

**University College Cork
National University of Ireland, Cork**

Quality Improvement/Quality Assurance

Peer Review Group Report

on

**Dental School & Hospital
BDS Degree
Department of Oral Health & Development
Department of Oral Surgery
Department of Restorative Dentistry**

Academic Year 2000/2001

May 2001

Members of the Peer Review Group:

- 1. Professor J. Hall, Department of Physiology, UCC (Chair)**
- 2. Professor A. Hyland, Vice-President, UCC**
- 3. Mr. Denis Doherty, Director, Office of Health Management and CEO of the Midland Health Board, Ireland.**
- 4. Professor J.G. Cowpe, Department of Oral Surgery, Bristol Dental Hospital, UK**
- 5. Professor W.M. Edgar, Department of Dental Science, University of Liverpool, UK**
- 6. Professor P. Holloway, Department of Oral Health & Development, University of Manchester, UK**
- 7. Dr. D.Y.D. Samarawickrama, St. Bartholomews, The Royal London School of Medicine and Dentistry, UK.**

Peer Review Report

Members of the Peer Review Group were assigned different sections of the Report to write up. All members of the Peer Review Group agree with the findings contained in the Report and the final recommendations. The Chair of the PRG wrote a summary of the major findings and recommendations. The individual sections are attached as appendices, where the author responsible is clearly indicated.

Timetable,

The timetable for the conduct of the review visit is attached as Appendix A.

Peer Review
of
Dental School and Hospital
BDS Degree
Department of Oral Health & Development
Department of Oral Surgery
Department of Restorative Dentistry

W.J. Hall,
Chairman, Peer Review Group

The first section of the report is an executive summary of the detailed findings on each of the departments, the Dental School & Hospital and the BDS Degree.

Section 1

Ownership and Governance of School and Hospital

The continuing success of the school and the hospital will be influenced by the way the interlinked relationships between the school, the hospital, the university, the Southern Health Board and the Departments of Health & Children, and Education are managed.

We were impressed at the level of acceptance we encountered of the need for shared ownership of the school and hospital by the key stakeholders and a general willingness to engage in the processes and structures that will be required to realise the potential shared ownership offers. We were pleased to learn that plans are in hand to enlist the leadership of the most senior figures in the university and the health board to achieve the desired outcomes. We fully endorse the approach being adopted and recommend to the parties that they commit themselves to measurable progress on the issues of shared understanding of the future role of the school and

hospital, governance and funding arrangements being achieved by the end of the current calendar year.

The BDS Degree

The Review Group was impressed by the positive collegial atmosphere, which was evident among the Heads of Department and Senior staff and their willingness and openness, as a group, to respond to the changes, which are occurring in Dental education as in other areas of education. This tangible collaborative and collegial approach underpinned all aspects of the work of the School and Hospital and is to be highly commended.

We were impressed by the quality of the student body and the graduate output, reflecting an excellent level of student recruitment. We consider this outcome a measure of the great deal of hard work done by a talented and dedicated staff. We note that the school has identified through student feedback a need to reorganise the BDS course and has instituted a Curriculum Development Committee to implement the necessary changes.

The peer group strongly supports these proposals, as they became aware that there was considerable dissatisfaction among the students about the structure of the current course. The first two years, with their almost total concentration on the biomedical sciences, were felt to be so distant from the profession, which the students have chosen as to lead to alienation .

A competency-based curriculum is seen as an ideal vehicle for the development of integrated modules incorporating basic and clinical elements, together with outcome assessment in the context of evidence-based dentistry. One way of approaching these course elements could involve a problem-base model. A competence-based curriculum is to some degree at variance with modularisation. We have difficulty seeing that the curricular developments we are urging are compatible with modularisation, especially in the first two years.

Department of Oral Health and Development

The Department consists of four units teaching paediatric dentistry, orthodontics, preventive dentistry and dental public health. All four units are contributing to the BDS degree in a very satisfactory manner. The Orthodontic Unit is in a state of flux at present because of a recent change in senior staff which is still unresolved. There is an urgent need to appoint a senior member of staff to this unit, not only to support the undergraduate teaching, but also to establish a postgraduate training programme in the speciality.

The teaching programme in Ethics and Jurisprudence in the undergraduate curriculum is also organised by the Unit of Dental Public Health. The lecture programme in the subject appears to be inadequate at present, and we would recommend that this be moderately expanded to embrace the many legal and organisational constraints that bear upon dental practice.

There is also a need to establish a course of behavioural sciences relevant to dentistry within the undergraduate course.

The Department has a research facility and programme with a high international reputation and profile. As well as being a WHO Collaborating Centre for Oral Health Services Research it leads several major European collaborative programmes and is also associated with international research workers in the USA and the UK. All this has been developed on outside funding from a number of international, national and commercial sources. It offers excellent facilities for research not only in public health but also in other disciplines with the Dental School of which several members of staff have already availed themselves. It is important that arrangements are established to ensure that this research is supported and encouraged in the future.

Department of Oral Surgery

The Department of Dental Surgery is a multidisciplinary department, which provides a clinical service and a teaching program in the following subjects: Oral Surgery (including maxillofacial); Oral Medicine; Oral Pathology; Oral Radiology; Oral diagnosis and Oral Therapeutics.

The response to the teaching by the students and graduates is largely very positive and the high calibre of the Cork graduates is recognised by the external examiners. The lack of extractions in appreciable numbers and minor surgical opportunities are the only problem-areas cited. However, it is recognised that this is not unusual to Cork but a general trend in most teaching institutions.

The main concern of the review panel in relation to the Department of Dental Surgery relates to staffing levels, which need to be addressed, as a matter of urgency

There is an urgent need to discuss, with close co-operation between the University and the Southern Health Board, the replacement of two senior posts in Oral & Maxillofacial Surgery, with the retirement of the current post-holders being imminent.

There is a need, as a matter of urgency, to appoint a consultant in Oral Medicine, who could also contribute to the proposed development of an Acute Care Unit.

Department of Restorative Dentistry

We found the Self-Assessment Report (SAR) to be a very searching and credible document dealing with the issues the department had been specifically asked to address by the Quality Review Committee of the University. The overall analysis of the department as described in the SAR was thoughtful and thorough. Its conclusions were in agreement with the findings of the Peer Review Group (PRG) during its site visit.

We were satisfied with the overall content and delivery of the course in Restorative Dentistry by well-motivated and committed staff.

Modularization of the curriculum is gathering pace. However, there is evidence that this is hindering vertical and horizontal integration of the curriculum.

The present curriculum provides for a very considerable time for clinical practice. However, there is ample opportunity to make more efficient use of clinical time for example, by getting students to see two patients in one 3-hour session. This move should allow for a reduction of timetabled clinical sessions without affecting quality of teaching and learning.

There appeared to be a high DNA rate for patients requiring elective dental treatment. The introduction of some form of assessment clinic to identify appropriate patients for undergraduate dental teaching might be worth consideration.

While the clinical facilities had the benefit of a recent upgrade, the Techniques Laboratory appears outdated. This should be upgraded with modern equipment to help students learn in a more realistic way as a matter of priority.

General Comments

There is a large contingent of part-time staff that would value improved communication and discussion on aspects of School and Hospital activities. They would appreciate more opportunities for in-house continuing education and be interested to receive information of and contribute to research programs.

The subject of staff development and continuing education for all staff needs to be addressed using a structured approach to developing and progressing internal and external opportunities

Section 2

Review of the Dental School and Dental Hospital Cork

D. J. Doherty

In the course of our visit we met

- Committed & enthusiastic staff
- Bright and lively students
- Graduates who value the training they received

Status and future ambitions

There is good evidence that the school and the hospital produce graduates who have no difficulty securing employment at home or abroad. There is also evidence that Cork graduates are high achievers in their careers.

The continuing success of the school and the hospital will be influenced by the way the interlinked relationships between the school, the hospital, the university, the Southern Health Board and the Departments of Health & Children and Education are managed. We were impressed by the expressed willingness of all those we met to further develop an understanding of the needs of each of the parties concerned.

We gained the impression that the school and hospital seek the status of being in the premier division of dental schools and dental hospitals in these islands and are willing to develop the evidence base needed to demonstrate that premier division status is being maintained. In that connection the school and hospital should consider benchmarking with other dental schools and dental hospitals in Ireland, the UK and even further afield. The potential benefits of achieving ISO certification or EFQM accreditation should also be considered.

Governance and Accountability

The mission of the school and hospital should, we believe, be negotiated and agreed with the key stakeholders, UCC and the Southern Health Board and the resulting agreement communicated with the Departments of Health and Children and Education. There should follow, we believe, negotiations and agreement with the key stakeholders on how the school and hospital should be governed. Governance should address responsibility for inter alia – policy making – budgeting – financial control – operations (a) clinical (b) other – performance indications.

The school and hospital should review their corporate identity with a view to ensuring that the high reputation of the institutions, for training and service and as places where staff are proud to belong, are reinforced.

QUALITY INSTITUTIONS

The representatives of the school, the hospital and the university we met readily acknowledged that demonstrable high quality standards are essential. We set out below some of the hallmarks of a quality grounded and quality driven institution.

- A place where safe systems support safe practice. Safe systems are the responsibility of management and should aim to ensure that potential risks to patients, students and staff are minimised. Safe practices are the responsibility of clinicians, individually and collectively, supported by their professional representative bodies.
- Appropriately funded to meet its obligations. Clear understanding of mission and the commitment of key stakeholders are essential.
- Well managed and can demonstrate high quality education for students, high quality service to patients and value for money to funders.
- A satisfying and rewarding workplace where - all categories of staff are valued and consulted in relation to matters relating to their work – staff are facilitated to realise their professional and personal potential – the rewards are those of an employer of choice – there are opportunities for promotion – problem solving skills are encouraged and facilitated – staff have their needs

to be communicated with met by their employer – staff at all levels are afforded opportunities to visit other dental schools or dental hospitals to see at first hand how things are done elsewhere – is a learning organisation for management and staff as well as students.

CONCLUSION

We were impressed at the level of acceptance we encountered of the need for shared ownership of the school and hospital by the key stakeholders and a general willingness to engage in the processes and structures that will be required to realise the potential shared ownership offers. We were pleased to learn that plans are in hand to enlist the leadership of the most senior figures in the university and the health board to achieve the desired outcomes. We fully endorse the approach being adopted and recommend to the parties that they commit themselves to measurable progress on the issues of shared understanding of the future role of the school and hospital, governance and funding arrangements being achieved by the end of the current calendar year.

Review of the BDS Degree Course

W.M. Edgar

We were impressed by the quality of the student body and the graduate output, reflecting an excellent level of student recruitment. We consider this outcome a measure of the great deal of hard work done by a talented and dedicated staff.

We note that the school has identified through student feedback a need to reorganise the BDS course and has instituted a Curriculum Development Committee to implement the necessary changes: principally

- Vertical integration. A continuous development of the student's knowledge by organisation of learning experiences in a 'joined up' way.
- Early clinical contact. The student needs to be aware that he or she has joined a dental school by meeting patients and other students in a clinical environment as early in the course as possible.
- Competency based. The course should prepare the student for independent clinical practice by identifying essential competencies, and structuring the curriculum to ensure that these are developed in the most logical and efficient way.

The Peer group strongly supports these proposals as they became aware that there was considerable dissatisfaction among the students about the structure of the current course. The first two years, with their almost total concentration on the biomedical sciences, were felt to be so distant from the profession which the students have chosen, as to lead to alienation.

We consider that early clinical contact will correct this problem, and will necessitate some decongestion of the first two years. We support moves to provide core courses in Biochemistry and Physiology in the first year, to establish the concepts and vocabulary need for subsequent development. More applied aspects of these disciplines should be discussed later in the BDS course in relation to the students' experience of human diseases, and of oral medicine, surgery and pathology. Anatomy is seen by the students to be relevant, and they appreciate the development

from general to oral anatomy, and the course in oral biology given jointly with the department of Oral Health and Development.

To co-ordinate these important changes in an essential sector of the BDS course, we are convinced of the value of the proposed senior non-clinical academic appointment in the Dental School to oversee biomedical science teaching throughout the course. Such an individual could facilitate an expansion of research in the School by the development of joint clinical/laboratory research programmes.

Early clinical contact implies the early development of communication skills, and other aspects of working in a clinical environment such as cross-infection control. The importance to clinical practice of an understanding of psychological and sociological factors which affect patient behaviour requires the input of appropriate knowledge of the behavioural sciences later on in the course.

A competency-based curriculum is seen as an ideal vehicle for the development of integrated modules incorporating basic and clinical elements, together with outcome assessment in the context of evidence-based dentistry. One way of approaching these course elements could involve a problem-based model.

A competence-based curriculum is to some degree at variance with modularisation. We have difficulty seeing that the curricular developments we are urging are compatible with modularisation, especially in the first two years.

We find the clinical years of the current course to be too highly structured, and that there is need for decongestion to allow students time for private study, elective projects and thinking time. The students need to be responsive to new knowledge, and the course should include an appreciation of the concepts and methods of research.

We recommend that the responsibility for quality assurance in the school is centralised and formalised, so that all quality issues and measures are responded to and disseminated. One such

structure could be a Teaching and Learning group, comprising staff and students, which receives all input such as student appraisals and external examiner reports, and recommends appropriate responses to the departments. The group would also monitor whether actions were taken following such recommendations. It is important for quality assurance and improvement, that quality issues are transparent to stakeholders, who see what if any responses are put into place, and why.

Review of the Department of Oral Surgery

J. G. Cowpe

The Department of Dental Surgery is a multidisciplinary department, which provides a clinical service and a teaching program in the following subjects:-Oral Surgery (including maxillofacial); Oral Medicine; Oral Pathology; Oral Radiology; Oral Diagnosis and; Oral Therapeutics.

There is a broad range of clinical material and clinical procedures available to the students, including opportunities within the outpatient and daycare settings. The staff makes an enormous effort to provide a cohesive and structured teaching program, integrating all the subjects. For this there is a heavy reliance on the goodwill of the clinical and support staff at all levels.

The response to the teaching by the students and graduates is largely very positive and the high caliber of the Cork graduates is recognised by the external examiners. The lack of extractions in appreciable numbers and minor surgical opportunities are the only problem-areas cited. However, it is recognised that this is not unusual to Cork but a general trend in most teaching institutions.

A series of proposals have been put forward by the Department in the Self-Assessment Documents, which the reviewers would wholeheartedly support.

- The establishment of an Acute Care Unit
- Opportunities for students to undertake minor oral surgery in outreach units
- Early re-equipment of a Clinical Simulation Unit to provide a structured introduction to basic surgical principles
- A structured 'in-house' Radiology teaching program
- The introduction of CAL teaching programs
- An integrated course in Oral Medicine/ Oral Pathology which would also compliment teaching in the other subject areas

Clear and concise sets of competencies for the subjects taught by the department have been identified. In addition, the department is taking a lead in the further development of the teaching program in Medicine & Surgery by initially identifying a list of competencies. Hopefully, this will lead to vertical integration of this course into the clinical teaching program. Equally, there should be scope to consider vertical and horizontal integration of Pathology, Microbiology, Pharmacology, and the Basic Sciences with Human and Oral Disease subjects.

The teaching of Basic Life Support (BLS) is driven by one of the consultant anaesthetists and occurs in the 3rd, 4th and 5th years. There is clearly enthusiasm from the student body to gain more experience in dealing with collapse situations. This could be facilitated, between the definitive yearly BLS sessions, as a hospital wide initiative. The teaching of BLS to the pre-clinical years warrants exploration. This could be another way of introducing clinical topics earlier in the course, thus strengthening the relevance of the Basic & Applied Science subjects to the Practice of Dentistry.

There is a serious lack of senior academic staff in the Department, specifically in the specialties of Oral Medicine, Oral Pathology and Dental and Maxillofacial Radiology.

The department has a low critical mass, in academic terms, and this combined with the large clinical and teaching workload is bound to have a significant influence on research output. However, the panel was impressed with the willingness for cross-departmental research collaboration and specifically the school-wide support from the Oral Health Services Research Unit (OHSRU). In fact, the latter is viewed by the panel as pivotal in the continued development of research in the Dental School and Hospital.

The main concern of the review panel in relation to the Department of Dental Surgery relates to staffing levels, which need to be addressed, as a matter of urgency, to provide a more structured and senior academic led teaching program and delivery of clinical service. The self-assessment document clearly identifies these needs.

In order to achieve the staffing objectives there needs to be a clear understanding of the breadth of the clinical service and teaching requirements of the department.

There should be a concerted effort by the Dental School and Hospital to display a united approach to the future strategy for the department of Dental Surgery.

The future Strategic Policy for the Department of Dental Surgery should be drawn up by the Head of Department, with the hope that support from all colleagues in the School and Hospital will facilitate the establishment of a stronger link between the University and the Southern Health Board in relation to the department. This will not only preserve a strong and effective clinical service but also ensure the continued development of a well-balanced undergraduate teaching program and future plans to develop specialist training and facilitate research within the department.

There is a need for the University and Southern Health Board to support the Dental School providing a positive response for the replacement of senior staff and the appointment of additional senior staff. The latter is clearly lacking at the present time.

The review group would support the following staff needs, recognising that the Dental School and Hospital will have to prioritise their requirements.

Replacement staff

There is an urgent need to discuss, with close co-operation between the University and the Southern Health Board, the replacement of two senior posts in Oral & Maxillofacial Surgery, with the retirement of the current post-holders being imminent.

Their replacement will be crucial to the maintenance and continued development of the specialty of Oral & Maxillofacial Surgery both in terms of the clinical service and the teaching program at the Cork Dental Hospital & School. The suggestion of joint appointments would be worth exploring.

Additional senior academic staff

There is a need, as a matter of urgency, to appoint a consultant in Oral Medicine, who could also contribute to the proposed development of an Acute Care Unit. This individual could provide a contribution and possibly co-ordinate a course in Human Disease (Medicine & Surgery), which should be of specific relevance to Dentistry and for which competencies have recently been identified.

The post holder should liaise with colleagues in Medicine and Surgery to address the very important subject of Human Disease in relation to Dentistry. This could provide an opportunity to establish vertical integration of this course, through links with Primary Care Dentistry, Medically Compromised and other Special Needs patients, Oral & Maxillofacial Surgery. Attendance at the Accident & Emergency unit might be explored. There may be a possibility that the appointee has experience in Oral Pathology, another subject that needs strengthening within the school. Once again there may be opportunities for links with the Basic Sciences, General Pathology and Microbiology.

The department has recently received funding to replace the radiography equipment. It relies on support from Radiology staff from the University Hospital for the provision of a radiological reporting service. A visiting Dental & Maxillofacial Radiologist from Dublin provides teaching. In order to conform to the needs of undergraduate students and staff in terms of teaching, clinical service and ionizing radiation regulations, there is an urgent need to appoint a consultant in Dental & Maxillofacial Radiology. Such an individual might also contribute to other clinical and teaching activities in the department, such as Primary Care, Oral Surgery or Oral Medicine.

These appointments could also facilitate future Specialist Training Programs. With the advent of the setting up of a Specialist list in Oral Surgery, the Hospital and School should be pro-active and play a major role in training programs and to this end employ trainees in Oral Surgery and in Oral & Maxillofacial Surgery. Trainees in Oral Surgery might undertake a combined clinical training and acquire a Masters' degree, akin to existing training programs in Orthodontics. There are

strong links with colleagues in Limerick and the fostering of this collaboration will greatly strengthen the provision of specialist training in the specialties in the Department of Dental Surgery.

Recommendations: -

1. The establishment of an Acute Care or Primary Care Unit - to enable students more opportunities to experience a wide range of Oral & Human Disease
2. Opportunities to provide minor surgery in placements outwith the School and Hospital which would provide students with increased 'hands-on' experience of basic dento-alveolar procedures
3. The early re-equipment of the Clinical Simulation Unit to facilitate the teaching of basic surgical principles
4. The establishment of a structured "in-house" course in Dental & Maxillofacial Radiology
5. The establishment of an integrated course in Oral Medicine & Pathology to compliment teaching of all subjects undertaken by the department
6. Improved vertical and horizontal integration of the Basic Sciences, Human Disease and other non-clinical subjects with the clinical course and visa versa.
7. Further experience in Basic Life Support throughout the whole course
8. The involvement of support staff in the teaching of Cross-infection Control and patient/dentist communications
9. The direct involvement of the department in Specialist Training Programs
10. The promotion of a structure of continuing education opportunities for all staff
11. The continued collaboration of the department with the OHSRU with regard to research
12. The urgent replacement of the two senior posts in Oral & Maxillofacial Surgery to facilitate the recommendations outlined above
13. The urgent appointment of a senior post in Oral Medicine, to facilitate the recommendations outlined above
14. The urgent appointment of a senior post in Dental & Maxillofacial Radiology to facilitate the recommendations outlined above

Additional General Comments from the Peer Review

There is an urgent need to strengthen links with the Southern Health Board in recognition of the breadth of clinical workload undertaken by the department. There is a need to consolidate the clinical service in partnership with teaching with a joint approach between the University and the Health Board to strengthen the continued development of the clinical service to patients and equally to support the teaching of undergraduate students and the continuing education of clinical and support staff at all levels.

The dental nurses would like to receive more recognition for their contribution to the School and Hospital. There is a perceived lack of career development opportunities. There are difficulties in recruiting nurses. The nurses would like to be involved in student teaching for example in interpersonal skills. They have already been involved in producing booklets for student guidance on clinical procedures and these could be further explored.

The Director of Nursing will need to address the concerns of the dental nursing staff with regard to being valued, continuing professional development and involvement in undergraduate teaching. The clinical nurse administrator has been pro-active in continuing education.

There is a large contingent of part-time staff that would value improved communication and discussion on aspects of School and Hospital activities. They would appreciate more opportunities for in-house continuing education and be interested to receive information of and contribute to research programs.

The clerical staff would appreciate a review of their posts and a greater opportunity to explore career development. There are problems regarding notification of courses at UCC and problems getting onto courses.

A very positive response from CSSD and equipment support staff. This might reflect the fact that a clinical re-equipment program and installation of a new CSSD has recently been completed.

There is a need to produce a mechanism whereby students get some indication of the relevance of the pre-clinical subjects to the Practice of Dentistry. They would appreciate earlier contact with Clinical Dentistry. Students in year 1 would value some guidance on how to learn and progress their own self-directed learning.

There was great concern regarding the relevance and volume of Biochemistry taught in the course. It would be useful to explore the possibility of reducing the Biochemistry to Core material of relevance to the Practice of Dentistry and the provision of a vertically integrated course in relevant Applied Biochemistry further on in the clinical course. This could free up time in years 1 and 2 to introduce students to the practical aspects of dentistry at an earlier stage in the course.

The mentoring process seems somewhat patchy. It would be valuable to consider the introduction of mentors or personal tutors in year 1. The involvement of clinical staff would contribute to earlier clinical contact. The inclusion of part-time clinical staff would be valuable.

There is a need to clarify feedback to students of their progress and for areas of concern that they express. In addition, a structured process for dealing with student concerns and support should be explored.

The reviewers would support the speedy redevelopment and upgrading of the Clinical Simulation Laboratory.

Students appeared to have a clear understanding of the weighting of in-course and continuing assessments in relation to formal examinations. What seemed less clear was their and some of the staff's understanding of the four-point scale of assessment and what this meant in formative and summative terms.

There appeared to be a high DNA rate for patients requiring elective dental treatment. The introduction of some form of assessment clinic to identify appropriate patients for undergraduate dental teaching might be worth consideration.

The reviewers recognise the pivotal role of the OHSRU in the future development of research in the Dental School. The reviewers stressed the need for the University to consider the provision of funding to pump-prime research within the dental school. This would encourage new and innovative research and provide a stepping-stone for applications for external funding. In addition this would increase the attraction for individuals with an enthusiasm for research to apply for academic posts at the Cork Dental School.

The reviewers strongly believe that there must support for the continued development of the OHSRU which already has an internationally renowned reputation. It is vital that the positive inertia of the unit is maintained following the retirement of the present director.

Recommendation for considering the amalgamation of the School & Hospital committee structure, to establish an Executive Committee to streamline the teaching and clinical service.

The curriculum committee provides good examples of inter-staff, staff/student co-operation. The following will be important activities to be addressed by this committee: -

- Competencies
- Assessment procedures
- Modularisation
- Vertical integration of the course

The subject of staff development and continuing education for all staff needs to be addressed using a structured approach to developing and progressing internal and external opportunities.

The importance of representation by members of staff on external committees and bodies is recognised. This should be sustained.

Whilst the reviewers welcomed the recent re-equipment program there was concern about the mechanism by which capital re- equipment is facilitated. They would recommend that a more

structured approach towards a rolling program of re-equipping be introduced. The maintenance of appropriate and highly efficient equipment within the Hospital and School is crucial to patient care and teaching and needs to be supported.

The reviewers in addition to recognising the immense contribution of the OHSRU to dental research in Cork recognise efforts throughout the school to promote a wide range of research initiatives. The efforts to maintain cross-departmental research collaboration and collaboration with colleagues outwith Cork is to be applauded. They believe that a school initiative to drive research in the future needs to be progressed. The establishment of a Research Strategy Group, which would identify the research, aims of the School and research subject subgroups should be given consideration.

Vertical and horizontal integration of the course should be one of the major goals. This could involve any of the following: -

- Basic sciences
- Pathology, Microbiology, Pharmacology
- Medicine and Surgery
- Oral Medicine and Pathology
- Radiology
- Therapeutics
- Materials Science

A structured approach to the teaching of pain and anxiety control in-patients undergoing dental treatment would be valuable. Students should have an understanding and experience of all methods of maintaining painfree dentistry and the various methods by which this can be achieved. There should be a structure to the teaching of local and general anaesthesia for dental treatment and the role and varieties of sedation techniques. The reviewers understand that a conscious decision has been taken to make students aware of the use of sedation but not expect them to be competent in the use of sedation in Dentistry. This is considered to be a postgraduate activity.

Review of the Department Of Oral Health And Development

P. Holloway

The Department consists of four units teaching paediatric dentistry, orthodontics, preventive dentistry and dental public health. All four units are contributing to the BDS degree in a very satisfactory manner. The Orthodontic Unit is in a state of flux at present because of a recent change in senior staff which is still unresolved. As a consequence, the educational programme is under active review and should be completed in the near future. However, there is still an urgent need to appoint a senior member of staff to this unit, not only to support the undergraduate teaching, but also to establish a postgraduate training programme in the speciality. The Unit of Orthodontics appreciates the need for training programmes for orthodontic specialists and the unique position that the two dental hospitals hold in this respect, but this cannot be established at the Cork Dental School and Hospital until the extra consultant post has been established, ideally at the professorial but otherwise at a statutory lecturer/consultant level. There is a clear need in relation to this to make arrangements with the Health Board for a supply of suitable patients, and to gain the co-operation of the local consultant in orthodontics.

The new major re-equipment programme has transformed the clinical facilities in the orthodontic and paediatric dental clinics, and further modifications of the cabinetry will complete the upgrading to a stage where the clinics meet the standards of first class undergraduate, clinical teaching facilities. It is highly desirable that arrangements are made for the Hospital to receive a rolling, annual, major capital re-equipment grant to avoid the need, in future, to replace all the equipment at one time when it has become impossible to maintain in a satisfactory working condition.

The excellence of the undergraduate clinical programme has not detracted from the high standard of the secondary and tertiary treatment provided by the staff in the two clinical units.

The teaching in Preventive Dentistry and Dental Public Health is also of a high standard. Their relatively low credit ratings should not be allowed to detract from the importance of these two

subjects. The taught MSc programme in Dental Public Health is a particularly valuable contribution to the national requirements in this discipline. The 18 post-graduate students, including eight doctoral theses, are clear examples of the productivity of this relatively small unit.

The teaching programme in Ethics and Jurisprudence in the undergraduate curriculum is also organised by the Unit of Dental Public Health. The lecture programme in the subject appears to be inadequate at present, and we would recommend that this be moderately expanded to embrace the many legal and organisational constraints that bear upon dental practice. This shortcoming might be divided between ethical issues delivered in the third year just before the students meet patients for the first time in the clinic, and legal issues in the final year just before they progress to independent dental practice.

There is also a need to establish a course of behavioural science relevant to dentistry within the undergraduate course and this would best be organised from the Units of Preventive Dentistry and Dental Public Health. Once more this might be divided into communication skills and behaviour modification introduced late on in the second year of the course before the students meet patients, and social and economic considerations that impinge on dental disease and the delivery of dental services later in the course when the students might be more receptive to these issues having overcome the initial problems of carrying out clinical procedures on patients.

The Department has a research facility and programme with a high international reputation and profile. As well as being a WHO Collaborating Centre for Oral Health Services Research it leads several major European collaborative programmes and is also associated with international research workers in the USA and the UK. All this has been developed on outside funding from a number of international, national and commercial sources. It offers excellent facilities for research not only in public health but also in other disciplines within the Dental School of which several members of staff have already availed themselves. It is important that arrangements are established to ensure that this research facility is supported and encouraged in the future.

In summary, the Department of Oral Health and Development is a first class teaching and research establishment that also carries out excellent patient services. We would recommend:-

1. That a senior consultant appointment in orthodontics, preferably at the professorial level, be established at the earliest possible moment.
2. That the appointment be coupled with the establishment of a specialist training programme in orthodontics.
3. That the upgrading of the orthodontic and paediatric dental clinics be completed as soon as possible.
4. That the orthodontic undergraduate teaching programme be up-dated.
5. That the Department oversees the development of the undergraduate programme in Ethics and Jurisprudence and the establishment of an appropriate programme in behavioural sciences relevant to dentistry.
6. That the future of the Oral Health Services Research Unit be guaranteed and expanded to form the major basis for the research programme of the Dental School.

Review of the Department of Restorative Dentistry

D.Y.D. Samarawickrama

Introduction

1. We found the Self Assessment Report (SAR) to be a very searching and credible document dealing with the issues the department had been specifically asked to address by the Quality Review Committee of the University. The overall analysis of the department as described in the SAR was thoughtful and thorough. Its conclusions were in agreement with the findings of the Peer Review Group (PRG) during its site visit.
2. We were satisfied with the overall content and delivery of the Course in Restorative Dentistry by well-motivated and committed staff. There are a number of commendable features:
 - Small group teaching facilitating close student contact and monitoring.
 - Integration of the disciplines of Conservative Dentistry, Periodontology, Prosthetic Dentistry and Dental Materials Science into Restorative Dentistry to provide a more holistic approach.
 - Efforts to develop and implement a competency-based curriculum.
 - Creating a module on Introduction to Clinical Skills to make the transition from pre-clinical to clinical studies as painless and seamless as possible.
 - Early introduction to clinical work.
 - Implementation of a student mentoring system.
 - Continuous assessment.
3. Significantly, both undergraduates and recent graduates were of the opinion that they received a good education. The latter also felt that they were prepared for independent practice on graduation.

Recommendations

Staffing

4. The department has 6 full-time staff and about 26 part-time staff. There is thus an imbalance between full-time and part-time staff. This in itself is not a bad thing but we found that this has led to difficulties in communication and implementation of a common policy on issues ranging from teaching to assessment and feedback. We are also inclined to think that quality assurance and improvement will also be difficult to implement uniformly. In view of these, an effort should be made to resolve this situation. We recognise that this is a sensitive political issue and therefore needs to be handled with care and tact. Nevertheless, this will facilitate better communication, greater uniformity of teaching, assessment and effective quality assurance.

Teaching and Learning

5. Although the students are being introduced to the clinical phase earlier than had been the practice in the past, there is opportunity to introduce students to limited clinical contact during the first two years. This will answer one of the criticisms made by the students that the first two years appear very remote from dentistry they have entered the university to learn. In addition, this change will also help the students to understand the relevance of basic medical sciences to clinical dentistry.
6. Modularization of the curriculum is gathering pace. However, there is evidence that this is hindering vertical and horizontal integration of the curriculum. Therefore, much thought and care need to be applied during the design of various modules if integration were not to be lost. One approach can be the creation of macro-modules as mentioned in the SAR.
7. The students currently spend considerable time learning laboratory technical procedures they are very unlikely to carry out following graduation. While there is a need for them to be familiar with the various technical procedures with a view to scrutinising the quality of the technical work supplied by the laboratories, it is hard to justify the need for the students to

attempt to learn the skills themselves. Therefore, the time spent on these technical exercises needs to be reduced.

8. The presence of part-time staff exposes the students to diverse clinical opinions, which is healthy. However, this should be matched by greater effort to harmonise standards of teaching and assessment. (See also Section 1).
9. The present curriculum provides for a very considerable time for clinical practice. However, there is ample opportunity to make more efficient use of clinical time for example, by getting students to see two patients in one 3-hour session. This move should allow for a reduction of timetabled clinical sessions without affecting quality of teaching and learning. The time thus saved can be used by staff to engage in greater research and scholarly effort.
10. Timetable as it stands at present is very rigid allowing little time for the students to undertake diverse educational activities. Such rigidity is also a hindrance to enabling students to plan educational activities according to their individual needs. After all, learning is an individual pursuit with different learning styles and pace. A flexible curriculum will allow, for example, students to devote more time to those areas they are currently experiencing difficulty with. The students should also be encouraged to undertake self-directed learning and project work instead of being taught and spoon-fed the whole time.

Assessment

11. The students appeared to be confused by the nature and intent of various tests they had to undergo. For example, the difference between formative assessment and feedback designed to help students learn and continuous assessment contributing to the final mark was not well understood. This has led to some apprehension among students with the result that some students merely attempted to complete practical tasks with a view to getting a safe pass by the deadline rather than taking time to master the skill. Therefore, the purpose and nature of formative assessment must be clearly explained to the students so that students learn in a supportive environment. The overriding concern is that all students master the specified skills, irrespective of differing learning styles and abilities.

12 Many assessments have a notional pass mark of 50% assigned to them. It was not clear on what basis this was determined, whether the possession of 50% of the knowledge required or the demonstration of core knowledge was the basis of a pass grade. Therefore, clear standards needs to be set for each of the test / examination grade. This will also have the benefit of greater consistency among the assessors.

Technical Support

13. There were several instructor technicians and also production technicians employed by the department. However, very little of their expertise appeared to be available to facilitate student learning which was most unfortunate. Early efforts should be made to remedy this situation.

Facilities

14. While the clinical facilities had the benefit of a recent upgrade, the Techniques Laboratory appears outdated. This should be upgraded with modern equipment to help students learn in a more realistic way as a matter of priority. In fairness to the department, this is listed in the SAR.

Research

15. Heavy teaching and administrative commitments undertaken by staff are leaving little time for reflection, research, innovation and scholarship. Although research output was satisfactory, there is room for improvement by making teaching and administration more efficient, thus releasing more time for research and scholarship. Greater use can also be made of the facilities of the Oral Health Services Research Centre, which is already on site with a proven track record. It was heartening to note that a start has been made in this direction.

16. Further expansion of postgraduate teaching should also be considered. This will help in enhancing research output as well as bringing greater vibrancy to the department and the School.

Conclusions

17. There was clear evidence of good academic practice and efforts on the part of the staff to reflect and refine the activities of the department with a view to improving performance and quality. The staff and students were very articulate in expressing their honest views to the PRG so that we could form a judgement.
18. The PRG acknowledges the help given and hospitality shown to the Group to enable it perform its task properly.

Educational Issues - issues of Teaching, Learning and Assessment

Á Hyland.

The Review Group was impressed by the positive collegial atmosphere which was evident among the Heads of Department and Senior staff and their willingness and openness, as a group, to respond to the changes which are occurring in Dental education as in other areas of education. This tangible collaborative and collegial approach underpinned all aspects of the work of the School and Hospital and is to be highly commended. It is indicative of a new era in the Dental School and Hospital and should be recognised and affirmed by all the partners in the Dental School and Hospital enterprise (University, Health Board etc.)

Throughout its two-day exercise, the Review Group saw evidence of the commitment of the academic staff to the provision of high quality teaching and student support. Student responses to the survey, carried out in conjunction with the Review, were very positive about the teaching and supervision / support provided, especially in the clinical years. Such a positive and unanimous response of students of all year groups is quite unusual in third level courses and is a tribute to the staff involved.

The Review Group was made aware of the variety of teaching approaches which were used in interacting with students - all of which appeared appropriate to the goals of the course. There is an increasing use of a competency and problem-solving based approach in the clinical years. The articulation / description of the various competencies was sufficiently broad (e.g. with an emphasis on understanding) to avoid the overly skills based / technical approach which can sometimes be associated with a competency model approach. (Reservations expressed on other professional courses about a competencies model could well be alleviated if competencies were conceptualised and presented in this broader way). The method of assessing the competencies was by a four point scale - two levels of "satisfactory" and two levels of "unsatisfactory". The descriptors of what constituted each grade were clear and unambiguous and if read and digested by students should enable them to become self-directed learners.

The students were less enthusiastic about their pre-clinical courses - especially those which were taught jointly to the Medical and Dental students. Many students had difficulty in seeing the relevance of some of the first and second year modules to a Dental course. Virtually all students had difficulty in seeing the relevance of the Biochemistry course in First and Second Year. The Review Body was informed that the Curriculum Committee is currently looking at vertical integration of some of the theoretical course material to try to ensure that topics will be introduced at a more appropriate point of the course. This is to be welcomed.

Feedback and Support

While students in the clinical years indicated broad satisfaction with the support available, they suggested that in some cases the formal mentoring system, which has recently been set up, is not fully satisfactory and needs to be reviewed. Having said that, some of the students' suggestions were unrealistic - as for example that every student should be mentored by full-time staff.

As regards First and Second Year students, the Review Body is of the opinion that they need to be more fully integrated into the culture of the Dental School much earlier in their university life. Some students indicated that they had never visited the Dental School in First Year and only very occasionally in Second Year. Many felt no affiliation with dentistry before Third Year and indicated that "they might as well be Science students". It might be worth considering some mentoring by clinical students of pre-clinical students.

Library and IT provision

The Review Group was impressed by the commitment of the Medical librarian, and her aspiration to provide a service of high quality to the Medical and Dental Hospital. There are about seventy reading places in the library, which appeared well-stocked and organised, although some of the external reviewers were not convinced that all the text books and research material were as up-to-date as would be desirable nor that there was a sufficient stock of books, given the numbers now using the library. The Review Group was aware that the demands on the library are growing rapidly and will continue to grow, with the expected advent of up to 1,000 Nursing students in the University within the next few years.

Recommendations:

1. Greater efforts might be made to involve staff other than full-time academic staff in curriculum change in order to ensure that all those involved in the teaching, support, supervision and assessing of students have a sense of ownership of and commitment to the change. (This would include part-time academic staff, nursing staff, technicians and clerical staff).
2. The revised competencies model which is now operational for clinical practice for Third, Fourth and Fifth Year sessions, may not be fully understood and / or accepted by some part-time teachers. Some further professional development may need to be provided for these clinical teachers / supervisors to encourage them to adopt the new approach more fully and enthusiastically. This is particularly true in relation to the assessing of the competencies. Practice in relation to the operation of the assessment appears to be uneven among part-time staff. There also appears to be some misunderstanding on the part of some part-time staff and some students as to how this assessment is used. The misconception held by some that the assessment is cumulative and (in the case of any one competency) averaged over a number of attempts, needs to be corrected. Clear written guidelines for part-time staff and students in relation to the operation of the assessment might be made available.
3. The teaching loads and staff /student contact demands, at both clinical and pre-clinical levels, seem particularly high. Perhaps more emphasis should be put on (self and peer-directed) student learning and less on staff teaching - this would necessitate an early concentration on supporting students to develop learning and study skills and to recognise the potential of ICT in this regard.
4. The Review Group was made aware of the pre-clinical course which is currently being undertaken by the Curriculum Committee. The Review Group supports this review and would recommend that it be moved forward with some urgency.

Timetable for conduct of Peer Review Group Site Visit

Clinical Dental Departments
Dental School & Hospital
BDS Degree

Sunday 22nd April 2001

- 18.00 Meeting of members of the Peer Review Group
Briefing by Director of Quality Promotion Unit, Dr. N. Ryan.
Group agrees final work schedule and assignment of tasks for the following 2 days.
Views are exchanged and areas to be clarified or explored are identified.
- 20.00 Dinner for members of the Peer Review Group and Heads of Departments, Head of Dental School, Director of Nursing, K. Neville and A. Dunlea.

Monday 23 April

- 08.30 Convening of Peer Review Group in Temporary Board Room, Ground Floor, Dental Hospital, Wilton, Cork
- Consideration of Self-Assessment Report
- 09.00 Professor Robert McConnell, Head of Dental School and Ms. Kathryn Neville, Administrative Officer
- 09.30 Mr. Frank Burke, Head, and staff of Department of Restorative Dentistry
- 10.00 Professor Denis O'Mullane, Head, and staff of Department of Oral Health & Development
- 10.30 Professor Duncan Sleeman, Head, and staff of Department of Dental Surgery
- 11.00 Meeting with representative groups of staff in different departments
- 13.00 Working lunch for members of Peer Review Group
- 14.00 Visit to core facilities of Dental School & Hospital and Departments and, including Medical Library and meeting with Ms. Margot Conrick, Head of Information Services and Ms. Rosarie Buttimer, Subject Librarian, CUH
(Note: members of Peer Review Group divided up for this element of the visit)
- 15.00 Meetings with representative selections of undergraduate students, postgraduate

students and recent graduates.

Venue: Conference Room, Oral Health Research Centre, Dental Hospital

Approximate schedule:

15.00 – 15.20: Meeting with representatives of 1st year classes

15.20 – 15.40: Meeting with representatives of 2nd year classes

15.40 – 16.00: Meeting with representatives of 3rd year classes

16.00 – 16.20: Meeting with representatives of 4th year classes

16.20 – 16.40: Meeting with representatives of final year classes

16.40 – 17.30: Meeting with representatives of postgraduates

17.30 - 18.00: Meeting with representatives recent graduates (not postgraduates)

- 19.00 Meeting of Peer Review Group to identify remaining aspects to be clarified and to finalise tasks for the following day followed by a working private dinner for members for the Peer Review Group

Tuesday 24th April 2001

- 08.30 Convening of Peer Review Group in Room 144, O’Rahilly Building, UCC
- 08.30 Meeting with Professor Robert McConnell, Head of the Dental School and Ms. Kathryn Neville, Dental Hospital Administrator
- 09.00 Mr. Noel Keeley, Director of Human Resources
- 09.30 Professor Brian Harvey, Vice-President for Research Policy & Support
- 10.00 Visit to Boole Library, UCC; meeting with Ms. Margot Conrick, Head of Information Services and Ms. Una Ni Chonghaile, Subject Librarian
- 10.30 Mr. Michael O’Sullivan, Vice-President for Planning, Communications and Development
- 11.00 Professor Aidan Moran, Registrar & Vice-President for Academic Affairs
- 11.30 Meeting with Professor Michael Murphy, Dean of Faculty of Medicine
- 12.00 Meeting with representatives of pre-clinical subjects
Anatomy: Dr. Robin O’Sullivan
Biochemistry: Dr. Mary McCaffrey,
Physiology: Dr. Anne Harris
- 13.00 Meetings with Heads of Departments and Head of Dental School to re-visit issues and finalise any concerns – including working lunch in Conference Room, Oral Health Research Centre, Dental Hospital
- 14.00 Preparation of first draft of final report in Conference Room, Dental Hospital

- 17.00 Exit presentation made by the Chair of the Peer Review Group and the members of Peer Review Group, summarising the principal findings of the Peer Review Group.
- 19.00 Working private dinner for members of the Peer Review Group to complete drafting of report and finalisation of arrangements for speedy completion and submission of final report.

Wednesday 24th April 2001

Externs depart