possible responses.

The Editor-in-Chief of the *BDJ* has previously raised important questions about dental workforce planning and the implications for dental graduates of recent changes and pressures.[1] It is now time to revisit this issue. Much has changed since the last workforce review in England and Wales,[2] and the rate of change is in all probability set to increase. First, at the time of writing this paper the momentous step of including dental care professionals (DCPs) on General Dental Council (GDC) registers in the United Kingdom has recently been completed. Second, the Scope of Practice of all dental professionals has been under consultation by the General Dental Council,[3,4] and research evidence suggests that greater use should be made of skill-mix in the dental team.[5-7] Third, within England, Lord Darzi has just published the 'Final Report of the NHS Next Stage Review',[8] which emphasises 'quality care' and 'team-working' as key features of healthcare; this report was accompanied by an important document entitled 'A High Quality Workforce',[9] in which plans for local workforce planning within the NHS are outlined, placing responsibilities at national, local and regional levels. Fourth, policy makers across the UK are wrestling with addressing oral health needs, promoting health and facilitating access to dental care, all of which have implications for the nature and shape of the dental workforce. Fifth, with the impact of globalisation and European policies we are net gainers of dentists[10] as well as having more in training.[11] Sixth, although there have been reviews and policy initiatives by regulatory, professional and other bodies in support of shaping the dental workforce,[2,10-14] there has been little serious consideration of skill-mix and funding mechanisms to encourage team-working. Together, these events demand that we enter a fresh debate on the future dental workforce which should extend beyond professional and national boundaries and inform workforce planning. This debate is of great importance to future generations of dental healthcare professionals, funders, commissioners and providers of both dental services and dental education and training, and most importantly our patients and the public whom we serve. Furthermore, workforce planning must be linked to a philosophy of care which promotes promotion of health and embraces quality care, rather than merely treatment of disease, and addresses oral health needs and demands.

The aim of this paper is to examine the case for change and suggest a contemporary approach to professional workforce planning so that the future oral and dental needs and demands of the UK population may be met in an equitable manner.

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Where are we going?

As in all aspects of life, it is easier to review and agree where we have come from than where we are going; dentistry is no exception. Dentistry, in becoming an independent profession, was accorded parity with medicine. This parity has been largely maintained and must continue if the dental healthcare professionals of the future are to meet the needs of the public and ever-increasing expectation of patients, let alone translate anticipated advances in medical sciences and related technologies into mainstream oral healthcare provision. Where we have not progressed as quickly or as far as many of our medical counterparts is in the ability to devolve roles and responsibilities to others. Now that the extended dental team is recognised by the General Dental Council,[15] and the range of skill-mix roles is expanding, we have a unique opportunity to provide global leadership in developing team dentistry.[16] This opportunity must not be lost; however, this professional challenge must not be constrained by current business models. Furthermore, to be effective it must not be constrained by history and current practice, premises, traditional modes of working or funding.

Given the developments in oral health sciences and the anticipated changes to the clinical practice of dentistry, dentists of the future will need to be as much oral physicians as dental surgeons and lead the evolving dental team in providing holistic, multifaceted,

patient-centred care, which complements general healthcare provision. If we are to deliver healthcare in line with the principles outlined in 'A High Quality Workforce' then we need to actively adopt a new approach and processes to workforce planning. Few would argue against the importance of focusing on 'quality', providing care that is 'patient-centred', 'clinically driven' and 'flexible', which demonstrates our commitment to 'valuing people' and 'life-long learning', as outlined by Lord Darzi.[8] Armed with this vision, the principles which underpin the shape and size and qualities of the future workforce can be developed.

Achieving effective workforce planning requires an understanding of drivers for change, consideration of future roles and responsibilities to meet the needs and demands of the population, and an appreciation of issues in respect of the recruitment and extension of suitably qualified and motivated personnel.

What are the pressures for change in the wider context?

The pressures for change on healthcare are myriad and involve taking cognisance of the social, political and cultural context. This includes the influences of key players such as government, universities, health service management, other professions, patients and the public, let alone international movements of professionals. Together these have far-reaching implications for dental professionals ranging from their future numbers in training to roles and relationships.[17,18] These pressures will be considered in four broad categories outlined by the Nuffield Foundation as influencing the future workforce.[19] First, trends in demography and disease; second, the exponential growth in new technologies and scientific understanding; third, policy and politics; fourth, and finally, social and economic developments.[19] The future workforce will be considered in relation to each of the above in turn.

Demography and disease

Demographic trends mean that increasing numbers of older people and fewer children will have traditional treatment needs.[20,21] Patterns of disease have, and are, changing over time;[22,23] however, the prevalence of oral diseases is such that almost everyone in western society will need, and use, dental services at some stage in their lives. Surveillance of health behaviour reveals that reductions in dental caries incidence and prevalence have not diminished the demand for dental care.[22] Whereas all the population have much to benefit from access to regular dental care, notably enhanced preventive care, specific sections of society such as socially disadvantaged groups, and older people, together with some new immigrants will have more extensive needs for dental care. Thanks to the availability of state funded dental care and the availability of oral hygiene products, middle-aged and older people, who did not benefit from fluoride in water or toothpaste in earlier years, have had extensive experience of caries but have retained some or all of their natural dentition.[22,24,25] They are therefore trapped in the 'restorative cycle'. We also have a society in the UK in which a significant burden of disease is located in the lower social classes,[22,26] many of whom do not attend as regularly for care as they might - evidence of the 'inverse care law', whereby those who most need dental care are least likely to access it.[27,28] Furthermore, global population mobility is such that for dental professionals in urban areas in particular, their patient base is increasingly diverse and may include people coming from parts of the world with much higher disease levels and a culture of only seeking care in acute need. As people live longer, the level of chronic disease rises and more patients will be on medication(s). Dental professionals need to be skilled to cope with increasing numbers of patients with special needs, providing holistic care.[29]

Inequalities in oral health extend beyond the influence of health behaviours. The recent WHO 'Commission on Social Determinants of Health'[30] advocates a workforce trained to recognise the social determinants of health, to understand that the healthcare system is itself a social determinant of health, and recognise the importance of universal access to healthcare for all. It remains a priority for dental professionals to recognise and reduce health inequalities. Workforce expansion will need to be diverse and include public health and health promoting roles if it is to be effective, as future healthcare will need to be as much about strategies to reduce disease levels as ensuring that there are sufficient dental healthcare professionals to deliver certain forms and quantities of treatment.

Technology and scientific development

Dentistry has a very important relationship with technological and scientific advances. Looking to the future this relationship will continue from restorative materials using nanotechnologies, to genetics and developments in molecular biology, facilitated by 3D imaging and new diagnostic risk assessment, preventive procedures and disease treatments.[31] The creation of new academic health science centres, with links to industry, should contribute an appropriate environment for the dental research community. We need more researchers at all levels, particularly clinical researchers, and systems to ensure that developments influence dental care provision. Current graduates will readily cope with the intellectual challenges of keeping up-to-date with scientific and technological developments if provided with the appropriate scientific background and skills for life-long learning. This will prevent them from becoming 'bored', one of the fears raised by new graduates in the dental system.[32]

Policy and politics

Within the UK, dental care policy has been marked by change and diversity and often negative reaction. The latter has contributed to increased privatisation of dental care. Diverse policies and models of care are increasingly present across the four nations of the UK. There has been a shift to local commissioning of dental care in England and Wales whilst traditional fee-for-item of service models still exist in Scotland and Northern Ireland. Dental check-ups are free at the point of delivery for older people in Scotland and Wales but not in England. The emphasis on prevention of oral diseases, promotion of oral health and much needed planning or commissioning of care according to the needs of the population also varies within and

between countries. Governance issues are increasingly important, particularly in areas such as health and safety, employment, decontamination and infection control which bring the need for increasingly diverse skills amongst the dental healthcare team.

Overall, as highlighted in the introduction to this paper, healthcare is opening up to new providers and changing skill-mix with blurring of boundaries between health professionals.[10,33-35] There is much greater emphasis on new ways of working involving teamwork across the healthcare system in pursuit of quality care,[8] together with increasing emphasis on maximising out of hospital services to reduce healthcare costs.[8,36,37] Secondary dental services are not immune to service redesign, albeit the majority of dental care is already provided in a primary care setting. Value for money is desired by government and insurance companies, both within and without state health services, as well as patients and the public but should not be the sole driver for care. We need to ensure that healthcare is evidence-based appropriate to patient needs as well as value for money.

It is not only national and UK health policy but European policies and practices that must be considered as they influence the education and movement of dentists. Within Europe we have seen the development of the European Association of Dental Education and the publication of the competencies for the European Dentists.[38] Within the European Union, the Bologna declaration, which is a pledge by 29 countries to reform the structures of their higher education systems in a convergent way,[39] facilitates such movement of health professionals. There is evidence that the UK[10,40] and England in particular are net gainers of dentists. Not only do dentists move, but health tourism of patients is on the increase, again facilitated by health policies.[41]

Social and economic change

Dental practice is certainly not immune to social and economic change. So how do these factors influence us? As a professional group, status needs to be negotiated with society, as well as government and patients.[42] First, the effects of globalisation are evident in a more diverse patient base and a more diverse workforce.[43] The demands of patients from different parts of the world will differ. Second, as professionals we may be more directly aware of economic than the social changes. Economic change relates to the wealth of society in general and NHS finances and is particularly pertinent for the profession given the current 'credit crunch'. Social acceptability of private healthcare has assisted with a shift in balance towards private practice.[44,45] The profession does well to recognise the pressures in society which require attention. Contemporary Britain is a post-modern society, characterised by individualism, consumerism and constructivism.[46-48] What does that mean for us as a profession? It affects our patient base and our workforce. Patients and the public will place greater demands on health professionals in contemporary culture. They will also be more informed about health and healthcare; however, not always accurately. The workforce itself is also changing, Generation Y are now entering the workforce.[49] It is important to understand the views of new and recent graduates on their motivation for choosing dentistry[32,50-53] and their future career expectations,[32,53] to factor these into workforce planning. Furthermore, within a group of professions which share care, roles and status need to be negotiated with one another,[54] both at the routine and complex ends of care.

Post-modern individualistic society places great demands on providers of care and has implications for team working. What do the public want in a consumerist society and what should we be offering them? Perhaps they want to know that they have access to dental care when they need it or choose to have it? In highly developed individualistic societies, the public want patient-centred care. They also place growing importance on appearance. What will consumers pay for? Many adults receive or would like to receive NHS dental care.[55] We have a dilemma in that the social elite in this country are less likely to have oral disease and more likely to want access to cosmetic care. Is this health care? If we go down this route members of the profession may be increasingly viewed as service providers rather then healthcare professionals. The GDC has recently taken a view signalling a separation between healthcare and other services.[4]

We live in a risk averse culture. Healthcare is moving towards risk assessment and not just treatment of disease. This needs to form part of care plans for patients, rather than just focusing on technical procedures. Who should do this? Many of the procedures are becoming routine and the technical skills are not a challenge. As we move towards individual risk assessments and a greater emphasis on prevention, thus providing a 'wellness service' with every health encounter providing the opportunity for promoting health and preventing disease, it is clear that much of this care could be better performed by DCPs,[5] including extended role dental nurses, mirroring arrangements in primary medical care.

Where to?

So what of the future? Given the forces for change outlined in this paper, how quickly do we need to change? And who should make up dental teams? The focus of dental care needs to shift to creating leaders of the dental teams of the future with increased numbers of DCPs providing large elements of routine primary dental care. In addition to leadership skills the dentist of the future must have the knowledge and competencies to undertake those complex procedures, therapies and patients which cannot be delegated. In turn, there must be training of specialists, with wide geographic distribution to support the primary care sector across the UK. Given the lead time necessary to implement changes to a curriculum, let alone produce graduates with a different blend of skills and competencies, it is suggested that the need for action is already pressing. Can we argue the case for no change? As dental professionals, can we stand with our medical counterparts in saying that 'our careers are dedicated to improving continuously the quality of care we provide for patients',[8] unless we face this debate?

How to plan for the future?

Policy makers and planners are constantly faced with problems requiring their immediate attention and there may be neither the time, nor the will, to plan for the future. But strategically plan they should. A helpful approach outlined in detail by Garrett in the WHO Health Futures Handbook,[56] has been used widely in both developing and developed countries, such as the Netherlands, to explore future scenarios in healthcare.[57] Advocates of this approach argue that in a complex and changing climate, the benefit of a *vision* of alternative futures is greater than ever, providing warning of potential future threats and opportunities and allowing institutions to rehearse their responses to different future situations.[57] Using this approach, there is merit in consider a range of 'possible futures' or 'future scenarios', and their implications. This process can provide the opportunity to explore whether there is a 'desired future' that we should be working towards and, if so, what this might be like to enable us to plan effectively. In London key players worked towards achieving a desired view of the future, which includes the need for an 'energised workforce'.[58]

Critical to the success of Futures Research is the involvement of key players who will facilitate both the development, and hopefully the implementation, of its findings.[56] It should be recognised, however, that in undertaking Health Futures work, the process itself may alter the future.[56] This means that if none of the future scenarios is realised, the study will not necessarily have failed. Rather, Garrett suggests that this may be an indication of its success, with steps being actively taken by planners and providers to avoid the future scenarios presented, the research having provided them with *foresight* in decision-making.[56]

Workforce planning is both an art and a science. Critical to the way forward are robust data on the current workforce working across health sectors; however, it is clear that such data are not readily available.[2,13,59-62] Steps are being made to improve NHS workforce date collection; however, in reality, there is no single body empowered to collect all the necessary data to support workforce planning thus data will have to be drawn from a range of sources.

In closing...

Where do we go next? To keep pace with healthcare in general, and to attract and retain individuals best suited to be the dental workforce of the future, modern approaches to workforce planning should be high on the dental agenda. As a profession, dentistry needs to debate our approach to care to ensure that it is patient-centred and promotes oral health. We need to ensure that evidence-based care informs the business of dentistry, rather than the other way round. The UK Departments of Health need to work collaboratively on workforce issues in the context of Europe. Based on the outcome, we need the GDC to ensure that the ongoing review of dental education takes a bold approach to the training of dentists and the wider dental team. Providers of dental education need to be willing to adapt to changing skill-mix but are well equipped to do so as they work with dental hospitals and outreach centres where dental care professionals are trained. If team-working is a feature of future care, then service providers will also need to begin a process of change from building bigger dental practices to employing more DCPs and extending team-working. It will be a challenging process for some; however, acting will preserve professional status and enable us to provide integrated contemporary high quality healthcare. Ongoing contemporary workforce planning, informed by professional debate, is fundamental to shaping the future of dentistry as a profession and serving the public.

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