

Academy of Australian and New Zealand Prosthodontists

Education Committee Report: January 2008

The purpose of the Education Committee is:

To monitor the teaching of prosthodontics in Australian and New Zealand Dental Schools at the undergraduate and postgraduate levels and to facilitate the teaching of prosthodontics in Australasian Dental Schools.

After being established at the biennial meeting in Sydney in 2006, this committee has been asked to consider the following issues.

1. How is prosthodontics taught within the Universities at the moment at an undergraduate level and how is the profile being improved or how can it be improved?
2. How can the website be made more useful to members while being beneficial to the public wanting to know about prosthodontics?

The following information has been obtained by the members of the committee (Mark Grevais, Brad Shepherd, Stephen Travis and Gil Watson); additional information was requested from Iven Klineberg, Lindsay Richards and Peter Wilson, whose assistance was gratefully received

1. How is prosthodontics taught within the Universities at the moment at an undergraduate level and how is the profile being improved or how can it be improved?

Adelaide

How is prosthodontics taught at an undergraduate level?

Adelaide doesn't have departments and all clinical disciplines (except orthodontics and oral surgery) are taught in the Dental Clinical Practice stream.

Currently clinical operative dentistry and occlusion teaching commences in second year, clinical operative dentistry continues in third year with periodontics and occlusion and clinical teaching in fixed and removable prosthodontics and endodontics commences in the fourth year; TMD is also taught in fourth year. The final year at Adelaide has a patient-centred model with comprehensive care that allows students to provide patients with whatever prosthodontic / restorative / endodontic / periodontic treatment their patients require. Technique / laboratory teaching proceeds each clinic by 6-12 months.

Student dental technology experience has been substantially reduced over the years so that a course of about 1 session a week through 3rd year is now provided and the students are not required to do technical work for their patients.

How is the profile of prosthodontics being improved or how can it be improved?

The profile of prosthodontics in Adelaide has been improving by attempting to increase the understanding of what prosthodontics is. This has been achieved by involving prosthodontists in the 3rd year laboratory programme and including treatment planning in those sessions, making it clear to the students that it is the prosthodontic needs that drive treatment planning.

Attempts have also been made to promote prosthodontics using various local prosthodontic organisations. To date, this has been partially successful.

In Adelaide, many members of the profession still think of prosthodontics as being only removable prosthodontics (or prosthetics). To help make it clear what prosthodontics is, there is to be a change in terminology in the Dental Clinical Practice stream in 2008 so that prosthodontics and crown and bridge are replaced with fixed and removable prosthodontics.

Griffith

How is prosthodontics taught at an undergraduate level?

The Comprehensive Adult Dental Care program at Griffith University is still being developed with Professor Florian Mack who arrived in October 2006. Professor Mack will run the program that replaces the traditional Department of Prosthodontics.

The university's first class of dental students is now in their fourth year with the theoretical and clinical training in fixed and removable prosthodontics running parallel to each other. The third year students receive introductory lectures in fixed prosthodontics and attend a semester of laboratory-based crown and bridge training. The removable prosthodontics component of third year is still being developed.

The clinical experience and theoretical knowledge of Griffith University's fourth year students will need to develop quickly to match the University of Queensland. There are however encouraging signs, with more patients becoming eligible for treatment following an arrangement between Griffith University and Queensland Health. The cost of prosthodontic treatment for the patients should continue to fall with this new arrangement; currently, for example, the price for a porcelain-fused-to-metal crown is above \$850.00.

How is the profile of prosthodontics being improved or how can it be improved?

With a limited number of prosthodontists on the Gold Coast, the best way for the profile of prosthodontics to be improved is for either the students to be invited to attend the second semester University of Queensland prosthodontic evening sessions, or for something similar to be offered for Griffith students. Also, members of the Academy could present a prosthodontic themed half-day seminar on the Griffith University campus. This would take advantage of the University's lecturing facilities and be an opportunity for some Brisbane-based (or other) prosthodontists to visit the School of Dentistry and Oral Health and help establish an Academy presence at this fledgling institution.

Otago

How is prosthodontics taught at an undergraduate level?

At Otago, the prosthodontics discipline is in the Department of Oral Rehabilitation that includes endodontics, dental materials and dental technology. Prosthodontics at an undergraduate level is not taught as an integrated programme until the 5th year in the general dental practice course. Prior to this, it is taught as removable prosthodontics (2nd, 3rd and 4th year) and fixed prosthodontics (4th year).

BDS 2: introduction to laboratory procedures for removable prosthodontics with the emphasis on partial dentures and occlusion.

BDS 3: academic principles and clinical experience in removable prosthodontics is obtained in partial denture prosthodontics in the course “arch rehabilitation”. Principles of immediate dentures as well as implant prosthodontics for the partially dentate patient are introduced.

BDS 4: the concept of “arch rehabilitation” continues with immediate dentures, complete denture prosthodontics, implant fixed bridges and removable implant overdentures. There is also horizontal integration with fixed prosthodontics, including conventional crown and bridge and single implant crown simulation.

BDS 5: with core teaching completed, the final year students are able to apply their knowledge in the comprehensive care of patients, including implant crowns, as well as being introduced to the concept of a specialist prosthodontic clinic for advanced treatment planning cases.

How is the profile of prosthodontics being improved or how can it be improved?

Members of the Academy are involved in teaching second, third, fourth and fifth year courses involving aspects of fixed and removable prosthodontics. In the final year, one clinic a week has been designated as a “specialist clinic” with an endodontist, a periodontist and a prosthodontist in clinic to provide advice on treatment planning and to supervise student cases. This helps to facilitate an understanding of the breadth of prosthodontics at the undergraduate level together with the standard use of terminology fixed and removable prosthodontics rather than crown and bridge and prosthodontics. Encouragement is given to undergraduate students to consider a career in prosthodontics through clinic contact with prosthodontists and postgraduate prosthodontic students.

Melbourne

How is prosthodontics taught at an undergraduate level?

Prosthodontics gets an equitable share of teaching in the undergraduate curriculum at Melbourne. The teaching of prosthodontics occurs in years 3 and 4 with comprehensive patient care occurring in year 5.

At the start of the third year, students are introduced to the concept of replacement of teeth, and in the next two years, the students learn the techniques to address this issue. In the final year, the students apply their knowledge as they provide comprehensive patient care. The terms fixed, removable and implant prosthodontic are used instead of the terms crown and bridge. The designation of specialist prosthodontists also reinforces this.

The teaching of removable prosthodontics is provided by simulation for complete dentures because of limited clinic access and patient supply. This also reflects the trend in Victoria where there is some evidence that complete dentures are rarely provided in Victoria by dentists. The teaching of partial dentures is under review but will be retained.

The provision of implant restorations by undergraduate students is planned to occur in the next couple of years, at least by student group.

How is the profile of prosthodontics being improved or how can it be improved?

Members from the Academy present to fifth year students each week on treatment planning that helps to reinforce the standing of prosthodontists to the students. Melbourne has excellent support from the profession, both from specialists and general dentists. The postgraduate program is a major factor in enhancing the status of prosthodontics; the postgraduate students are excellent ambassadors.

Queensland

How is prosthodontics taught at an undergraduate level?

The fourth year students deliver a range of prosthodontic treatments throughout the year, with all clinical sessions supervised by either a prosthodontist or an experienced general practitioner. All the technical work is out-sourced to private dental laboratories that produce a high standard of technical work at turn-around times similar to private practice. The patients who receive treatment in the undergraduate prosthodontic clinic pay up to 40% of private practice fees.

BDS 2: students are taught tooth morphology and occlusion and complete denture theory as well as constructing an occlusal splint.

BDS 3: students revise complete denture theory, and are taught removable partial denture theory, and are introduced to dental implants. Clinically students obtain experience in complete and partial dentures. Students are also introduced to fixed prosthodontics including laboratory-based training.

BDS 4: students are taught fixed prosthodontic theory. Students also have laboratory-based fixed prosthodontic training at the start of the year and clinical sessions in fixed prosthodontics for six hours per week for the full year. Visiting prosthodontists conduct prosthodontic-based seminars / treatment planning sessions one night a week in the second semester.

How is the profile of prosthodontics being improved or how can it be improved?

The University of Queensland has lost the experience of a number of highly respected clinicians in recent years and this has impacted on the prosthodontic programme. The second semester of fourth year provides the Academy with an opportunity to enhance its presence at the University of Queensland, with private practitioners invited to talk on selected prosthodontic topics in student-compulsory evenings.

Sydney

How is prosthodontics taught at an undergraduate level?

Recognising that prosthodontics continually has both technology advances with implants and materials and general medical associations (self esteem, psycho-social wellbeing, function, diet and nutrition), the teaching of prosthodontics has been continually modified to ensure that it competes appropriately with other major disciplines in dentistry; as well as recognition of implant options and the diminishing demand for removable prostheses. The latter has created a teaching challenge in the BDent programme since there is a need for complete and partial denture training for general practice registration and there is a recognition that as dental implant care forms part of clinical dentistry this also needs to be included in prosthodontic teaching and clinical experience. Implant prosthodontics has been an advantage for undergraduate teaching as it emphasizes interdisciplinary treatment planning and patient care.

Currently, prosthodontics commences in BDent 1 with overview lectures introducing the extent of fixed, removable and implant prosthodontics and the importance of occlusion. This introduces students to the various aspects of prosthodontics including diagnosis and treatment planning, technology requirements, the interrelationship of form and function and management of aesthetic expectations. An implant component begins in first year and continues through each year and is integrated with anatomy, imaging and rehabilitation.

BDent1: pre-clinical course that includes pouring and articulating casts, examining tooth replacement on casts and examining tooth form and occlusal relationships in relation to other oral structures. Clinical involves alginate impressions and pouring casts

BDent 2: partial and complete denture prosthodontics including pre-clinical exercises on partial denture component selection and design. An occlusion theme that is prosthodontically based also occurs which reinforces occlusal form-function in relation to fixed and removable prosthodontic treatment.

BDent 3: a 20-week removable prosthodontics clinical block on removable prosthodontics will begin in 2008, including integrated complete and partial denture construction. Pre-clinical fixed prosthodontics commences and continues in the clinic with single crown treatments.

BDent 4: complete denture prosthodontics – the block of 6 sessions with demonstrations and clinical treatment has been transferred to BDent3, but will be offered for the last time in 2008; clinical treatment for fixed and removable prosthodontics including implant restoration (with emphasis on single tooth and mandibular overdentures) in the integrated clinics, where fixed, removable and implant restorations are provided

How is the profile of prosthodontics being improved or how can it be improved?

The status of prosthodontics at Sydney is strong. The discipline description of prosthodontics and oral rehabilitation are regarded at Sydney as being equivalent but that oral rehabilitation is a broader term and includes removable and fixed prosthodontics including implants, occlusion, restorative dentistry and management of aesthetics. It is likely that there will be a change in the title of the discipline descriptor to oral rehabilitation.

Western Australia

How is prosthodontics taught at an undergraduate level?

In Western Australia the terms operative dentistry, restorative dentistry and removable prosthodontics are used and fixed prosthodontics is taught as part of restorative dentistry.

BDSc 1: students are introduced to the fundamentals of tooth preparation.

BDSc 2: students have an integrated series of lectures, pre-clinical laboratory instructions and practical exercises with comprehensive coverage of tooth preparation. Students also receive lectures, literature reviews, demonstrations and student hands-on simulation of techniques for clinical and technical aspects of complete and partial removable prosthodontics.

BDSc 3: students have three clinical modules: clinical operative dentistry, removable prosthodontics and fixed prosthodontics.

BDSc 4: lectures on operative dentistry and biomaterials, fixed prosthodontics, removable prosthodontics, occlusion and facial pain. Clinical treatment continuation of cases started in the third year of the course also occurs.

Main didactic course has completed at the end of Year 4.

BDSc 5: This is an intern year. Integration of all subjects occurs in this year. Limited prosthodontics because of constant rotation through out-clinics. Students mostly gain experience in diagnosis, emergency treatment, exodontia and operative dentistry and endodontics as well as some exposure to implant theory.

How is the profile of prosthodontics being improved or how can it be improved?

An Academy member is involved, primarily in teaching in final year clinics as well as attending treatment planning sessions with the student groups. It is hoped that a number of other Academy members will become involved in teaching in the undergraduate programme.

Summary

How is prosthodontics taught at an undergraduate level?

The teaching of prosthodontics appears to be similar at most Universities in Australia and New Zealand. Preclinical removable prosthodontics and occlusion is introduced in 1st or 2nd year and clinical experience in removable prosthodontics occurs from 3rd year. Fixed prosthodontics theory is introduced in 3rd or 4th year and clinical experience occurs from 4th year. Most Schools have or are planning to introduce theory and/or clinical experience in oral implantology. Several Schools are questioning or reviewing teaching of complete denture prosthodontics because of difficulty obtaining patients and/or a perceived need to teach complete dentures.

How is the profile of prosthodontics being improved or how can it be improved?

Most Schools have either standardised or are planning to standardise terminology replacing crown and bridge and prosthodontics with fixed and removable prosthodontics to clarify the historical terminology that related to removable prosthodontics. Involvement of Academy members in teaching prosthodontics varies and greater involvement of members in case treatment planning and educational sessions are ways that have been identified that the Academy could increase the profile of prosthodontics in undergraduate prosthodontics that is likely to, with time, increase the profile of prosthodontics in the profession.

How can the website be made more useful to members while being beneficial to the public wanting to know about prosthodontics?

At the moment attempting to find the Academy section of the website or a dentist or a prosthodontist in the new ADA website is difficult. The new website has been totally changed and doesn't function like the old one. The ADA is aware of this. To use the new site, Academy members have to be registered with the ADA and have a PIN; when you apply for a pin number you are also asked whether you would agree to having your name listed on the site. Only those practitioners who individually agree to have their name listed on the site are listed under search for a dentist or search for a prosthodontist. This would mean that every member of the Academy would have to contact the ADA and register on the site; this excludes New Zealanders as they are not members of the ADA. Another change that has occurred is the search words (meta data) we had listed no longer links to prosthodontists or the prosthodontic section. The ADA website manager has made the following suggestions:

1. Register the domain name for AANZP.com.net.org so that we have those to use;
2. Set up a sub-site on the ADA's website with our own URL address. We would use the domain name of AANZP.org. On the sub-site we could then reproduce the old site on the new sub-site and that would allow New Zealand members to access it and it would also be possible to get the meta data to work so that it points to the Prosthodontists when certain search words are inserted.

Currently, John Locke is working with the Ron Robinson at the ADA regarding access to the Academy website with the aim of making the website more useful to members while allowing the public to access at least portions of the site to found out more about prosthodontics and where they can find a prosthodontist.

Access to the current website is via the following address<www.ada.org.au/ods/societies/aanzp/aanzp.asp>