Treatment planning based upon risk prediction – the future of preventative care

The global population is ageing and advances in health and social care, nutrition and standards of living, are creating a doubling of the number of individuals over 65 years of age, every 25–30 years. This, coupled with reductions in fertility rates and increased patient expectations of teeth for life, is creating a funding vacuum for oral health (as well as systemic health) in many countries. Several healthcare models exist for delivering oral health across the developed world, but the vast majority are still based upon medical or surgical models of care, which are clinician driven. The so-called ‘repair model’ is one that I have trained and worked with for the last 25 years. Despite the drive for preventative care, the reality is that in the absence of models of risk prediction, prevention tends to be generic in nature, rather than focusing resources upon those individuals that have greatest need. We still fix it when it breaks and plan treatment according to current disease status, rather than identifying patients most at risk of developing disease and involving patients in individualised preventative care programmes.

Periodontal care lends itself to several healthcare models. The biological basis of periodontology is enormous, as is reflected in the wide diversity of periodontal research, much of which focuses upon disease aetiology and pathobiology, rather than surgical intervention. The evidence base for risk factors for chronic periodontitis (both putative and true risk factors) is growing at such a rate that alternative models can now be developed. The ‘Wellness model’ is one such model, which is both patient and clinician driven. Patients are holistically assessed, at a time when they are healthy, for their risk of developing common diseases using accepted clinical or biological measures and are provided with evidence-based and personalised information to help them take responsibility for their own ‘wellness’. This may involve objective risk prediction models, the calculation of risk scores and their use to determine individual care plans based upon future need rather than current disease status.

This volume contains two manuscripts that map the future of preventative oral health care for an ageing population who will no longer accept tooth loss as part of their life history. Page and Martin provide the scientific and clinical background to the Oral Health Information Suite (OHIS) and take care to differentiate ‘risk’ from ‘disease’ using objective scoring systems. They describe an online risk and disease scoring system, its validation and implementation in modern 21st Century practice. In the second manuscript on this theme, Loeb describes the benefits of objective risk prediction models from the oral healthcare stakeholders’ standpoint; that is to say, the benefits for patients, dental surgeons, and healthcare funding bodies. I strongly recommend you read these papers and reflect carefully upon their key messages. I hope you enjoy this issue of PERIO as much as I did.

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