Clinical challenges

Samenvatting van de inaugurele rede uitgesproken door dr. A. Sandham bij het aanvaarden van het ambt van hoogleraar Orthodontie aan de Rijksuniversiteit Groningen op dinsdag 11 oktober 2005.

The generation of an idea, the investigation of a concept and the defence of a thesis is part of academic life. The principles of clinical challenges are maybe somewhat different, because they must be tempered with ethical considerations, compassion and ensuring no harm. Teamwork and a long term focus on the issues are not possible without adequate finance and many areas of research are now carried out by large pharmaceutical and manufacturing companies, which have an eye on marketability of the end product. This poses new ethical challenges, so process controls, audit and accountability become important issues for the profession.

These activities are all part of delivering quality to clinical care, which should involve both practitioner centred and patient centred evaluations, together with maintenance of standards through process evaluations and inter- and intra-centre audits of outcome.

Government health departments and insurance agencies have considerable interest in quality issues regarding the delivery of a clinical service, value for money and evidence-based practice. In the United Kingdom, the Department of Health has set up a National Institute for Clinical Excellence. This organization is concerned with standards of care and patient satisfaction, internal and external audit of the outcomes of treatment, and the development of consensus over the clinical management process of a wide range of medical and surgical procedures.

Medical and dental education is becoming a process of life long learning, guided and focussed towards specialization in a relatively narrow area of clinical activity. In dentistry, at least in one Dental School, the students can select a specialist profile which can exclude parts of the established curriculum. As a logical extension of these activities, the newly qualified medical or dental practitioner is becoming different to traditional expectations that the public has. The all embracing doctor does not exist anymore. There is no possibility that a new graduate would be competent in all aspects of clinical practice.

This is the age of increased specialization, but with it has come the development of greater responsibility for nursing and paramedical personnel. A new job title has had to be created for describing the increased responsibilities that have been shouldered by hospital workers. The title of 'professions complimentary to medicine and dentistry' has evolved and training and registra-
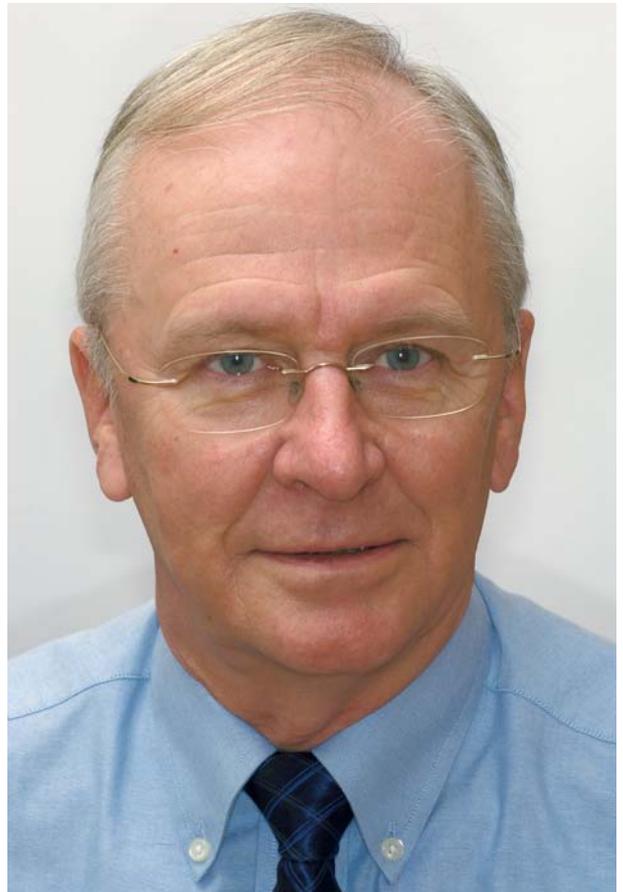
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tion authorities have had to recognize and regulate the activities of this new group of practitioners.

The problem is: who manages the patient, the general physical status and the impact the specialist work has on other aspects of well-being? It seems that this responsibility is often devolved to junior staff in training and the professions complementary to medicine. The challenge is to ensure that with increasing specialization, we don't overlook the individual in our attempt to focus on the problem.

In a world of finite resources there have to be priorities. Specialist care is quite often expensive, and in a public health care system this can place a strain on the health budget. One particular problem is the very high costs of pharmaceutical products and the personal challenge to a patient seeking expensive treatment, when this involves having to sell the family home to meet the hospital charges for medication.

So, how well do we focus on the patient, or are we more concerned with the procedure? Do we respect autonomy and the rights of the patient? Do we have a patient's charter and do we have in place all the checks and balances that are patient-centred, so that evaluations can be made that involve patient satisfaction? Surely, this is a most important area for the patient, who wants as much information as possible, helping making a decision on treatment proposals.

Quality, audit and maintaining standards

Perhaps most important is the overall maintenance of quality in clinical care, and this implies patient or customer satisfaction. The clinician who proclaims 'he has always done it this way, and it seems to work' has no longer any firm foundation on which to base this continued approach.

Without comparison with the outcomes from other clinicians and other centres, the clinician might have been doing it wrong for a whole career, or maybe was doing it better than everyone else. Somehow, we need to measure treatment change and to evaluate outcome, not only in terms of technical success, but also in the improvement in quality of life and the cost-effective nature of the overall care. Then we need to compare our results with other centres doing the same procedures. Then we need to change as a response to identified problems, and in this way aim to have a cycle of continuous improvement built into our processes.

I feel quite pleased to be able to say that in orthodontics we have developed indices of need and complexity, and have had evaluators of outcome for many years. In 1993, the European Commissioners in Brussels awarded a grant to a group of orthodontic researchers for creating a framework of delivering quality by orthodontic professionals. This was called EUROQUAL and had a wide impact on the delivery of orthodontic care. The study for the first time obtained a broad consensus over the indicators for treatment, the treatment process, and the outcome evaluation. In effect, EUROQUAL was created using the industrial concept of total quality management (TQM) used by manufactures to ensure consistency of outcome and customer satisfaction.

If the profession does not immediately have a focus on quality, then the medical defence companies certainly do. They must manage risk, because they take on the liability when things go wrong. There are medical institutions and organizations in many places in the world that have agreed a consensus of approach to management and treatment of each medical and surgical problem encountering the specialist. This exerts control over the clinician, but it prevents a 'wild card' approach being used when its efficacy is not proven. The clinician then has to accept that the work must be done according to established guidelines, using evidence-based protocols. This approach will certainly become much more relevant in future.

Consensus is now building for this evidence-based approach in health care to be followed, and this has a considerable champion in the Cochrane collaboration, which is a non-profit making organization concerned with providing up-to-date information with evidence-based data bases using systematic reviews of the results of randomized controlled trials.

Cost effectiveness, adequate manpower, and resources

Cost effectiveness will always be a problem for providers when, for the costs of one multi-transplant procedure, a developing nation could build a plant to produce clean drinking water for a town. One sees this aspect of care, involving transplants, being more common. However, as costs are contained, more economies of scale are possible, and more certain outcomes can be anticipated. It is therefore important being able to take a balanced view of these issues. In treatment centres, priorities can be established that make for this balanced approach to health care service for each discipline, with their separate budgetary requirements. There will always, however, be high cost disciplines, and the implementation of audit and cost control measures here are so important ensuring value for money and cost effectiveness. This ensures that the procedures being carried out are offered to those standing to benefit most, and in whom the outcomes are more likely to result in success.

How we share resources in a society, and how we educate our health providers, and how the system provides continuing employment are all closely inter-linked and resource dependent, but like any large conglomerate business, the health care industry needs to be well managed. At this level it is up to the professional managers and politicians whose job it is to ensure the development of appropriate health care policies and strategies and educational resources to support the activities of the health sector.

'Do no harm' and maintenance of equality of care

As progress is made in medical research and knowledge, new information, techniques and pharmaceutical agents are developed, extending further the recuperative power of the human body and creating a situation where even severe chronic conditions can be controlled and the quality of life improved, where previously this would have resulted in death.

This poses difficulties because the challenge of 'do no harm' is partially delegated to large pharmaceutical companies where profit is an overriding consideration. We must rely on rigorous controls, animal testing of products and carefully structured clinical trials of new drugs before these are used. Even so, there are real problems when a product is marketed aggressively. One who prescribes has to reply on product information provided and be watchful of adverse reactions, and report these to drug control agencies.

This brings me to another point which I mentioned earlier, namely the costs of new products which are expensive not only covering the development costs, but companies are now having to think forward having liquidity to not only defend lawsuits, but also being able to pay large claims to thousands of patients when things go wrong.

This has a big impact on the equality of care and has no better example than the AIDS epidemic in Africa. According to the United Nations Children's Fund (UNICEF), one out of every five people in Zambia is HIV-positive, and virtually everybody in the country is affected or infected by HIV or AIDS. Why, when anti-retro-virus is so effective, is it not available to all who would

benefit? The answer lies in the costs; and while generic production has brought the prices down for first-line retrovirus from US $ 10,000 in 2000 to as little as US $ 150 per patient per year in 2004, there are still immense problems, political and logistic, which prevent those who's need is greatest, obtaining the medication. So hundreds of thousands of people are dying for want of drugs they cannot afford.

Progress

Finally, I mention the challenge of progress. We all like our comfort zone and we do like to change our routines or learn new things. There are two types of resistance to change and progress. One is organizational resistance to new ideas and activities and the other is personal resistance.

Both can have some positive effect to slow down a process so that there is time to reflect, form a consensus and develop a new approach, but they can so easily be used in a non-productive way stifling innovation and creativity. In a health care context, we want to be able to have a human response showing compassion in areas of need when change exerts a real and tangible benefit to health and well-being.

I return to the EUROQUAL study where I personally witnessed the difficulty of obtaining consensus over treatment approach. Delegates were assembled at a congress centre at Noordwijkerhout, representing the profession from each European Community member state. Some delegates listened and reflected, some contributed opinions, some were ready accepting things they did needed to be re-thought, but some groups just withdrew and did not vote because they did not agree that their autonomy or any of their colleagues' clinical judgements should be affected and maybe ultimately controlled any consensus opinion. The majority opinion ultimately prevailed, but having reached a conclusion this did not mean change was imminent, because the implementation phase was perhaps the most difficult.

I use this example to conclude and to say – be careful of just saying no, be responsive to new ideas, allow new initiatives space and support to develop, and above all, ensure that patient autonomy is respected.