【第24回学術集会招請講演】

THE CONTINUING MEDICAL EDUCATION PROGRAMME
FOR SURGEONS IN AUSTRALIA AND NEW ZEALAND

TO BE PRESENTED TO:
THE 24TH ANNUAL MEETING OF THE
JAPANESE COLLEGE OF SURGEONS

JUNE 24-25 1999

KOBE, JAPAN

CLINICAL ASSOCIATE PROFESSOR
DR LEIGH ATKINSON FRACS

Thank you for the invitation to attend your annual meeting. I bring to you, President Masayoshi Okada, greetings and best wishes for a successful meeting from my President Professor Bruce Barraclough, who regrets that he is unable to attend this meeting as our Council Session is being held this week in Melbourne. Our College appreciates the opportunity to build bridges of friendship and scientific knowledge with our colleagues in the Japanese College of Surgeons.

It was a pleasure for me to meet with Professor Hiroshi Takami at our Annual Scientific Congress in New Zealand in May and I hope these annual exchanges can increase over the years.

I also bring you greetings from the Asian Surgical Association. As President of the Congress I was very happy to welcome the Japanese delegation to Brisbane this year to attend the 12th Annual Congress of the Asian Surgical Association. We appreciated the attendance of the two Japanese Surgical Council Members, Professor Yutaka Atomi and Professor Masao Tanaka.

I look forward to the increasing presence and influence of the Japanese surgeons on this important regional association, and I invite you all to the next Congress in Singapore in two years' time.

It is a real pleasure for my wife Noela and I to return to Kobe. I first visited this city as a medical student in 1961. It was my first brave venture outside of Australia and I was most attracted to the culture of Japan and your love of harmony and nature. Then in 1986 my own home town Brisbane became the sister city to Kobe and I returned with a city delegation. I was most impressed with the mono-rail and the hospital facility and I recall a most generous welcome by the Mayor of Kobe, Dr Miyazaki. The hospitality was overwhelming. We were saddened to read later of the subsequent damage suffered in Kobe by the earthquake.

Continuing Medical Education may lack surgical excitement, but it is one of the core reasons for the existence of our Surgical Colleges. My own College has 3,300 practising surgeons in Australia and New Zealand. In addition there are 1,200 advanced trainees in nine surgical specialities - General, Cardio Thoracic, Plastic and Reconstructive, Orthopaedic, Urology, Paediatric, Neurosurgery, Vascular, Otolaryngology and Head and Neck. The training programmes extend over five years. The College is responsible for the selection, the training, the accreditation of programmes, the evaluation, the examination and the awarding of the diploma FRACS to each Fellow. It is to be noted that trainees must move around different hospital training programmes to meet the training requirements.

When the College was established in 1927 (1), the objectives included:

- the promotion of the practice of surgery and the maintenance of the highest principles of surgical practice and ethics;
- the development of post-graduate surgical training programmes and the conduct of examination for the candidates for admission to the Fellowship;
- the promotion of research in surgery;
- the drawing together of surgeons in Australia and New Zealand for periodic scientific discussion and practical demonstration of surgical subjects. And more recently there has been an increasing emphasis on the international relations of the College and its Fellows in an effort to contribute to the improvement of surgical practice in our region.

My College has tended over the years, to place a major emphasis on the training of young surgeons and the development of research activities. At times this has been at the expense of supporting our Fellows with ongoing educational activities. The specialist societies, such as the Neurosurgical Society of Australasia, then filled the void.

Early in the century, the renowned doctor, Oesler (2), had warned us of the importance of "education as a lifelong process". He went on to say, "we teachers and consultants are in constant need of post-graduate study as an antidote against premature senility" (1900). If Oesler triggered our attention to this issue, it took until the 1930s for the introduction of post-graduate courses in which content was designed to be related to the individual needs of the practising physician. There was a further stage in the 1950s when the explosion of medical sciences caused specialisation, which, in turn required the professions to provide more Continuing Medical Education at local levels and at university centres.

A decade later we saw the emerging influence of medical educators applying the principles of adult learning, identifying the needs, listing the objectives, and evaluating the outcomes in the field of post-graduate education for surgeons.

My own College introduced re-certification and education in 1991. At that time, the surgical College was ahead of most others, but certainly slow in comparison to the United States.

The College had recognised growing pressures in our countries for continuing improvement and better patient care. Our young surgeons and our academics were concerned about the levels of competency in surgery. There was an explosion of scientific information that, for some, was hard to keep up with. At the same time, there was a rapid evolution of new technology and "industry" pressures.

We also found that there were increasing community expectations and a reluctance to accept adverse events in surgery. The College recognised the responsibilities of self-regulation and this was driving change. However, Government agencies also threatened to take over College activities if change did not occur. Further pressures resulted from medical defence and protective insurance agencies who noted the growing cost of insurance to the surgeon. And lastly, there was growing litigation within our community. As a result our College set up a re-certification programme to improve patient care and surgical performance.

The programme initially was voluntary, but it soon became a mandatory one.

It was based on the following three legs (3):

1. a requirement for annual Continuing Medical Education involvement;
2. evidence of a personal, annual, surgical audit which was peer reviewed;
3. and lastly, the evidence of credentialling to an approved hospital or day surgery unit for each surgeon.

The initial ten year cycle soon became a three year cycle.

Continuing Medical Education was an important part of the programme. It was defined as; "Continuing Medical Education consists of educational activities undertaken after qualifying as a surgeon, which serve to increase, maintain and develop the knowledge, skills and attitudes needed to provide safe, effective, surgical care".

It was acknowledged that "although Fellows are able to choose Continuing Medical Education activities to meet their own needs, there is a range of activities that the College considers should be part of every Fellow's Continuing Education Programme.

Our programme fell into four categories. It was appreciated that some of the most important on-going education occurred at the hospital. Therefore, attendance at Speciality Unit Meetings and Clinical Outcome Meetings were important and each Fellow needed to obtain ten hours of active involvement per year over a three year period. Additional learning activities were recognised and surgeons involved in hospital committees involving the clinical care of patients, could claim time for commitments to infection control, quality assurance, clinical indicators, ethics, radiology review, pathology review and operating theatre committees.

The second category involved attendance at scientific meetings. The Royal Australasian College of Surgeon's Annual Scientific Congress was a major priority but into this group fell clinical meetings for Sections, Divisions and Specialist Surgical Societies. Also, International Surgical Meetings could be accredited as CME activities. Each surgeon had to attend 25 hours of such meetings a year, averaging 75 hours over three years.

It was appreciated that all surgeons learn in different ways at different times and so Category 3 involved self-education activities such as arranged visits to special units, Internet activities related to clinical practice, reading of surgical journals, producing videos and tapes and participating in self-assessment tests.

The fourth category included a loose group, which allowed surgeons to act as referees for journals, for review of one's practice by peers, attendance at similar courses to the ATLS, the presentation of publications and the involvement in teaching activities.

In all, a further 40 hours, or 120 hours over a three year period, was required. So in total 75 hours of Continuing Medical Education activities were required by each surgeon each year.

To assist, we provided each surgeon with a diary and instructional information and they were required to report to the College who, in turn, confirmed on paper this involvement in the programme.

In addition, the surgeons were required to carry out a personal, surgical audit, of some aspect of their practice each year and this was to be peer reviewed. And as noted, each surgeon had to be officially credentialled to an approved hospital or day surgery unit.

Provided these activities were achieved each Fellow was then awarded a Certificate of Continuing Professional Standards at three yearly intervals.

Increasingly, this Certificate and its annual confirmation of involvement in the programme, has been sought by hospital credentialling and appointment committees and it is anticipated that medical defence and protection agencies and medical boards, will also in the future require the information. Already in New Zealand there is a requirement for evidence of re-certification by an approved professional College at the time of annual state registration to practise. In our countries there is a growing interest in adverse outcomes and as a result surgical competency. Our Colleges appreciate that they must pay more attention to these issues. One hundred years ago George Bernard Shaw, the famous playwright had said "the effect of this state of affairs is to make the medical profession a conspiracy to hide its own shortcomings". In our countries, where age has been excluded as a reason for retirement, the assessment of surgical competency has become an issue which we are seeking to solve.

As the Foundation Chairman of the Board of Continuing Medical Education and Re-Certification in our countries, I appreciated Nancy Bennett's (4) point that there are three stages in a surgeon's life:

1. breaking in,
2. fitting in,
3. getting out.

In the first place, the surgeon is trying to accommodate to the medical community and to separate from student days.

In stage two, the experienced and confident surgeon is looking for new options and new ideas. Learning becomes more specialised.

In stage three, surgeons reduce their role in medicine slowly and at times painfully disengaging. As a result, learning may change and involvement returns to the normal level. My particular concern was to target and tailor our medical education for surgeons between the ages of 30 and 70. It had to be recognised that all of us learn in different ways at different times.

Nancy Bennett crystallised some important aspects for planning post-graduate educational programmes. She identified that - "adults of all ages have an ability to learn. They also tend to be self-directed in their learning and experience turns out to be a valuable resource for learning. In addition, participants look for practical learning and they tend to learn by choice. Learning is more effective when adults have been actively involved. Furthermore, feedback is a critical part of learning. People learn differently from one another and on different occasions. Finally, learners are more apt to make changes as a result of learning if they have an image of what will be achieved".

We began to appreciate that the single most important factor in achieving effective Continuing Medical Education was combining the learning process with the surgeons' environmental practice. Examinations of memorised material were really not the way to develop.

The Continuing Medical Education and Recertification Program was surprisingly well accepted by most surgeons in our countries. By 1997 the compliance was 90% overall with 92% compliant in continuing medical education; 89% compliant with hospital credentialling and 87% compliant with surgical audit. Most surgeons did more than they were required to do. (See pie chart)

In 1996 our College invited the Queensland Medical Education Centre (5) to review the College program in one state which, in all, contained 10% of the total surgeons within the College.

The surgeons were grouped into metropolitan, provincial, city and geographically isolated practitioners.

ANALYSIS OF CME

RACS

a Usefulness

Table 9 Usefulness ratings - most to least useful CME (combined response categories '4' and '5')
N.B. Only includes the ratings of those who have participated in the particular form of CME.

Most to Least Useful CME	%
Specialist Surgical Society Meetings	80.8
International/Overseas Scientific Meetings	80.4
Advanced Courses, Workshops, Seminars	77.2
Scientific Reading	74.6
Arranged Visits to Special Units	71.0
Unit Clinical Meetings	66.0
Clinical Outcome Meetings	59.3
Undergraduate and Postgraduate Teaching	51.9
Publication/Presentation of Scientific Papers	42.6
Annual Scientific Congress of RACS	40.5
RACS State, ACT and NZ Scientific Meetings	34.8
EMST Course	26.8
Self-Assessment Examination	26.2
Hospital Grand Rounds	23.3

Specialist society meetings, international meetings and surgical workshops were the most popular. Self assessment activities and hospital grand rounds were the least popular. (5) See Table 9

Factors most likely to attract participation were presenters who were leaders in their field and "hands on skilled development". Factors that were likely to attract the surgeons were "large group, lecture style, computer instruction and material delivered by Internet". See Table 10

ANALYSIS OF CME

RACS

b Attractiveness

Table 10 Ratings of factors most to least likely to attract participation in CME (response categories '4' and '5' combined)

Most to Least Likely to Attract Participation in CME	%
Presenters who are leaders in their field	86.8
Fits in readily with busy practice	82.1
'Hands on' skill development	70.9
Allows a choice of activities	70.6
Workshop style, interactive learning	66.7
Can do it in own time	59.8
One-on-one interactions	54.3
Short duration with continuing support	49.1
Close to home	48.6
Provides effective follow-up	48.3
Held in interesting locations	48.3
Audio-visual instruction (videotapes etc.)	47.6
Self-paced material	40.0
Work-based interactions/audit	34.9
Large group, lecture style	22.3
Computer-based instruction	14.9
Material delivered by Internet	12.6

The College recognised as a result of this study that Continuing Medical Education activities had to be restricted. There was a need for more interactive activities and less didactic lectures. There was a need for better communications with our surgeons. It was recognised that the surgeons over 40 needed considerable help in addressing their computer skills and confidence. Surprisingly, while we appreciated that surgeons in geographically remote areas needed special attention we were surprised to find that private surgeons in metropolitan hospitals were isolated from educational activities.

Since that study the need for a rapid development of skills laboratories in Australia and New Zealand has become evident. (6) See Table 25

The first one has now been established in Perth in cooperation with the Royal College of Surgeons of England. Only weeks ago I visited the Meri Centre in Memphis, Tennessee and this reinforced the value of these units to surgeons, surgical trainees, nurses, medical students and the surgical equipment industry in general.

Table 25 Possible changes/improvements to CME - ratings of most likely to least likely to use (response categories '4' and '5' combined)

Improvements/Changes to CME	
Most to Least Likely to Use	%
Advanced skills courses	66.3
Instruction in accessing/making best use of Internet	44.1
Learning resources delivered via computer	41.0
Instruction in using computers: Advanced level	40.0
Instruction in using computers: Intermediate level	38.0
Instruction in using computers: Basic level	33.7
Resources/instruction delivered via satellite links	23.9
Guidance and instruction in scientific writing	23.3

The skills laboratories are needed to trial new equipment, new technology and new procedures. Hospital credentialling committees are insisting on appropriate training of the advanced trainee and the practicing surgeon before new technology such as endoscopic surgery, endovascular techniques and laparoscopic surgery are introduced. Appropriate training will save money and time. The team dynamics which can be developed prior to the operating theatre as eg. in cranio facial surgery. The standardised approaches can be established and assessed. The community knows that our international pilots practice on simulated flight equipment and they expect that the modern surgeon will follow similar practices.

In conclusion, Continuing Medical Education for the practising surgeon is expected by the profession and the community. It is known that the surgeons intellectual capital deteriorates over seven to ten years unless there is constant attention to upgrading. In Australasia Continuing Medical Education has been accepted but within our College it is probably better delivered to our surgeons by their specialist societies rather than by the College. We have found a particular need to support the geographically isolated surgeon in communities of less than 20 thousand people and the private practice surgeon in the metropolitan area. We have found a need to lift the computer skills and confidence in surgeons over 40 so that computer based educational programs and Internet activities can be advanced. More recently the increasing request for skills courses and workshops has been supported with the development of skills laboratories which, in Australia, are still in an early development.

**1997 Continuing Medical Education and Recertification Report
Report 1**

**1997 Continuing Medical Education and Recertification Report
Report 1**

**1997 Overall Recertification
Results**

INDEX

1. RACS College Handbook
2. Continuing Medical Education - a primer
Second edition edited by Adrienne Rosof and William Campbell Felch 1992
3. RACS Information Manuel 1999
4. Nancy L Bennett page 31-41 CME Primer 1992
5. Queensland Medical Education Centre. A report on the Analysis of CME
of Fellows of the College 1996
6. Professor Steven Dean, lecture, Annual Scientific Meeting RACS, Auckland
May 1999