THE INTEGRATED DENTIST

With both Australian and international governing bodies now recognising integrated healthcare as a priority practice, dental professionals are able to 'pivot' in new and exciting directions. So what does the new interdisciplinary practitioner look like?

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As the world has collectively emerged from the pandemic lockdown years, one healthcare trend has gained pace. Embracing a 'new normal' of telehealth and remote working life made the best of a situation that put necessary distance between us; conversely, however, it did little to stop the collaborative care movement.

Patient-centred collaborative care is not particularly new, with hospitals and other healthcare centres long benefitting from their ability to draw on specialists and generalists from many different departments. What is new, however, is two-fold.

1 INTEGRATED CARE AS POLICY

Firstly and perhaps most excitingly, truly integrated care is being formally recognised in policy.

Last year, the World Health Organization (WHO) took the step to officially recommend integrating oral health with primary healthcare as one of the major guiding principles behind its landmark global oral health strategy adopted at the World Health Assembly 75, with ambitious goals to achieve universal health coverage in the field of oral health by the year 2030.

Another of the guiding principles to work in concert with that, involves "adopting innovative workforce models to respond to population needs". WHO is now at work developing its full action plan to more comprehensively detail what that will entail in practical terms for public oral health this year, but meanwhile, other healthcare organisations have quickly followed suit with their own recommendations.

In February this year, for example, FDI put forward its own support of "exploring the bidirectional relationship between oral health and general health" via the online platform of its new Whole Body Health project (*fdiworlddental.org/whole-body-health*), stating: "Oral health is a basic human right and vital to maintaining general health and a good quality of life. The Whole Body Health project is focused on raising awareness of this bi-directional relationship by acknowledging and promoting the latest research in this area. It also aims to encourage individuals and National Dental Associations to advocate for the inclusion of oral health into national NCD strategies."

National and state bodies in Australia have also already reflected this move toward integrative innovation in their own strategic plans and recommendations. As one example, the NSW Health Oral Health Strategic Plan 2022-2032 names as one of its five strategic directions, "delivering truly integrated care".

Its vision statement describes integrated care in more of a holistic sense, as "consistent, efficient and effective care that reflects a whole of person's health needs", forming partnerships to provide seamless care, strengthening referral pathways and establishing referral pathways across providers of public dental services, providers of social services, and the not-for-profit and private sectors including GPs and nurse practitioners.

However, this definition still sees practitioners 'staying in our lane', with referrals and efficient information systems doing the job of bringing multiple healthcare disciplines to treat in a 'whole of person' way. In other areas, such as academia, there is innovation afoot exploring how dental professionals and researchers can lengthen their remit towards other healthcare disciplines.

2 ACADEMIA: BLURRING THE LINES

While public policy recommends and confirms, academia experiments and evolves. Universities allow interdepartmental research and interdisciplinary projects to delve more deeply into connections between health issues – the more widely publicised and accepted findings being the links between periodontal disease and systemic health issues such as diabetes, or cardiovascular disease.

The FDI notes in its Whole Body Health project that: "Poor oral health and untreated oral diseases are associated with multiple health conditions including cardiovascular diseases and increased risk of stroke, and diabetes which have a bi-directional relationship with periodontal disease, each able to influence and worsen the other. Periodontitis during pregnancy is linked to low birth weight, preterm birth and pre-eclampsia. In patients with chronic kidney disease, it may lead to a worse long-term prognosis. Further associations are known between oral health and osteoporosis, obesity, Alzheimer's Disease, respiratory diseases, and rheumatoid arthritis and research is emerging that poor oral health may increase the severity of COVID-19."

On the positive side, improved research methodologies and technology, coupled with these interdisciplinary findings, have now paved the way for new collaborations that would have been unheard of, 20 or even 10 years ago.

THE AUSTRALIAN CENTRE FOR INTEGRATION OF ORAL HEALTH: AN INTERDISCIPLINARY CASE STUDY

Prof. Ajesh George, co-founder and director of the Australian Centre for Integration of Oral Health (ACIOH; *acioh.com*), recalls the resistance he encountered as the Centre began. "Yes, it was hard to set it up even five to seven years ago," he says. "Everyone was waiting for more evidence to show causality between periodontal disease and systemic conditions rather than implementing preventative strategies."

"Fourteen years ago is when I started the journey as part of my postdoc, and when I started looking at whether midwives could play a greater role in promoting oral health among pregnant women. There was indeed a lot of resistance – from the dental workforce because they felt other health professionals might be trying to take over their turf, but also from the midwifery workforce because they weren't really sure what was expected of them. It was important to get champions in their discipline who advocated for this. If it wasn't for a midwifery unit manager at Campbelltown Hospital [in Western Sydney] who had a passion for oral health,

we wouldn't have established the Midwifery Initiated Oral Health (MIOH) Program – which ended up being recognised by WHO last year! It was a flagship program, really, to ask: is this feasible? Can non-dental professionals actually incorporate oral health into their practice? We spent about 10 years developing and trialling that program, resulting in funding (including NHMRC grants), more than 35 publications, and now it is part of policy and practice in Victoria.

Once Prof. George (*above*) had put in place pathways to extend oral health training and messaging to students within the nursing and midwifery academic streams, he had to make unusual decisions about his professional affiliations.

"I didn't seek employment in dental schools but deliberately stayed in the School of Nursing & Midwifery, Western Sydney University to become a Professor of Interprofessional Oral Health. I have seen the amount of work we can do with PhD students who are not dentists. They are dieticians, or nurses who are passionate about oral health. From a credibility point of view, I wanted to address them from a position of 'us' rather than 'them'.

"Raising awareness and improving the oral health literacy of consumers through the non-dental workforce is cost effective for health services in the short term. So when we finished that study, we said, 'Why not duplicate this in every other area of healthcare across the patient lifespan?' And that was the genesis of the ACIOH. Now we can address various conditions where poor oral health impacts general health, and we can adopt new models of care with both dental and non-dental workforce."

Looking to the future, Prof. George wants to move beyond simply playing 'matchmaker' between healthcare disciplines, instead making meaningful change in the traditionally siloed curricula shaping future health practitioners. "Every university goes through curriculum redevelopment and reassessment, and we would love to have the conversation at that point in time to say, 'have you thought about how oral health corresponds with what your students are learning? It really starts with communication, and that is lacking when everyone is working in silos in terms of oral health.

"At the end of the day, mutual respect is essential, taking in the best of what we have to offer with the best of others' expertise. Co-design of interprofessional oral health competencies seems to be somewhat lacking in Australia, although there are some great examples to model on, in other countries. Once there is more work done in this space, that will then inform interprofessional training."

EXTENDING THE SCOPE

HANNY CALACHE

With a Doctorate of Public Health, the career of Prof. Hanny Calache (*right*) is a great example of a dentist moving way beyond the clinic. In fact, Prof. Calache was awarded the 'Health Minister's Award for developing a capable and engaged workforce' for his work in extending the scope of practice of dental therapists – a great progression from his beginnings as a qualified paediatric dentist working on school children out of dental service vans in Victoria.

Prof. Calache moved into academia, leading the establishment of the Diploma in Oral Health Therapy at the University of Melbourne and ultimately building it up to degree level. He attained his Doctor of Public Health and completed his research in geriatric oral health – effectively attaining interdisciplinary qualifications that covered the full patient lifespan – then stretched into the area of health economics, with the support of Deakin University, setting up the only oral health economics research unit in the Southern Hemisphere.

"My interest also is in increasing the capacity of non-dental health professionals to better understand the importance of oral health in the effective management of patients. For example, if you have a speech pathologist working with children with speech issues, and they notice early dental carious lesions in the mouth, they can then refer them for early management and reversal of these lesions. Likewise, we've done some work around diabetes and periodontal disease. We have been looking at the capacity of oral health professionals to run the AUSDRISK (the Australian Diabetes Risk Assessment tool) on their patients who present with advanced periodontal disease, and then we worked on the development of a periodontal risk assessment tool called PRISK. The latter is a series of questions that a GP or a diabetes educator could ask patients, informed by some basic information on how to spot gum disease or calculus. This screening can then encourage a referral to a dentist; likewise, a dentist can be better informed on spotting a patient at high risk of developing diabetes, to then refer them to a GP. In this scenario, both professionals benefit from managing the patient's condition more holistically.

"Another group in a great position to work more closely with are pharmacists. On average, a person visits a pharmacy at least 14 times a year. A pharmacist can provide preventive oral health advice, for example, when dispensing medications that cause dry mouth – a risk factor for tooth decay and gum disease – or provide guidance about prevention of early childhood caries when selling baby bottles or formula."

WHEN DENTISTRY AND PHARMACY COMBINE

LEANNE TEOH

Dr Leanne Teoh (*left*) has thoroughly explored the centre of the dentistry-pharmacy Venn diagram, as the lecturer of dental therapeutics and postdoctoral research fellow at Melbourne Dental School, as well as being a registered practising dentist and pharmacist. She was awarded her PhD in 2021 with a focus on medicine use in dentistry and dental prescribing practices, particularly on dental antibiotic stewardship. Leanne co-authored the *Therapeutic Guidelines Oral and Dental Version 2*, is on the editorial board for the international journal *BMC Oral Health*, and is Vice President of the ADA's Therapeutics Committee.

"My career has rather taken the path less travelled. After graduating from pharmacy, I realised that I wanted a job that that had more direct patient involvement and decision making. I love being a dentist as it's a good mix of art and science, and it is enjoyable to be able to make a tangible difference to patients' lives. When I had the opportunity to co-author *Therapeutic Guidelines Version 2*, I was inspired by the researchers in the expert group. Eventually, I returned to Melbourne Dental School, after eight years of working in private practice to do my PhD while on maternity leave. I had been wanting to do my PhD for a long time, and think doing a PhD is rather like having wisdom teeth removed – there's never a good time to do it, but if it's something you need to do then you just have to do it! The students are also inspiring to teach, and it's great having the opportunity to be able to try to influence the next generation of dentists.

"Being dual qualified has certainly been pivotal to my career path, but also having great mentors along the way has been essential. The support and opportunities from the Melbourne Dental School, the ADA and the FDI has been fundamental for my career. It has certainly allowed me to explore this discipline of dental therapeutics, and recognise the gaps in the profession to try to develop ways to provide dentists with appropriate and practical resources to assist with accessibility of drug knowledge, the latter of which is always changing.

For more about Leanne Teoh's career journey, turn to page 27 to read our Member Spotlight feature.