TRANSACTIONS

50 Years of Excellence 1955-2005

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Front Cover
In support of contemporary Zulu telephone wire baskets
Artist: Dudu Cele, Port Shepstone, Kwazulu-Natal

Photographer: William Raats
Dudu's work is well described as being full of riotous colors and oozing individual expression. She had a passion for celebrating life and occasion in her work, and her baskets showcase images of soccer championships and other such events. Her artwork is available from the BAT Shop, Durban, Tel: (031) 332 9951, E-mail: batcraft@mweb.co.za

Photographs reproduced from the book, *Wired*, by David Arment and Mariska Fick-Jordaan, 2005, S/C Editions Santa Fe. ISBN 0-89013-449-9, with permission. © 2005 David Arment and Mariska Fick-Jordaan. The book is available from David Krut Publishers, (011) 880 4242 or info@davidkrutpublishing.com and local book shops in South Africa. Proceeds from the book will benefit the Wilson Education Foundation and educational development projects in South Africa

FEES AND CHARGES

(Applicable 1 June 2008 to 31 May 2009)

PAYABLE BY MEMBERS OF THE CMSA:

Annual Subscriptions

Local:

Associate Founders, Associates, Fellows, Members and Certificants:	R550
Diplomates:	R325
Overseas (all categories of members):	R550
Retired members:	R62

Assessment Fee: Fellowship by Peer Review:	R865
Registration Fee: Associates:	R560
Fellows, Members, Certificants and Diplomates:	R375

(The registration fee for Fellows, Members, Certificants and Diplomates forms part of the examination fee)

Voluntary Constituent College Levy: R65

Purchase or Hire of Gowns and Hoods

(The charge for the hire of gowns by new Fellows, Members, Certificants and Diplomates is included in their registration fees)

For occasional hire:

Gown and hood:	R120
Gown only:	R85
Hood only:	R45
Purchase of hoods:	R220

Cost of Past Examination Papers (per set of 6 papers) R50

PAYABLE BY THE CMSA:

Subsistence Allowance (in addition to accommodation only) per day or part thereof, actually spent on CMSA business

Senators, examiners and staff (local):	R240/day
CMSA delegates (overseas):	$215/day

Honorarium (local subsistence)

Local examiners: R240 per day less PAYE of R60: R180/day

Remuneration for Setting FCS(SA) Part 1 Papers: R300

Remuneration Invigilating:

(not applicable to salaried personnel of the CMSA)

Full day:	R350
Half day:	R190

Remuneration for Secretarial Assistance:

(not applicable to salaried personnel of the CMSA)

The following sliding scale applies:

Hours worked	Remuneration		
Up to 8 hours	R35 per hour	08 – 10 hours	R350
11 – 15 hours	R495	16 – 20 hours	R660
21 – 25 hours	R760	26 – 30 hours	R860
31 – 35 hours	R965	36 – 40 hours	R1 070
41 – 45 hours	R1 150	46 – 50 hours	R1 200

There is a ceiling of R1 200 as persons providing secretarial assistance to the CMSA receive a salary from their employers.

Claims in respect of secretarial assistance rendered at the time of the examinations have to be supported by a special recommendation for payment signed by the examination Convener.

RATE OF REMUNERATION FOR LABORATORY TECHNOLOGISTS/TECHNICIANS

The current rate of remuneration is R75 per hour.

Claims for reimbursement of laboratory technologists/technicians who assist during CMSA examinations also have to be supported by a special recommendation for payment signed by the examination Convener.

COST OF PAST EXAMINATION QUESTION PAPERS

Per set of 6 papers (covering a period of 3 years): R50

Reimbursement for Travelling on CMSA business: R2,92/km

ADDITIONAL FUNDING FOR EXAMINER'S MEETINGS

Additional funds have been made available to allow for examination meetings and examination preparation so as to increase the efficacy of the process. These funds have been allocated from budget surplus and does not influence the examination expenses or fee structure. No examination fee increase is proposed.

- Prof Tuviah Zabow; HONORARY TREASURER

CMSA MEMBERSHIP PRIVILEGES

LIFE MEMBERSHIP

Members who have remained in good standing with the CMSA for **thirty years since registration and who have reached the age of sixty-five years** qualify for life membership, but must apply to the CMSA office in Rondebosch.

They can also become life members by **paying a sum equal to twenty annual subscriptions** at the rate applicable at the date of such payment, **less an amount equal to five annual subscriptions** if they have already paid for five years or longer.

RETIREMENT OPTIONS

The names of members who have **retired from active practice** will, upon receipt of notification by the CMSA office in Rondebosch, be transferred to the list of "retired members".

The CMSA offers two options in this category:

First Option

The payment of a small subscription which will entitle the member to all privileges, including voting rights at Senate or constituent College elections. If they continue to pay this small subscription they will, *most importantly,* qualify for life membership when this is due.

Second Option

No further financial obligations to the CMSA, no voting rights and unfortunately no life membership in years to come.

Members in either of the "retired membership" categories continue to have electronic access to the Journal *Transactions* and other important Collegiate matter.

WAIVING OF ANNUAL SUBSCRIPTIONS

Payment of annual subscriptions are waived in respect of those who have attained the age of **seventy years** and members in this category retain their voting rights.

Those who have reached the age of seventy years must advise the CMSA Office in Rondebosch accordingly as subscriptions are not waived automatically.

EDITORIAL

EDITORIAL Prof Gboyega A. Ogunbanjo

Dear colleagues,

It is always a pleasure to write the editorial for the Transactions as it provides me the opportunity to summarize the various activities of the Colleges of Medicine of South Africa (CMSA) to the fellows, members, diplomates and certificants. This issue of the Transactions has the President's report which covers a number of important activities and milestones within the last year. These include:

- **Examinations:** The direction on the possibility of a National Equivalence Examination (single exit examination) for specialization now appears clearer. The decision will ultimately be made by the Health Professions Council of South Africa with input from the Department of Education hopefully in due course. You will be kept abreast of further developments on this important matter.
- **Interactions of the CMSA with the departments of Health and Education:** In the last year, there has been an improvement in the CMSA's interactions with the departments of health and education. There is increased realization that the CMSA is an important stake holder in the certification of medical and dental specialists in South Africa, and continued collaborations with these departments are strategically important.
- **African Partnerships:** The attendance of representatives of the Ghana College of Physicians and Surgeons at the May 2007 CMSA examinations paved the way for an agreement between the two colleges in which junior colleagues from Ghana who may wish to either join our clinical rotations for limited periods (3-6months) to gain specific skills or to complete part of their 4-year training programme may be able to do so in future. The issue of funding was raised and the Ghanaian colleagues were confident that their government may provide financial support for the initiative. The sterling work of the ophthalmological network developed by Prof Andries Stulting in various parts of Africa is extremely efficient and this will be reported in the next issue of the Transactions.

The other milestones were the possible establishment of 'affiliated' membership status for registrars within the CMSA, policy forum on tertiary academic medicine in specialist training held in Oct 2007 (full report available in this issue), acquisition of two properties adjacent to the Durban office and preparation for the workshop on Assessment Processes to be held in May 2008.

The oration titled *"In defence of tertiary medicine"* by Prof Max Price at the Oct 2007 CMSA graduation ceremony is an interesting and compelling article to read. He alludes to the consensus that tertiary medicine consumes an excessive share of health budget, benefits very few patients relative to the population, are mostly urban-based, does not address the major public health problems and its contribution to improving health is relatively low. But in its defence, he highlights the crucial role tertiary medicine plays in the training of specialists, continuing professional development, quality assurance, research and development. He concludes that the simplistic approach used to determine the share of resources allocated to tertiary medicine based primarily on the relative cost-effectiveness of tertiary care in comparison to primary and secondary care should be reviewed as it misses the many benefits of tertiary medicine which are not directly measured by disability-adjusted life years (DALYs) gained.

The report on the CMSA policy forum held on 24-25 October 2007 by Brigid Strachan clearly captures the strategic issues discussed regarding tertiary medicine and specialist training in South Africa. Some of the issues were inadequate funding, lack of sustainability of academic service training platform, problems in teaching and training etc. Some recommendations were made which include an audit of the teaching and academic service platforms for specialist training, advocacy for partnership with HPCSA, national department of Health and development of a national governance structure for academic medicine. There was consensus for the process initiated by the CMSA to continue.

The three review articles in this issue cover topics that are multidisciplinary in nature:

a. *Antenatal prevention of mother to child transmission of HIV* by GB Theron covers the superiority of dual to mono therapy in non-breast feeding women and the importance of initiating HAART at a higher CD_4 threshold. Irrespective of the maternal disease, the newborn babies should receive the same ART regimen and concludes that with routine use of ART, there is reduction in the risk of obstetric interventions.

b. *Pain Management in Primary Care – Current perspectives* by HP Meyer focuses on the concepts of acute and chronic pain, pain assessment and the biopsychosocial management of pain. He concludes by indicating that appropriate pharmacological treatment must be evidenced-based, invasive therapy should be conservatively selected, and that educational interventions and exercise therapy should be part of the comprehensive management of pain.

c. *Quality Assurance II: A practical application to educate and train future specialists* by AC Hurribance is the second article on quality assurance that deals with the practical application on how to educate and train future specialists. It identifies the roles of the educator/supervisor, defines total quality management (TQM) in a teaching/learning setting and gives practical approaches on how to accomplish the latter. The table on assessment factors shows performance focus areas that impact on the quality of education and training/learning. He concludes by encouraging educators/ supervisors to be open to ideas, constantly evaluate the processes they use and innovatively apply TQM elements to their teaching.

I end this editorial by encouraging readers to give feedback on the presentation, content and suggest topics for future issues of the journal through your letters to the editor. The next issue of the journal will include a report on the sterling work of the ophthalmological network developed by Prof Andries Stulting in various parts of Africa and the workshop proceedings on 'Assessment Processes' to be held in May 2008.

Prof. Gboyega A Ogunbanjo
Editor: Transactions of the CMSA

LOST MEMBERS

The office of the CMSA is keen to establish the whereabouts of the following "lost members". Any information that could be of assistance should please be submitted to:

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Bresler, Pieter Benjamin *(College of Public Health Medicine)*
Drew, James du Preez *(College of Anaesthetists)*
Gibson, John Hartley *(College of Obstetricians and Gynaecologists)*
Hill, John William *(College of Physicians)*
Kornell, Simon *(College of Physicians)*
Leigh, Werner Eberhard Julius *(College of Family Physicians)*
Matus, Szlejma *(College of Radiologists)*
Ndimande, Benjamin Gregory Paschalis *(College of Anaesthetists)*
Oduwole, Olusesan Odusami *(College of Anaesthetists)*
Phillips, Kenneth David *(College of Family Physicians)*
Raubenheimer, Arthur Arnold *(College of Obstetricians and Gynaecologists)*
Richmond, George *(College of Physicians)*
Sartorius, Kurt *(College of Public Health Medicine)*
Sesel, John Ruby *(College of Radiologists)*
Shaw, Keith Meares *(College of Surgeons)*
Smith, Robin Errol *(College of Paediatricians)*
Van den Aardweg, Machteld Sonja *(College of Surgeons)*

Information as at 20 June 2008

INSTRUCTIONS FOR AUTHORS

1. Manuscripts

1.1 All copies should be typewritten using double spacing with wide margins.
1.2 In addition to the hard copy, material should also, if possible, be sent on disk (in text only format) to facilitate and expedite the setting of the manuscript.
1.3 Abbreviations should be spelt out when first used in the text. Scientific measurements should be expressed in SI units throughout, with two exceptions; blood pressure should be given in mmHg and haemoglobin as g/dl.
1.4 All numerals should be written as such (i.e. not spelt out) except at the beginning of a sentence.
1.5 Tables, references and legends for illustrations should be typed on separate sheets and should be clearly identified. Tables should carry Roman numerals, thus: I, II, III, etc. and illustrations should have Arabic numerals, thus 1,2,3, etc.
1.6 The author's contact details should be given on the title page, i.e. telephone, cellphone, fax numbers and e-mail address.

2. Figures

2.1 Figures consist of all material which cannot be set in type, such as photographs, line drawings, etc. (Tables are not included in this classification and should not be submitted as photographs). Photographs should be glossy prints, not mounted, untrimmed and unmarked. Where possible, all illustrations should be of the same size, using the same scale.
2.2 Figures' numbers should be clearly marked with a sticker on the back and the top of the illustration should be indicated.
2.3 Where identification of a patient is possible from a photograph the author must submit consent to publication signed by the patient, or the parent or guardian in the case of a minor.

3. References

3.1 References should be inserted in the text as superior numbers and should be listed at the end of the article in numerical order.
3.2 References should be set out in the Vancouver style and the abbreviations of journals should conform to those used in *Index Medicus*. Names and initials of all authors should be given unless there are more than six, in which case the first three names should be given followed by 'et al'. First and last page numbers should be given.

Article references:
- Price NC. Importance of asking about glaucoma. BMJ 1983; 286: 349-350.

Book references:
- Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworths, 1975: 96.
- Weinstein L, Swartz MN. Pathogenic properties of invading micro-organisms. In: Sodeman WA jun, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974: 457-472.

3.3 'Unpublished observations' and 'personal communications' may be cited in the text, but not as references.

Zephne M van der Spuy

President 2007 - 2010

Because of the change in the Constitution of the CMSA, the new President and Vice-Presidents take office half way through the life of an existing Senate. Therefore, together with Professor Anil Madaree, Senior Vice-President, and Professor Gboyega Ogunbanjo, Vice-President, I took office at the Senate meeting of May 2007. I particularly appreciated the opportunity to serve as President-elect for six months and to have the benefit of the mentorship of Professor Lizo Mazwai, our immediate Past President.

Prior to commencing our terms of office, the Vice-Presidents and I discussed what we hoped to achieve over the next three years. There were several areas in which we particularly wished to engage and these included upgrading and updating our examination and assessment processes, making a National Equivalence Examination a possibility and engaging with our colleagues in Africa. These issues will be our focus for our three years of office and obviously represent some of the core business of the Colleges of Medicine of South Africa. We cannot, however, operate in a vacuum and many meaningful links have been developed with colleagues in Europe, America and the Pacific rim over many years and these need to be supported and encouraged. Contacts in Africa have been somewhat varied and we are, as a priority, now continuing to develop many of the initiatives started by Professor Mazwai. The past year has been interesting and has offered numerous challenges and some exciting possibilities.

Examinations

There has been considerable discussion, debate and varied enthusiasm about the possibility of a National Equivalence Examination. This concept was originally raised by the universities and brought to the CMSA and has been extensively debated by the Committee of Deans and within the HPCSA. At present the CMSA provides the only national examinations recognised by the HPCSA for the sub-specialities and for the various diplomas within our constituent Colleges. Specialist qualifications may, however, be obtained either through a university degree (MMed) or a CMSA Fellowship. Numerous issues are currently being debated around specialist qualifications and these include the subsidy to the universities, which will depend on the outcome achieved by registered students.

The decision about a single exit examination for specialisation will ultimately be made by the HPCSA with input from the Department of Education. There seems to be enthusiasm for such an examination and also support for a research component as a requirement for qualification. This will obviously be overseen and supervised by the Faculties of Health Sciences and will probably be expected to be the equivalent of an MMed Part III dissertation. There is debate about the merits of requiring research productivity as part of specialist qualifications but many of the arguments of the protagonists of this are very compelling and potentially may generate increased capacity and expertise within clinical research. We await the final decisions from the HPCSA and the Departments of Health and Education.

Interaction with Departments of Health and Education

It has been agreed in meetings of the Senate and the Executive Committee that liaison with relevant colleagues in the Department of Health and the Department of Education would be most valuable. Given that the business of the CMSA is examination and assessment, the Senate and EXCO agreed that we would benefit from interaction with the relevant government departments. Past Presidents have communicated with the Department of Health and requested representation at our Senate meetings.

Recently the Department of Health invited the CMSA to send representation to a meeting held on 3 August 2007, chaired by Dr Percy Mahlati, about specialist training. The CMSA representatives were Professor Lizo Mazwai, Professor Alf Segone, Professor John Robbs and myself. The fifth representative, Professor Ken Huddle, was unfortunately unable to attend due to a prior engagement. Staffing and training issues were discussed at this meeting and there was considerable interaction with numerous role players from the Department of Health and elsewhere. These included junior doctors and registrars. It was agreed that a follow-up meeting was essential and this is still to be organised.

Communications with the Department of Education in the second half of 2007 resulted in the Director General arranging for Dr M Qhobela to meet with us at the CMSA offices in Cape Town and he has agreed to participate in future EXCO meetings.

African Partnerships

We hope to develop and grow partnerships with colleagues in Africa. Professor Usuf Chitke, the Honorary Registrar for the Finance and General Purposes Committee, has been tasked with establishing which contacts are already in place in Africa in the various Colleges. Professor Mazwai has already established

valuable links and communication between some African Colleges and the CMSA.

During the May 2007 examinations members of the Ghana College of Physicians and Surgeons attended the CMSA examinations and met with Professor Mazwai, Professor Del Khan and myself to discuss further contacts and co-operation. In particular they asked if we would send representatives to a meeting to be held in Ghana at the end of 2007. They asked that the President and the immediate Past President attend and Professor Khan was invited to be a key-note speaker. In addition they asked that the Presidents of the Colleges of Physicians, Paediatricians and Obstetricians and Gynaecologists should attend the meeting. This interaction duly took place in November 2007 when our delegation attended their conference. We had the opportunity for discussion between the various disciplines, and exchange of ideas as to how we can co-operate in the future. In addition Professor Mazwai and I were awarded Honorary Fellowships of the College of Surgeons an honour we both appreciated.

Each College interacted with our Ghanaian colleagues and made plans for the way forward. Essentially there was agreement that junior colleagues from Ghana may wish either to join our clinical rotations for a limited period of 3 - 6 months to gain specific skills or perhaps for their four years of specialist training. Funding is obviously an issue but our Ghanaian colleagues felt confident that their government might well provide such resources. They have previously sent trainees to the UK and the USA and unfortunately most of them never returned to Ghana. They expressed the hope that if the junior staff were trained within Africa they would return to Ghana with appropriate skills. We agreed to try and facilitate registrar training programmes and possibly also offer our registrars the opportunity of working in Ghana. It was also decided that colleagues from the relevant Faculties within the Ghana College may attend our examinations, if they so wish, either as examiners or observers and we would be willing to supply examiners to them, if requested.

We will keep each other informed of meetings and conferences and, where appropriate, offer financial support. We already have links with the West African College of Surgeons and it appears that there is no conflict between them and the Ghana College and indeed many of the senators from the Ghana College have served as President of WACS. We will continue to liaise with Professor Paul Nyame, the Rector of the College. There was consensus among the delegates who attended this meeting that this was an exciting development and may well allow us to grow further contact within Africa.

While there are a number of other initiatives within Africa organised by individual Colleges and, in particular, the network for ophthalmological services developed by Professor Andries Stulting is extremely efficient, we are hoping that, through the Colleges, we will expand and develop this further. Co-operation between our Colleges and those of our African neighbours potentially may prove to be very worthwhile.

South African Registrar's Association (SARA)

Dr Bernito Mashiloane has now taken over as the representative of this registrar body. He or his representative will be present at our future meetings. We recognise that the registrars who are participating in our examination process, represent the future of our Colleges and we are discussing the possibility of affiliation with the CMSA with them. Through interaction with the registrars from all the universities, Dr Mashiloane will be able to present their opinions and needs at our meetings and, because he attends both EXCO and Senate meetings, he will be able to make a meaningful contribution to our discussions. SARA is invited to send representatives to all Council meetings, to EXCO and to the three standing committees of the CMSA. They do not have voting rights, which is central to the debate within SARA.

We are hoping in the coming year to establish affiliated membership with the CMSA for the registrars. We currently await their feedback on this and a number of other issues.

Links with Colleges and academics abroad

Several invitations are received by the CMSA for the President or a representative to attend meetings abroad. I was very privileged to attend the 41st Singapore-Malaysian Congress of Medicine which coincided with the Golden Jubilee Celebration of the establishment of the Academy of Medicine in Singapore. This was a memorable occasion during which I was awarded an Honorary Fellowship. It offered an opportunity to attend academic meetings but also to interact with the Presidents of Colleges from around the world. This was a very meaningful interaction and I do hope that some of the contacts will be continued in the future.

Unfortunately many of the invitations clash with College activities and have to be declined. Professor Del Khan was asked to attend a meeting of the American College of Surgeons on behalf of the CMSA but he was denied a visa despite his long-standing interaction with the USA. At present no plans for travel in 2008 have been finalised. Invitations are often received at short notice which makes it difficult to schedule these events.

Examinations and assessments

There has been ongoing and healthy debate about the quality of our examinations and our assessment processes and how we train the examiners. In May 2007 Professor John Robbs organised a very successful workshop in Durban to discuss the use of logbooks. There was consensus that logbooks have considerable value, may have a gate-keeping function and at present are used by many Colleges. Ultimately Senate has decided that this assessment process must be expanded and incorporated into the final specialist examination. A logbook of experience helps with the formative assessment of the candidate, in planning their ongoing training and also offers an opportunity to discuss with the provincial funders any deficit within our service which impacts on training.

In May 2008 the Examinations and Credentials Committee has arranged a workshop on Assessment Processes. This will be held in Cape Town after the College examinations and the Senate meeting has been rescheduled to accommodate this. It is hoped that all senators and examiners will attend this meeting and possible attendance may be expanded to allow members of academic departments to participate in this meeting. The programme is now being developed and offers a stimulating and worthwhile academic day for all of us.

Policy Forum on Tertiary Academic Medicine in Specialist Training

There is considerable concern about the cuts in funding for tertiary medicine and the erosion of this very important activity within South Africa. Because of this, the CMSA decided to hold a consultative forum on 24th and 25th October 2007. This meeting was funded by DFID and our project coordinator and organiser was Dr Brigid Strachan of Impact Health Management Solutions.

The meeting brought together representatives from every constituent College, and from the Departments of Health, Education and Finance. In addition Deans from all the Faculties of Health Sciences were invited and important role players in the field of ethics were also included.

The meeting discussed numerous issues involved in tertiary academic medicine, while recognising that training at every level of care needs appropriate funding and support. A report was generated which was circulated to all participants and a follow up of this meeting is planned. This is dependant on generating funding and should include workshops as well as a further general meeting. We need to explore numerous issues which were identified during this meeting and the report on the meeting will be published in the next edition of the Transactions. Dr Strachan has been asked to stay on as our project manager and at present Professor Kirsch is preparing documentation and comments on this meeting.

Developments within the CMSA

Over the past year we have managed to acquire two properties adjacent to the Durban office and we are indebted to Professor YK Seedat for his generosity in his proposal for facilitating the sale of the third and immediately adjacent property and for the establishment of a research fund within the CMSA with this revenue. Plans are being developed for a new Durban office but unfortunately a recent fire has resulted in extensive damage and this obviously accelerates the need for fundraising to develop the Durban site. Hopefully, by the next Senate meeting, we will have a clearer idea of the way forward.

CMSA Infrastructure

Many members of the Colleges contribute to our activities and our development. The Chairpersons of the three standing committees and their honorary registrars are central to College activities. At present the Finance and General Purposes Committee is chaired by Professor Gert Vlok, the Examinations and Credentials Committee by Professor John Lownie and the Education Committee by Professor John Robbs. The Honorary Registrars are Professor Usuf Chikte, Professor Jeanine Vellema and Professor Bilkish Cassim. These committees oversee functions central to the running of the CMSA and we are most appreciative of the input of both the officials and the committee members. Professor Gboyega Oganbanjo has transformed the Transactions since his appointment as the editor. The production in innovative and attractive and we are most appreciative of his innovation.

The input into CMSA business by Professor Tuviah Zabow as Honorary Treasurer is central to the management of College business. Few of us would wish to take on the financial responsibilities of the Colleges and he has performed this task diligently, enthusiastically and meticulously. We owe him an enormous debt of gratitude.

I wish to thank all these officers for their input and loyalty to the Colleges. This involves considerable extra work in an already busy academic and clinical schedule. I also wish to express my gratitude for the support we receive at the three College offices. Thanks are due to the Administrative Secretary of our Durban office, Anita Walker; our Academic Registrar, Ann Vorster, whose educational knowledge and input solves so many difficult problems and our CEO, Bernise Bothma, whose knowledge and support is central to anyone in the Presidential role. I certainly have gained a great deal from their support and their pivotal role in running the CMSA is often under-appreciated. Without their input and expertise we would become considerably less effective.

May I also take this opportunity to thank the two Vice Presidents, Professor Anil Madaree and Professor Gboyega Ogunbanjo for their input, innovation and support? In particular I wish to thank Professor Lizo Mazwai, the immediate Past President, for his mentorship. I trust that as a team we will realise our ideals and our vision over the next few years.

Zephne M van der Spuy
President

ADMISSION CEREMONY

18 October 2007

The admission ceremony was held in the Great Hall, on the main campus of the University of the Witwatersrand, Johannesburg.

At the opening of the ceremony the President, Professor Zephne van der Spuy asked the audience to observe a moment's silence for prayer and meditation.

The President announced that she would proceed with the admission to the CMSA of the new diplomats, certificants, members and fellows.

The new Diplomates, Certificants and Members individually, were announced and congratulated.

The Honorary Registrar - Examinations and Credentials, Dr Jeanine Vellema announced the candidates, in order to be congratulated by the President. The Vice President, Professor Anil Madaree individually hooded the new Fellows. The Honorary Registrar Finance and General Purposes, Professor Usuf Chikte handed each graduate a scroll containing the Credo of the CMSA.

Eight medallists were congratulated by the President on their outstanding performance in the CMSA examinations.

Three Honorary Fellows were admitted. Professor Geoffrey Gill to the College of Physicians citation written and read by Professor Kenneth Huddle. Professor Kenneth Salyer to the College of Plastic Surgeons citation written and read by Professor Anil Madaree. Professor John Collin to the College of Ophthalmologists citation written and read by Professor Andries Stulting.

Two fellows ad eundem were admitted. Prof JCA (Tony) Davies to the College of Public Health Medicine citation written and read by Professor Brendan Girdler-Brown. Prof Robert Franklin Corder to the College of Emergency Medicine citation written and read by Dr Walter Kloeck.

All in all, the President admitted 155 Fellows, 8 Members, 285 Diplomates and 34 Certificants.

Professor Max Price delivered the oration.

The National Anthem was sung, where after the President led the recent graduates out of the hall. Refreshments were served to the graduates and their families.

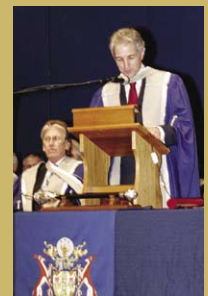
Geoffrey Gill

Kenneth Salyer

John Collin

JCA (Tony) Davies

Robert Franklin Corder



Max Price

RECIPIENTS OF MEDALS

Mohlabe John Moche

Janssen Research Foundation Medal
Awarded to candidates who excelled in the Fellowship examination of the College of Dermatologists of South Africa

Anna Maria Kilsiewicz

Suzman Medal
Awarded to candidates who achieve distinguished results in the Fellowship Examination of the College of Physicians of South Africa

Izak De Villiers Jonker

Brebner Award
Awarded to candidates who achieve excellent results in the Intermediate section of the Fellowship examination of the College of Surgeons of South Africa

Tamatha Jane Urquhart

Eugene Weinberg
Awarded to the best candidate in the Diploma in Allergology examination of the College of Family Physicians of South Africa

Franz Friedrich Birkholtz

J M Edelstein Medal
Awarded to the candidates who show a very high standard of proficiency in the Fellowship examination of the College of Orthopaedic Surgeons

Renata Schoeman

Novartis Medal
Awarded to candidates who achieve a sufficiently high standard of excellence in the Fellowship examination of the College of Psychiatrists of South Africa

Jacobus Hendrik Henning

Lionel B Goldschmidt Medal
Awarded to candidates of distinction in the Fellowship examination of the College of Urologists of South Africa

Ismail Sikander Kalla

Asher Dubb Medal
Awarded to a candidate of sufficient merit in the clinical section of the fellowship examination of the College of Physicians of South Africa

50 Years
of Excellence
1955-2005

MEDALLISTS 2007

LIST OF MEDALLISTS - 2007

FCA(SA) Part I – JANSSEN RESEARCH FOUNDATION MEDAL
Dr Fabian Leong NAM – October 2007

FCA(SA) Part I – ABBOTT MEDAL
Dr Kim DE VASCONCELLOS (cannot be awarded until all 3 subjects are completed)

FCA(SA) Part I – HYMIE SAMSON MEDAL
Dr Alastair Wayne MOODLEY – October 2007

FCA(SA) Part I – GLAXOSMITHKLINE MEDAL
Dr Fabian Leong NAM – October 2007

FCA(SA) Part II – JACK ABELSOHN MEDAL & BOOK PRIZE
Dr Mohinee Gulab KALAN – October 2007

FC Derm(SA) Part II – JANSSEN RESEARCH FOUNDATION MEDAL
Dr Laeeka MOOSA – May 2007

FC Neurol(SA) Part II – NOVARTIS MEDAL
Dr Izak Daniel Petrus BURGER – May 2007

FCOG(SA) Part II – DAUBENTON MEDAL
Dr Tania WIDMER – May 2007
Dr Gabrielle Dominique TOWEEL October 2007

FC Paed(SA) Part I – LESLIE RABINOWITZ
Dr Marié WESSELS – October 2007

FC Paed(SA) Part II ROBERT McDONALD MEDAL
Dr Sathiaseelan Parmersivan NAIR – May 2007

FCP(SA) Part I – AM MEYERS MEDAL
Dr Jonathan Grant PETER – May 2007
Dr Keir Robert Gregor McCUTCHEON – October 2007

FC Psych(SA) Part II – NOVARTIS MEDAL
Dr Pralene MAHARAJ – September 2007

FCPHM(SA) Part II – HENRY GLUCKMAN MEDAL
Dr Ingrid WEBER May 2007

FCPHM(SA) Occ Med Part II SASOM MEDAL
Dr Shahieda ADAMS – September 2007

FC Rad Diag(SA) Part I – RHÔNE-POULENC RORER MEDAL
Dr Phaku Nhlanhla MALATJI – May 2007

FCS(SA) Primary – FREDERICH LUVUNO MEDAL
Dr Ismail SEEDAT October 2007

FCS(SA) Primary TRUBSHAW MEDAL
Dr Francis William QUAYSON – October 2007

FCS(SA) Intermediate – BREBNER AWARD
Dr Shazia PEER – May 2007

FCS(SA) Final – DOUGLAS AWARD
Dr Anupa RAMNARAIN - May 2007

MCFP(SA) CLAUDE HARRIS LEON MEDAL
Dr Surendra SIRKAR October 2007

Dip Allerg(SA) – EUGENE WEINBERG MEDAL
Dr T MOODLEY – October 2007

DA(SA) – SASA JOHN COUPER MEDAL
Dr Mohamed RAIMAN – October 2007

Dip HIV Man(SA) THE HIV CLINICIANS SOCIETY
Dr John Maule BLACK – May 2007
Dr Koenraad Edwin GREYLING – October 2007

Dip PEC(SA) – WALTER G KLOECK MEDAL
Dr Gert Johannes PIENAAR – October 2007

Dip PEC(SA) – CAMPBELL MACFARLANE MEDAL
Dr Elizna VAN ASWEGEN – May 2007

MEDALLISTS 2007

CITATION

FELLOWSHIP AD EUNDEM

PROF TONY DAVIES

COLLEGE OF PUBLIC HEALTH MEDICINE

Prof J C A (Tony) Davies was the inaugural Professor of Occupational Medicine at the University of the Witwatersrand, appointed to the position in 1982. He is currently retired, and an Emeritus Professor at the University of the Witwatersrand and an honorary research Fellow in the School of Public Health at the same University.

At the time that Prof Davies was appointed as the Head of the Department of Occupational Health, he faced severe political difficulties owing to the prevailing ideology that was antagonistic to the interests of workers. Tony Davies was not intimidated, however, and became a courageous champion of the rights of South African workers. He relentlessly exposed injustices and abuses in the workplace through his research and publications and inspired an entire generation of postgraduate students through his research-based teaching and also through his supervision and mentorship of masters and doctoral students.

He has published over 92 articles (with 1 more in press and a further 3 in submission) in the peer-reviewed scientific press and continues to add to this number in spite of having entered retirement. Prof Davies was the director and later chief director of the Centre for Occupational Health (now known as the National Institute for Occupational Health, the NIOH) in Hillbrow for 13 years prior to his retirement. He has also produced six bound unpublished reports for the National Institute of Occupational Health. In his retirement Prof Davies continues to conduct research, publish, and edit the Annual Report of the NIOH and the Adler Museum Bulletin.

Prof Davies was a commissioner on the Leon Commission into occupational safety and health in the mining industry, and edited the final report of the commission. He holds Honorary Fellowships in both Public Health Medicine and Occupational Medicine from the Royal College of Physicians of London.

Prof Davies was born in the United Kingdom, but came to South Africa at two years of age. He completed his schooling at St John's College and studied medicine at Guy's Hospital in London, where he also completed his pre-registration training. He served as a senior House Officer in medicine in the same city before spending two years as a registrar in chest medicine in Kent.

From 1959. Prof Davies held a range of public health posts in Zimbabwe, culminating with his appointment as the Medical Officer of Health in Harare, a position that he filled for 8 years before returning to South Africa to take up the appointment as Professor of Occupational Health at the University of the Witwatersrand. He is married and has 6 children.

We are honouring Prof Davies tonight because of his enormous contribution to the academic standard and the human rights focus of the discipline of Occupational Medicine in South Africa, as well as for his inspirational leadership, teaching and research.

Author: Prof Brendan Girdler-Brown

CITATION

FELLOWSHIP AD EUNDEM

PROF ROBERT CORDER

COLLEGE OF EMERGENCY MEDICINE

Professor Robert Franklin Corder graduated M.D. at the University of Maryland School of Medicine in 1996. He did his Internship and Residency in the Department of Surgery and Division of Emergency Medicine at the same University, and was Board Certified by the American Board of Emergency Medicine in June 2001.

Bob Corder is a Diplomat of the American Board of Emergency Medicine, a Diplomat of the American College of Emergency Physicians, a recipient of the "Excellence in Emergency Medicine" Award of the Society for Academic Emergency Medicine, and is currently Medical Director for World Access, North America.

Having a special interest in International Emergency Medicine, Professor Corder is actively involved in developing a Masters level degree program in International Emergency Medicine at the University of Maryland School of Medicine. He has developed an academic and clinical affiliation between the University of Maryland and the Department of Health, Limpopo Provincial Government, and in August 2005 he led a consulting team of University of Maryland emergency physicians to work with the Limpopo Provincial Government aimed at improving the delivery of pre-hospital and in-hospital emergency services.

Professor Corder is the co-ordinator for resident international emergency medicine experiences in South Africa, Honduras and Indonesia. He has made several visits to South Africa, participating and lecturing in various emergency medical workshops around South Africa, and inspecting emergency departments in Gauteng, KwaZulu Natal and Limpopo Province.

The College of Emergency Medicine of South Africa is proud to present Professor Robert Franklin Corder for admission to Honorary Fellowship of the College of Emergency Medicine (CMSA).

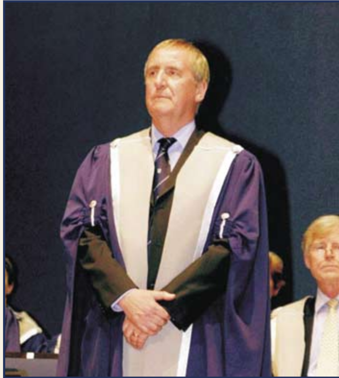
Author: Dr Walter Kloeck

CITATION

HONORARY FELLOWSHIP

PROF GEOFFREY GILL

COLLEGE OF PHYSICIANS



Prof Geoffrey Victor Gill was born on 3 March 1949. After schooling at the Oldershaw Grammar School, Wallasey, Merseyside, he studied Medicine at the University of Newcastle-upon-Tyne, qualifying MB BS with Honours. He obtained an MSc(Newcastle) in 1973, an MRCP(UK) in 1975, a DTM&H(Liverpool) in 1975, an MD(Newcastle) in 1980 and an FRCP(London) in 1990. His present appointment is that of Professor of International Medicine and Consultant Physician, University of Liverpool, United Kingdom. He is married with three children, two of whom have followed in their father's footsteps.

Professor Gill's research interests have centred around diabetes and endocrinology. He is one of Britain's leading diabetologists and is a recognised international expert on "brittle diabetes" and the "dead in bed syndrome", the latter referring to type 1 diabetic patients dying of hypoglycaemia whilst asleep. His published work includes 176 original peer-reviewed articles, editorship or co-editorship of 9 books and 51 book chapters. He is a referee for a large number of international medical journals and is also a sought-after lecturer, receiving invitations from institutions in the United Kingdom and abroad.

Prof Gill has not restricted himself to medicine in the first world. Indeed, he has made significant contributions to improving diabetes care in several African countries, including South Africa. He helped establish the diabetes services at Baragwanath Hospital, which have now been in operation for over 25 years, and which have led to significant improvements in a number of outcomes e.g. in acute hyperglycaemic mortality; in long term outcome of type 1 diabetes; and in diabetic pregnancy. In addition, he has instituted a nurse-led system of diabetes care in Hlabisa, a rural area in KwaZulu-Natal, and has co-edited 2 African-related books: Diabetes in Africa (1997) and Principles of Medicine in Africa (2004).

Professor Gill has given distinguished service to the University of Liverpool and to the Royal College of Physicians of London. With respect to the latter, he has been involved in educational activities, examinations and advisory work. He has also given sterling service to the British Diabetes Association.

In view of his distinguished contributions, especially in the field of diabetic medicine both in the developed and developing world, we would like to recognise Geoffrey Victor Gill by awarding him an Honorary Fellowship of the College of Physicians of South Africa.

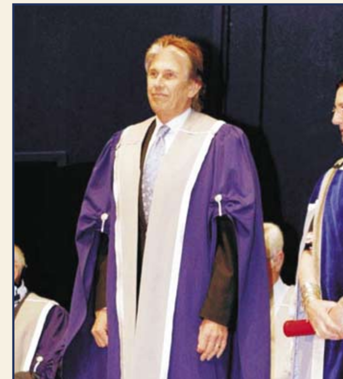
Author: Prof Ken Huddle

CITATION

HONORARY FELLOWSHIP

DR KENNETH E SALYER

COLLEGE OF PLASTIC SURGEONS



Dr Kenneth E Salyer is internationally renowned in plastic surgery especially in the fields of craniofacial surgery and cleft lip and palate deformities.

He grew up in Kansas where he completed his plastic surgery residency in 1969. His academic progression included being Professor and Chairman of Plastic Surgery at the University of Texas southwestern Medical School and adjunct and clinical professorships in a few other institutions. At present Dr Salyer is the founding Chairman and Director of the International Craniofacial Institute in Dallas.

Dr Salyer is extremely passionate about the care, privileges and rights of children born with facial deformities. He has campaigned tirelessly and widely on behalf of these children to ensure that they receive the best care possible. He is also involved in charitable endeavours in this regard. More specifically he is the Chairman of the Board of Directors of the World Craniofacial Foundation. One of the missions of this foundation is to improve the quality of care of patients with facial deformities on an international basis.

Dr Salyer is a leader in the fields of craniofacial surgery and cleft lip and palate. He is a founding member and a past president of the International Society for Craniofacial Surgery. He is also a Past President of the American Society of Maxillofacial Surgery.

He has published and presented widely. This includes 6 books, 36 chapters in books and 140 manuscripts and abstracts. He is also on the editorial board of several journals.

On a personal front Dr Salyer is very keen on skiing and fly fishing. He has a charming wife Luci and is the proud father of 2 children.

Madame President, it gives me great pleasure to present to you Dr Kenneth E Salyer for Honorary Fellowship of the College of Plastic Surgeons of The Colleges of Medicine of South Africa.

Author: Prof Anil Madaree

CITATION

HONORARY FELLOWSHIP

MR RICHARD COLLIN

COLLEGE OF OPHTHALMOLOGISTS

Richard Collin was born on 1 May 1943 and was educated at Charterhouse School, Cambridge University, Westminster Medical School, London. He received the Proxime Accessit Medical School prices for Ophthalmology and General Medicine. He obtained the MA degree from the University of Cambridge in 1966 as well as the MB B Chir from the same university and the MRCS, LRCP from England in 1967. Mr Collin was an Ophthalmic Registrar at the Westminster Hospital in London in 1971 and a Registrar/Senior registrar at the Moorfields Eye Hospital in London from 1972 - 1975. In 1971 he obtained the Diploma in Ophthalmology and in 1972, the Fellowship of the Royal College of Surgeons (England).

Mr Collin then became a Fellow in Ophthalmic Plastic Surgery at the University of California Medical School in San Francisco from 1976 - 1977. He became a Consultant Surgeon at the famous Moorfields Eye Hospital in City Road, London in 1981 and Honorary Consultant Surgeon at the Hospital for Sick Children at Great Ormond Street in London in 1982.

For more than two decades, Mr Collin was involved in the management of patients with Oculoplastic disorders. He is a great teacher and taught hundreds of postgraduate students and ophthalmologists in many countries.

He is a Fellow or Member of many National and International Societies, including Membership of the American Society of Ophthalmic Plastic and Reconstructive Surgery, Honorary Membership of the Society of Canadian Oculoplastic Surgeons and Honorary Membership of the Australian and New Zealand Society of Ophthalmic Plastic and Reconstructive Surgery. Richard Collin is an Associate of the British Association of Plastic Surgeons, a Founder Member, Ex-Secretary for 10 years and Ex-Council Member of the European Society of Ophthalmic Plastic and Reconstructive Surgery. He is a Fellow of the Royal College of Ophthalmologists and Ex-Councillor of the Ophthalmology Societies of the United Kingdom. He is a Council Member of the Oxford Ophthalmological Congress and was the Master in 1997 and 1998. Mr Collin was a member of the Scientific Committee of the Royal College of Ophthalomologists from 1996 to 1998. He is a Fellow of the Royal Society of Medicine and past Council Member of the Section of Ophthalmology.

He is a member of the Editorial Board of Orbit and Clinical and Experimental Ophthalmology (formerly The Australian and New Zealand Journal of Ophthalmology). He has published more than 140 articles in peer reviewed journals and has written seven excellent textbooks, the most famous being "A Manuel of Systematic Eyelid Surgery". He has also written 24 chapters in textbooks.

Richard is a frequent and very popular visitor to South Africa. He has influenced many ophthalmologists in this country to obtain a better understanding of Oculoplastic disorders and we have all benefited from his wisdom, warmth and friendliness. He was one of the invited guest speakers at the Annual Congress of the Ophthalmological Society of South Africa in 2003.

Mr President, I have the honour and great pleasure to ask you to confer the Honorary Fellowship of the College of Ophthalmologists of South Africa on an international leader in Ophthalmology, Mr John Richard Olaf Collin.

Author: Prof Andries Stulting

IN DEFENCE OF TERTIARY MEDICINE

CMSA Graduation Address, 18 October 2007, Professor Max Price

Madam President, members of College Senate, new fellows, diplomates, honoured guests, ladies and gentlemen:

First, may I say how honoured I am to have been invited to give this graduation oration. The Colleges of Medicine of SA are an august institution, whose authority and status and influence, are critical to the maintenance of standards for specialists, and for advancing specialist medicine. (And of course I include family medicine in this). It is also an honour to address you, the newly qualified specialists and diplomates, who are the future of the profession and the mainstay of our future health care in SA.

Second, I congratulate all of you who have been admitted tonight. Hard work, long years and long hours, often poor working conditions, and tough academic programmes have been your lot, and indirectly the lot of your close families, and you have come through with flying colours. On your behalf I also thank your loved ones for their support to you.

Many who know me will be surprised by the theme I have chosen for this address. I come from a community health background, having worked in rural areas and trained primary health care nurses, and having written mainly about inequity in health care. So you may be expecting that my focus would be about the need to strengthen rural health services and primary care.

Yet my theme tonight is: "In defence of tertiary medicine", appropriate, I think, to an evening devoted to the appreciation and acknowledgement of specialist training.

The appropriate allocation of resources to tertiary hospitals and tertiary medicine within a national health system has long been a controversial issue in health system planning in developing countries. There is an apparent consensus that:

- tertiary hospitals consume an excessive share of health budgets
- they benefit very few patients relative to the population
- they are necessarily urban based because they cannot achieve the economies of scale needed if they were rural, and hence benefit predominantly urban populations, often not those in greatest need
- they don't address the major public health problems - the common diseases that affect the majority of the population - but rather the somewhat esoteric and rarer problems
- their contribution to improving health is low relative to the expenditure each patient cured or cared for costs so much more than care in lower level facilities, or than lives saved through preventive and primary care interventions. In other words tertiary care is not a cost-effective use of resources.

On the other hand, large numbers of patients receive care in tertiary hospitals, most of whom are restored to health or have their suffering alleviated, and gain substantial benefit from the care they receive. Therefore the aggregate direct personal health benefits from tertiary hospital care will almost certainly be high. The question of whether tertiary hospital care is cost-effective relative to other interventions delivered at lower levels of care is less easy to answer in aggregate. By its nature, appropriate care in a tertiary hospital will tend to require more complex input mixes and higher skill levels, and hence will be relatively expensive.

A perfectly rational planning approach might be to undertake a detailed analysis of the role of tertiary hospitals in treating diseases to derive their contribution to saving disability-adjusted life years (DALYs).[1] A simple analysis of the cost-effectiveness of specific interventions offered by tertiary hospitals might allow the selection of those interventions that are justified given their marginal cost per DALY gained. These interventions, multiplied by expected demand, would then be aggregated to give a total optimal allocation for tertiary hospital services.

A limitation to a cost per DALY approach arises because tertiary hospitals produce multiple outputs, many of which are critical to the functioning of the health system but contribute so indirectly to DALYs that they cannot be compared directly to individual health interventions. Here are some examples:

- **Training:** The training of specialists, as well as of other specialised allied staff, for instance, nurses for intensive care or specialised psychiatry, physiotherapists specialising in back injuries or burns, and pharmacists specializing in oncology, can only be done in tertiary hospitals and requires substantial capacity to train reasonable numbers of people.

- **Continuing professional Development:** In recent years, continuing medical education has grown in importance. The coordination and provision of appropriate continuing medical education depends heavily on the specialists and academics associated with tertiary and academic hospitals.

- **Quality Assurance and Quality Improvement:** Tertiary hospitals can and do play a pivotal role in quality assurance and improvement. The most important mechanism for quality assurance and improvement is through the training that tertiary hospitals provide. The other key mechanism is through the setting of standards for treatment. For example, experts at tertiary hospitals should review evidence of effectiveness and cost-effectiveness applicable to the local context; determine the formularies to be used at each level of the health system; and identify changes needed to treatment protocols, for example, because of mounting drug resistance. Tertiary hospitals can improve the quality of peripheral services by giving advice, training on site, providing clinical services alongside local practitioners, and monitoring the quality of the referrals they receive.

- **Research and Innovation:** Tertiary hospitals tend to be where most health research is undertaken. Research that is responsive to local conditions, i.e. local disease burdens and techno-logy constraints, fills a critical gap, because researchers in developed countries and pharmaceutical companies do not generally pursue such research questions if they do not foresee sufficient returns to their investments. No one else would be doing that research if tertiary hospitals in developing countries did not exist to take up the challenge.

  Tertiary hospitals are also the vehicle for piloting and introducing new technologies developed elsewhere and for the evaluation of their local suitability and field efficacy. They are also

the vehicle for disseminating such technologies through the exposure of staff during training as well as through the role that tertiary hospitals frequently play in continuing professional education. This was well illustrated in the roll-out of the ARV programme.

- **Public confidence and economic growth:** The public often regard a country's ability to provide the kind of complex, high-tech care offered in a tertiary hospital as a measure of that country's level of development and sophistication. Particularly with respect to middle class citizens who form the engine of the country's economic development, as well as foreign investors, their attitude to living, working or investing in the country is often affected by their view of the health system, and whether they could get life saving health care locally if needed. This is a non-health benefit that should appropriately influence health policy.

From the enumeration of the many roles of tertiary hospitals and their indirect impact on health through their contribution to the health system by way of supervision, administration, training, research and quality improvement, and economic externalities, it is immediately evident that these benefits cannot be translated into DALYs or any other metric to be used in a relative cost-benefit analysis.

Finally, strong arguments can be made that focussing on DALYs gained fails to capture important dimensions of the community benefit and collective wellbeing that accrues from the provision of tertiary health services. In other words, tertiary hospitals have a wider impact on overall societal welfare than can be captured by measures of health outcomes. Utility, or welfare, of course includes health, but also many other important outcomes, such as financial security, risk alleviation, and psychological reassurance.

An example will highlight the difference between valuing tertiary medicine on the basis of its contribution to health status alone versus including wider concepts of welfare in the valuation.

End stage renal disease is relatively rare, and certainly rare in comparison to many other infectious and chronic diseases in lower- or middle-income countries.[2] Treatment by dialysis and transplant is lifesaving, but extremely expensive. The proportion of the total population that will benefit from such a tertiary medicine programme is small, therefore the DALYs generated are low, and the programme would not rank highly among the priorities given a limited budget.

However, every member of the population is at risk of renal failure, and if affected would find that, in the absence of a publicly funded programme, he or she would either die or face extremely high costs to secure treatment in the private sector or abroad. Even in poor countries, patients will fork out large amounts of money when faced with life-threatening illnesses, particularly when treatment can change the outcome. Thus people seek the peace of mind of knowing that they can obtain lifesaving treatment should they need it without the risk of incurring catastrophic costs of care. This additional welfare or utility derives both from the financial security of not having to spend more than people can afford to save their lives and from the direct health benefits of treatment itself.

Can the value to society of this sense of reassurance, this utility be measured? Yes, it can. One standard way of measuring utility is to measure a population's willingness to pay for a service. Willingness to pay approaches have many problems, but may nevertheless be a tool for putting a value on wellbeing. If a national dialysis and transplant programme were to cost, say, R1,5 billion[3] we could ask the population whether it would be willing to pay R31 per person per year to know that if any one of the 48 million developed renal failure, they would be able to access free treatment. My guess is that many would say, "that's a good deal". Or they might think the programme was worth R10 per year which might cover 100% of those under age 55. The point is that the benefit or utility does not accrue only to those few who need and get dialysis, it accrues to the whole population who would have access to dialysis should they need it. The total cost of the dialysis programme must therefore not be divided by the 4800 patients who will be on the programme (R312,000 per life saved), but by the 48 million who would benefit if they needed it. Paradoxically, the rarer a particular illness is, and the more costly the intervention required, the greater will be the welfare gain from public spending on that intervention.

This, of course, stands in direct contrast to the conclusions drawn from prioritization based on analyses of burden of disease and cost-effectiveness per DALY gained.

So extending this line of reasoning to tertiary care more generally, while for most individuals willingness to pay is far less than the costs of the procedure to them, because the whole population benefits from the security of knowing that they would all be entitled to tertiary hospital care should they need it, in aggregate the welfare value generated by public provision or funding may be many times greater than the value of the DALYs generated directly for those few patients who do receive treatment.

In summary, the simplistic approach to determining what share of resources to allocate to tertiary medicine, which would be based primarily on the relative cost-effectiveness of tertiary care interventions compared to primary and secondary care interventions, is flawed since it misses out the many benefits of tertiary hospitals medicine which are not directly measured by DALYs gained, such as education, research , quality assurance, support to lower levels of care and public confidence. But even within the cost-effectiveness framework it fails to measure the utility or welfare gained by having the tertiary services available to large parts of the population who may never use them. Once all this is taken into account, the value of tertiary medicine can be better understood so that it can take its rightful place.

However, the corollary of this is that if, as you leave here tonight to embark on your specialist careers, you fail to fulfil a role that extends beyond just the immediate treatment of individual patients, you will find it increasingly difficult to defend the place of tertiary medicine in SA. I urge you to take a broader view and help develop a health system that protects the place of tertiary medicine but ensures that these services are available to the whole population, because only when the whole population has the possibility of access to referral care can the high costs of tertiary care be legitimately distributed over the whole population, at which point they become justifiable.

I wish you well in your future careers and congratulations again.

1. To explain DALYs briefly: if the average age at which a patient contracted a particular terminal disease is, say, 50, and the life expectancy would have been 75, then an intervention that restores the patient to full health will generate 25 life years. An intervention that saved the patient's life but left the patient with some disability, or with significant pain, such that the quality of life were only 50% of a normal healthy life, might be assessed to generate 0.5 x 25 years, or 12.5 'disability adjusted life years'. Using this approach the cost per DALY of different interventions that affect people with different diseases at different ages and with varying effectiveness can be compared.
2. Approximately 160 deaths per million population in Sub-Saharan Africa, according to WHO: *Disease Control Priorities in Developing Countries.* http://www.dcp2.org/pubs/DCP/36/Table/36.1 , accessed 19 October 2007.
3. Rough calculations done by author based on data from, John Dirks, Giuseppe Remuzzi, Susan Horton, Arrigo Schieppati, and S. Adibul Hasan Rizvi, "Diseases of the Kidney and the Urinary System." 2006. *Disease Control Priorities in Developing Countries (2nd Edition),ed.* , 695-706. New York: Oxford University Press. DOI: 10.1596/978-0-821-36179-5/Chpt-36.

LIST OF SUCCESSFUL CANDIDATES

September 2007

Fellowship of the College of Anaesthetists of South Africa
FCA(SA)

BARNARD Sharon Linda	UP
BAX Nicola Anne	WITS
BLACKBURN Michael Richard	WITS
CANTRELL Helen Margaret	WITS
CHAO Erwin Dalmacio	
GERICKE Elizabeth Ann	US
GERICKE Theodor	US
GORDON Mark Patrick	WITS
GROBLER Christine	WITS
HARGOVAN Nitesh Pravindas	WITS
HOLLAND Charntel	
KALAN Mohinee Gulab	WITS
MALHERBE Annemie	US
MOTSHABI Palesa	WITS
PRETORIUS Sonet	WITS
SOTIROPOULOS Lazaros	WITS
SPIJKERMAN Sandra	UP
VENTER Gert Stephanus Petrus Willem	
VERBEEK Renier Ove	UCT
VICTOR Jonell	UCT
WIELSMA Evert Adriaan	UP

Fellowship of the College of Dermatologists of South Africa
FC Derm(SA)

NAIDOO Kesiree	US

Fellowship of the College of Emergency Medicine of South Africa
FCEM(SA)

SMIT Yolandé	UCT

Fellowship of the College of Forensic Pathologists of South Africa
FC For Path(SA)

HOLLAND Shakeera	WITS

Fellowship of the College of Maxillofacial & Oral Surgeons of South Africa
FCMFOS(SA)

MOOLLA Mahomed Ayoob	WITS

Fellowship of the College of Neurologists of South Africa **FC Neurol(SA)**

RANCHOD Kirti	WITS
RANCHOD Kaushik Ishwarlal	WITS

Fellowship of the College of Neurosurgeons of South Africa
FC Neurosurg(SA)

GOWAN Shamil Manilal	WITS
KOGELS Marcus	UCT
VIVIER Johannes Philip	US

Fellowship of the College of Nuclear Physicians of South Africa
FCNP(SA)

BRINK Anita	UCT
RAMJEE Bhavin Bharat	US
SONI Nischal	UL

Fellowship of the College of Obstetricians & Gynaecologists of South Africa
FCOG(SA)

ALBERTS Barend Christiaan	UP
BABBS Sarah Karen	UCT
EDELSTEIN Sascha Selig	UCT
MASHABANE Nhlanhla Christian	UP
MZILENI Bulelwa Phyllis	WITS
NGOGA Eugene	
NORTJE Lizelle	WITS
NQAYANA Tandiswa	UKZN
OCTOBER Leon Charles	US
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SAYED Muhammad Shafique	WITS
TOWEEL Gabrielle Dominique	WITS
TRUTER Alwyn Nicolaas	US
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FC Ophth(SA)

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GWAVU Michael	UKZN
HODGSON-JERVIS Edmond Vincent	WITS
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CHAGWIZA Tendeukai	UP
COCCIUTI Nicholas Segio	WITS
DU PLESSIS Gareth Neville	UP
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MANAVALAN Tin do George Devise US
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KOLLER Veronica Leigh	
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MANAVALAN Tijo Jospaul Davis	
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MORGAN Robert	WITS
NAIDOO Megeshinee	UKZN
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NEL Dorothea Catharina	
PANDAY Samantha	UKZN
PATERSON Alastair	
PLANK David Ralph	
PREM Darshini	UKZN
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SEBASTIAN Melinda	UP
SIBISI Buhlebuyeza	
SMITH Cornel	
SMITH Reuben Nathanael	UKZN
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LOCHAN Harsha	
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MARTIN Trudy Ann	
MNISI Klaas Putilele	
MOCKE Estelle Helena	
MORGAN Jennifer Mary	
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NAIDOO Vernon	WITS
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NELSON Candice Megan	
NUPEN Tracey Lee	
OOSTHUIZEN Tania	
PEARCE Deborah Frances Anna	WITS
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PILLAY Vashini	
POTGIETER Jeane	UP
PURDUE Claire Anne	
RYAN Lisa	
SCHLÜNZ Friedl	UKZN
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SWARTZ Ronel Natacia	WITS
SWITALA Juli Renate	
TELLIER Lara Roseanne	
THWALA Mgcini Desmond	WITS
TUCKER Faye Bronwyn	
VAN HEERDEN Lizaan	UKZN
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Dip For Med(SA) Clin/Path

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Diploma in Forensic Medicine of the College of Forensic Pathologists of South Africa

Dip For Med(SA) Path

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SCHERMAN Nadene-Louise	
SOLOMON Christa	UP

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DIP HIV Man(SA)

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AZIH Charles Ikechi	UL
BEGAM Maksuda	WITS
BRADLEY Bruce Edward	
BRICE Nicola Sian	UCT
BUDGE Melissa Barbara	
CASSIM Haseena	WITS
CHAKARE Tafadzwa	
CHENGADOO Ashley Deon	WITS
CHIBABHAI Vindana	WITS
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FLOWEDAY Estelle
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FRANCE-BROTHERTON Belinda UP
GANI Soomaiya WITS
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HELLSTROM Elizabeth
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ISMAIL Mugammad Taib
KIRYA Viola Maureen
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Diploma in Mental Health of the College of Psychiatrists of South Africa

DMH(SA)

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NAGAR Bhavisha	WITS
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MUTSOANE Tsholofelo Desiree
OSEI-BONSU Ernest Baawuah

Primary Examination of the Fellowship of the College of Maxillo Facial & Oral Surgeons of South Africa

FCMFOS(SA) Primary

BOBAT Muhammad Ashraf Yoosuf
KARACHI Nadeem

Primary Examination of the Fellowship of the College of Surgeons of South Africa

FCS(SA) Primary

ALLEY Nicol WITS
ALLY Ahmed
ARNOLD Marion US
AUCAMP Pieter Frederick
BABA Sachin Ramanlali UKZN
BELLEW Boyne
BHULA Chetan Gulab UKZN
BLUMBERG Raphael Moshe WITS
BONGOBI Monde
BOWES William Gerard
BURNELL Lisa Ashleigh
CHEDDIE Shalen
CHOKOTHA Tilinde Keith UCT
COVENTRY Jason Andrew
DACHS Robert Paul UKZN
DEL VALLE Andrés Francisco
DHOODHAT Faizel
DO VALE Isabel Lewis WITS
DONGO James Lehlohonolo UL
DOOKHI Vishal Neeahroo UKZN
EMEREOLE Obioma Uchenna WITS
ESTERHUIZEN Erni UN
FLEMING Mark Alexander UCT
FORGAN Timothy Robin UCT
GILL Hardeep Singh
GOGA Riaz UKZN
GOODIER Matthew David Meriton
GOVENDER Saveshree UKZN
GOVENDER Nerisha WITS
GOVENDER Gonasagren
GRUBNIK Alexandra WITS
HARIPARSAD Rikesh Dhuneshwar UKZN
HOFFMAN Emlyn Paul Laurie
JACOBS Frederick Julius
JAMES John Herman
JANSE VAN RANSBURG Nicolaas Johan UFS
JORDAAN Jacobus Daniel UKZN
KARIEL Firoz UKZN
KESHAW Paresh Bhana
KHAN Zafar Ahmed
KIMMIE Faizel
KISTNASAMI Prenolin UKZN
KOLLOORI Avinash WITS
LACHMAN Samesh Samraj

LAUBSCHER Maritz	
LIAKOS Dimitrios	UP
MACHAWIRA Simukayi Percy	
MADELA Fusi	UKZN
MAHLANGU Curnick Siyabonga	UL
MAKHAFULA Lebone Daniel	WSU
MAKHURE Stephen Mogamotsi	WITS
MARITZ Mark Frans	
MBATHA Sikhumbuzo Zuke	UKZN
MBILI Sizwe Malusi	UCT
MEWA KINOO Suman	UKZN
MOODLEY Vineshree Mischka	UCT
MOODLEY Leon Paul	UKZN
MOOLLA Zaheer	
MORSE Nicole Joy	
MORULE Pule Benedict Masego	
MOYEMI Nondabula	UKZN
MULLER Eugene	
MVELASE Sicelo Nkululeko	
NAIDOO Keegan	UKZN
NAIDOO Janani	UKZN
NAIDU Phnendren	
NAUDÉ Pieter Herbst	UCT
NCAPAI Phumzile	
NIETZ Sarah Lena	WITS
NOORBHAI Mohamed Aslam	UL
OSHUN Nathaniel	UKZN
PANDA Kitela Ghislain	
PIKOR Tim Daniel	WITS
POTGIETER Liezel	WITS
QUAIL Gavin Sean	
QUAYSON Francis William	UCT
RABE Sieglinde Erica	
RAUTENBACH Petrus Salomon	
RETIEF Kobus Naudé	WITS
SALKINDER Rael	
SCHLEMMER Kurt Denton	
SEEDAT Ismail	UKZN
SINGH Simmi	UN
SINGH Urishka	UKZN
SSENYONGA Peter Kato	UCT
STEARS Lezindie	UL
STOFBERG Niel Sascha	
STRÖBELE Bernd Paul	
THERON André Pieter	WITS
THOMAS Kuruvilla	WITS
TINDIMWEBWA Linda Karen Dere	WSU
VAN REENEN John-Rodger	
WOLDETSADICK Nebiat Teferi	UCT
YAWATHE Mangaliso Thomas	

Primary Examination incl Neuroanatomy of the Fellowship of the College of Surgeons of South Africa

FCS(SA) Primary incl Neuroanatomy

EMEREOLE Obioma Uchenna	WITS
ENICKER Basil Claude	UKZN
FRANCIS Jibin Joseph	UP
KADHAYA Muballe David	
KOLLOORI Avinash	WITS
MAKHURE Stephen Mogamotsi	WITS
MBUYANE Tommy	WITS
RETIEF Kobus Naudé	WITS

Primary Examination of the Fellowship of the College of Urologists

FC Urol(SA) Primary

BASSON Jacques

Intermediate Examination of the Fellowship of the College of Maxillo Facial & Oral Surgeons of South Africa

FCMFOS(SA)

Intermediate

SULEMAN Yusuf Farouk	WITS

Intermediate Examination of the Fellowship of the College of Surgeons of South Africa

FCS(SA) Intermediate

ADAM Ahmed	WITS
AKOOB Saadia	WITS
AMEER Yusuf	UKZN
BHORAT Naseem Yusuph	UKZN
CARAPINHA Charles Philip Do Nascimento Fernandes	WITS
CHEN Chih-Yuan	UN
CHOHAN Zubair Ebrahim	UKZN
COOLEN Dewald	US
DEONARAIN Rishan	
DEVAR John Wesley Samuel	UKZN
DOWER David William Rory	WITS
DU PLESSIS Leonel Mark	UKZN
FATUNLA Abiola Oluwasiji	UL
FERREIRA Yolandi	US
GEOFFREYS Dale Alex	UCT
HARRICHANDPARSAD Rohen	UKZN
HARRISON Derek Stanley	
HAYNES William Robert Pether	UKZN
KAIKAI Shaaban Mohammed	WITS
KASIPERSAD Viren Sukhraj	UKZN
KENT Mark Llewellyn	
LUBBE Jeanne Adele	US
MAGWABA Thanyani	WITS
MAKUPE Alex	US
MCGUIRE Duncan Thomas	
MONARENG Teboho Taalib	
NAIDOO Sudhanandan	UP
NAIDOO Sudarshan Mathavakrishna	UKZN
NESER Clare	UCT
NGHAAMWA Johannes Metumo Kaudife	UKZN
NHOVA Maxwell	UL
PADILHA João Filipe Somenson	WITS
PENNEL Timothy Charles	UCT
PRETORIUS Carl Joe	WITS
RYAN Paul Vincent	UKZN
SATHIRAM Ronisha	UKZN
SINGH Avesh	UKZN
STARK Alexander Hugo	US
TER HAAR Michiel	
VICTOR Anna Elizabeth	US
ZINN Richard Joseph	WITS

FELLOWSHIPS BY PEER REVIEW

BHIGJEE Ahmed Iqbal - College of Neurologists
ENGELBRECHT Louise - College of Emergency Medicine
JALIL Shahid - College of Emergency Medicine
KRUGER Christa - College of Psychiatrists
NIEHAUS Daniel Jan Hendrik - College of Psychiatrists

Minutes of the Annual General Meeting Held on 17 October 2007

Fifty Second Annual General Meeting of The Colleges of Medicine of South Africa held at 17:30 on Wednesday 17 October 2007 in the Board Room, CMSA Building, 27 Rhodes Avenue Parktown West, Johannesburg

PRESENT:

Prof Z M van der Spuy	(President) in the Chair
Prof J F Lownie	(Chairman Examinations and Credentials Committee)
Prof J V Robbs	(Chairman Education Committee)
Prof T Zabow	(Honorary Treasurer)
Prof A Madaree	(Honorary Registrar Education Committee)
Prof U M E Chikte	(Honorary Registrar Finance and General Purposes Committee)
Prof J Vellema	(Honorary Registrar Examinations and Credentials Committee)
Prof B Cassim	(Honorary Registrar Education Committee)

Prof J Aboobaker	Prof A C Lundgren
Prof J S Bagratee	Dr J N Mahlangu
Dr D Basu	Prof E L Mazwai *(IPP)*
Dr J Basu	Prof A L Peters
Dr W A M Clewlow	Mr A Reddi
Prof B Donde	Prof P M Saffy
Prof V U Fritz	Prof H Saloojee
Prof L Goedhals	Prof M M Sathekge
Prof D Govender	Prof B L W Sparks
Prof K R L Huddle	Prof A A Stulting
Dr I D Huskisson	Prof G Todd
Dr M H Kabaale	Dr K van der Donck
Prof M A Lownie	

APOLOGIES:
Recorded.

SECRETARY:
Mrs Bernise Bothma (Chief Executive Officer)

IN ATTENDANCE:

Mrs Ann Vorster	(Academic Registrar)
Mrs Jane Savage	(Minute Secretary)
Ms Patricia Bredenkamp	(Administrative Secretary)

WELCOME:
The Chairman welcomed all the members who were attending the Annual General Meeting and particularly those who came for the first time.

1. Registration of proxies
The Secretary duly registered 90 proxies.

2. Minutes of the Fifty First Annual General Meeting held on 20 October 2006
The minutes were ADOPTED and signed.

3. Matters of urgency
None.

4. Matters arising from the minutes of the last annual general meeting
None.

5. Annual report of the CEO on behalf of senate for the period June 2006 to May 2007

ADOPTED:
Mrs Bothma's report as published on page 17 in the Transactions for July – December 2007.

ACCLAMATION:

6. Financial report of the Honorary Treasurer
Prof Zabow reported as follows:

"The financial statement reveals the complexities of the CMSA operation. The properties, the staff components and the funds invested as well as the financial aspects of running the examinations have required strict control. The stringencies applied have again evidenced a healthy state of affairs.

In summary, an overall income of R12 397 000 and expenditure of R10 334 000 can be reported which resulted in a surplus for the year of R2 699 000. This included donations amounting to R636 817. The reason for the surplus was again the increased number of candidates. Annual subscriptions amounted to R3 447 884 (27.81% of overall Income), registration fees 4%, interest 5%, but examination fees made up 61.24% of overall income taking into consideration the fact that the examinations were expensive to run.

Examination expenses formed 61.80% of the overall expenditure, split up into direct and indirect expenses. Meetings and ceremonies which were always under the spotlight, was only 7% of the budget and publications 3%. Comparing the examination expenses with the budget, the travel and accommodation expenses accounted for the over expenditure bearing in mind that less entrants were expected for the examinations when the budget was planned.

Administration and property expenses for the three offices were overall under budget. However, legal expenses were over the budget by R47 000 with provision for a contingency being necessary in the new budget. Telephone expenses were over budget due to the new telephone system purchased. Another expense related to conversion of the pension fund which also resulted in consultation and actuarial fees. Staff expenses were overall over the budgeted figure.

The net book value on CMSA property, plant and equipment was R29 000 000, with investments amounting to R1 400 000.

Constituent College levies totalled R1 500 000. I would like to urge the Colleges to utilise their funds for meetings, etc.

I would like to draw particular attention to the outstanding subscriptions which have been a cause for concern for me for some time.

This is reported as bad debts and if these could be recovered it would contribute substantially to the finances. I believe that those members who default each year do so by omission and the published lists should be consulted, colleagues reminded and encouraged to submit outstanding fees. In this year outstanding subscriptions amounted to R709 856 and defaulters to R431 002.

In conclusion I would customarily like to thank Margie Pollock and her staff for their hard work and assistance whenever needed."

The Chairman in turn thanked Prof Zabow for his detailed report.

REPORT ADOPTED WITH ACCLAIM

7. REPORT OF THE PRESIDENT: PROF Z M VAN DER SPUY

The President reported as follows:

Introduction

Because of the change in our constitution, the new President and Vice Presidents took office at the Senate meeting in May 2007 which is halfway through the life of the present Senate. I was, therefore, inaugurated in May 2007 and the past 5 months have offered considerable challenges. I have been extremely fortunate to have had the opportunity to serve as President-elect for 6 months and have benefited from the mentorship and guidance of Professor Lizo Mazwai, our immediate past President. His generosity, wisdom and ongoing input are greatly appreciated and I thank him for his support. Professor Anil Madaree, Senior Vice President and Professor Gboyega Ogunbanjo, Vice President, have provided continued and valuable input over the past few months.

It is interesting to read through the procedures and minutes of previous Annual General Meetings and to note the shifting focuses and areas of concern which have been addressed by the CMSA over the past decade. There has been a concerted effort at transformation, concern about the examination system, attempts to retain membership and an imperative to engage with our African colleagues.

When we took office, the Vice Presidents and I determined that there were several areas in which we particularly wished to engage over the next 3 years. These included upgrading and updating our examination processes, making a National equivalence examination a possibility, and engaging with our colleagues in Africa. These issues will be our focus for our three years of office and obviously this includes the core business of the Colleges of Medicine which is assessment and examination. We cannot, however, operate in a vacuum and over the years many meaningful links have been developed with colleagues in Europe, America and the Pacific Rim. Our contacts in Africa had been somewhat varied and these are now enjoying priority within the CMSA. We are now continuing and developing many of the initiatives started by Prof Mazwai.

Examinations

There has been considerable discussion, debate, acrimony and enthusiasm about the possibility of a National equivalence examination. Originally this concept was brought to the CMSA by the Universities and subsequently has been extensively debated by the Committee of Deans. The CMSA already provide the only national examinations for the various diplomas in the disciplines within our constituent Colleges and also the examinations for the sub-specialities recognised by the HPCSA. Specialist qualifications may, however, be obtained either through a University degree (MMed) or a CMSA Fellowship. There are numerous issues which are currently being debated around specialist qualifications and these include the subsidy to Universities which depends on the outcomes of registered students.

We are informed that the decision about a single exit examination will finally be made by the HPCSA with input from the Department of Education. It seems that there is considerable enthusiasm for a National examination, at least at the Part II level, but also support for a research element as a requirement for qualification. This will obviously be overseen and supervised by the University departments. We await input from the HPCSA and from the Department of Education.

Links with the Department of Health and Department of Education

At many of the Senate and Executive Committee meetings there has been discussion about liaison with relevant colleagues in the Department of Health and the Department of Education. Past presidents have communicated with the Department of Health and a request was made for a representative to attend our Senate meetings. Recently, the Department of Health invited the CMSA to participate in their debate about specialist training.

This meeting was chaired by Dr Percy Mahlati and was held in Johannesburg on 3 August 2007. The CMSA representatives were Professor Lizo Mazwai, Prof Alf Segone, Prof John Robbs and me. Unfortunately Prof Ken Huddle who had been part of the initial committee liaising with the Department of Health was not able to attend. The meeting had originally been scheduled to take place in June and was then re-scheduled because of the national strike. At this meeting staffing and training issues were discussed and it was agreed that a follow-up meeting was essential.

We have also communicated with the Department of Education and asked the Director General whether it is possible to develop a relationship which involves this Department in participating in our Senate or Executive Committee meetings and some of our sub-committee meetings. Mr Duncan Hindle arranged for Dr M Qhobela to make contact with us and we subsequently met at the CMSA in Cape Town. Dr Qhobela agreed to participate in our upcoming Forum to discuss tertiary care. The Department of Education seems to be very open to interaction with us and certainly has been most cooperative.

African Partnerships

During the next three years we hope to develop and grow partnerships in Africa. Professor Usuf Chikte, Honorary Registrar for the Finance and General Purposes Committee, has been tasked with establishing which contacts within Africa are already in place between various Colleges. Professor Mazwai has already done a great deal of work in trying to establish communication and liaison between African Colleges and the CMSA.

In May 2007 members of the Ghana College of Physicians and Surgeons attended our examinations and met with Professor Mazwai, Professor Del Khan and myself to discuss future contacts. They are arranging a meeting at the end of 2007 and asked particularly that the President of the CMSA and the IPP should attend and Professor Khan has been invited to be a keynote speaker. In addition, they asked that the Presidents of the Colleges of Physicians, Paediatricians and Obstetricians and Gynaecologists should attend this occasion. Discussions between the various disciplines, exchange of ideas and of examination processes are planned. It was agreed that each College should fund their President's attendance but the Ghana College will organise all accommodation during the congress.

Potentially this is a very exciting development and may well give us further contact within Africa.

Professor Chikte will report to the AGM about contact elsewhere in Africa and several constituent Colleges have developed very important links. Some are providing important services in under-resourced areas. Professor Andries Stulting has developed a network throughout Africa for Ophthalmology.

CMSA Membership

There has been debate about what the CSMA offers our members and Professor Stulting has headed a programme which reviewed membership benefits and tried to identify what members wish to receive from the College. Some possible innovations are the development of access to electronic journals for Fellows and members in good standing. Prof Jeanine Vellema has been instrumental in investigating this, together with Professor Lizo Mzwai.

We have had discussions with the South African Registrars Association as to whether they wish to becoming affiliated members of the CMSA, paying a small membership fee, not having voting rights but becoming involved in the CMSA prior to their admission. We await their feedback.

Links with Colleges and Academics Abroad

Numerous invitations are received by the CMSA for the President to attend meetings abroad. I was very privileged to attend the 41st Singapore-Malaysian Congress of Medicine which coincided with the Golden Jubilee celebration of the establishment of the Academy of Medicine in Singapore. This was a truly memorable occasion during which I was awarded an Honorary Fellowship. There was an opportunity to attend academic meetings but also to interact with the Presidents of Colleges from around the world. This was a very meaningful occasion and I have already circulated my report on this meeting to you.

There have been several further invitations, many of which unfortunately clash with CMSA activities. I decided to accept the invitation to the meeting of the Canadian College, but because of the location of this meeting, which make travel arrangements difficult and the clash with local requirements, it was impossible to attend. Professor Del Khan was asked to attend the meeting of the American College of Surgeons on behalf of the CMSA but he was denied a visa, despite his long-standing interaction in the USA. As a consequence there was no CMSA representation at this meeting.

My next visit will be to Ghana and I hope to arrange my international visits in the future to ensure that each year at least one African visit will be part of the travel programme.

Examination and Assessments

There has been debate about the quality of our examinations, the quality of our assessment processes and how we select candidates to write the Part II examinations. A very successful workshop was held in Durban in May 2007, organised by Professor John Robbs, to discuss the use of logbooks. Essentially there was consensus that logbooks have considerable value, may have a gate-keeping function and are used by many Colleges. This assessment may be expanded and incorporated into the final specialist examination.

The Examinations and Credentials Committee is arranging a workshop on assessment processes which will be held in Cape Town prior to the May examinations in 2008.

Policy Forum on Tertiary Academic Medicine and Specialist Training

Because of the concern about the cuts in funding for tertiary medicine and the possible erosion of this very important activity within our country, the CMSA are hosting a consultative forum on 24 and 25 October 2007. This will include representatives from the Departments of Health, Education and Finance and there will be representatives from every constituent College. The Forum will offer an opportunity to discuss the perceived problems in tertiary services and training and to identify possible solutions. This meeting is funded by DFID and our conference organiser is Brigid Strachan of Impact Health Management Solutions.

Documentation will be produced during this meeting which will be circulated widely through the CMSA. A follow-up meeting is planned in 2008, provided we can generate funding.

Durban Office

A particularly exciting development over the past year has been the acquisition of two properties adjacent to the Durban office. We are indebted to Professor Yackoob Seedat for his generosity in facilitating the sale of the third, immediately adjacent, property (which belongs to the South African Kidney Association) and for the establishment of a research fund within the CMSA with this revenue. By the next AGM, I hope we will present realistic plans for the new Durban offices.

Conclusion

There are many members of the CMSA who contribute to our activities and our wellbeing. The Chairpersons of the three standing committees and their Honorary Registrars are obviously central to College activities. The Finance and General Purposes Committee is chaired by Prof Gert Vlok and is responsible for the day to day running and finances of the CMSA. The Honorary Registrar of this committee is presently Prof Usuf Chikte. The Examinations and Credentials Committee is based in Johannesburg and is chaired by Prof John Lownie with Prof Jeanine Vellema as Honorary Registrar. This committee deals with many of the problems which arise during examinations and with assessment procedures. It is an important and active committee and is central to CMSA activity. The Education Committee is based in Durban and is chaired by Prof John Robbs, with Prof Bilkish Cassim as Honorary Registrar. This committee deals with our CME programmes, many educational aspects of CMSA business and other important College business.

The Transactions are currently being edited by Prof Gboyega Ogunbanjo who is now Vice President. He has revisited the costs of production of this publication without detracting from its quality and he has produced new ideas for the Transactions. For this we are most appreciative.

Prof Tuviah Zabow has been the Honorary Treasurer of the CMSA since 2003. His role is central to the management of College business and few of us would wish to take on the financial responsibilities of the CMSA. He has performed this task diligently, enthusiastically and meticulously and we owe him a considerable debt of gratitude.

I wish to thank all these officers for their support and input. I realise that for all of them this involves considerable extra effort and work in an already very busy schedule.

I also wish to express our gratitude for the support we receive at the three College offices. Thanks are due to the Administrative

Secretary of our Durban office, Anita Walker, our Academic Registrar, Ann Vorster, who solves so many difficult examination problems and our CEO, Bernise Bothma, whose institutional knowledge and support is central to anyone in the Presidential role. Their pivotal role in running the CMSA is often under-appreciated and, without their support, we would be considerably less effective.

Finally I wish to thank the two Vice Presidents, Prof Anil Madaree and Prof Gboyega Ogunbanjo for their exciting ideas, for their desire for innovation and for their ongoing support and Professor Lizo Mazwai the immediate past President who has been a particularly important mentor to me. I hope that, as a team, we will realise our ideals and our vision over the next few years.

ACCLAMATION

8. REPORT OF THE CHAIRMAN OF THE EXAMINATIONS AND CREDEN-TIALS COMMITTEE: PROF J F LOWNIE

Prof Lownie reported as follows

"Mr President, the essence of the work of the Examinations and Credentials Committee over the past year will be dealt with in full at the Senate meeting tomorrow and I will therefore only be highlighting a few of the more important aspects of our work. The Examinations and Credentials Committee is an extremely busy Committee, but the Academic Registrar Mrs Ann Voster and her ladies do all the hard work, so I would like to thank them at the onset for their input which lightens my load extremely.

Mrs Vorster has requested that a staggered system for the written papers be introduced. This will mean that examinations with orals will be written first followed by the examinations without orals which will be written the week thereafter. This has come about because the growth in examination is such that the venues are not always able to comfortably accommodate all candidates.

Regarding the symposium on "Training the Examiner" which is scheduled to take place in Cape Town in May 2008 at the time of the Senate meeting, the Examinations and Credentials Committee have appointed a Task Team comprising Profs Gboyega Ogunbanjo, Brendan Girdler-Brown and Mrs Ann Vorster. A draft programme has been drawn up by Prof Girdler-Brown which he hopes will start the College thinking about ways to improve the preparedness of assessors. We plan to invite one international speaker and representatives from the Council for Higher Education, the Departments of Health and Education. The constituent Colleges will be asked to nominate members of their choice. The Task Team will be finalising the date for the symposium shortly.

The guidelines on appointing examiners and observers is currently under scrutiny as there are Colleges with specific rules on how they appoint examiners whilst at least 50% of constituent Colleges have no rules in place. Dr Hurribunce is in the process of drawing up a broad policy to manage a process that will allow for consistence in application without interfering with the programme that each constituent College will apply to their Colleges. This matter will be debated by Senate tomorrow.

Another contentious matter that has been debated on a number of occasions in the past and that will be debated again by Senate is the language issue. Specific recommendations from the College of Paediatricians will be put to Senate. This has always been a very sensitive issue but I am sure that Senate will handle the matter with diplomacy and with the College's best interests at heart.

Other items which require ratification by Senate are recognition of hospital training posts, the nominee for the Phyllis Knocker/ Bradlow Award for 2006 and our candidates who will be receiving a Fellowship by Peer Review.

That concludes my Report. Thank you."

REPORT ADOPTED WITH ACCLAMATION

9. REPORT OF THE CHAIRMAN OF THE EDUCATION COMMITTEE: PROF J V ROBBS

Prof Robbs reported as follows:

Continuing Professional Development

This is an ongoing free service for members of the CMSA and over the period 1 June 2006 to 31 May 2007, 80 applications were processed with a total income of R1 600.

Lectureships

The J C Coetzee, K M Seedat and Margaret Orford Lecturers will be appointed in 2008. These lectureships are arranged every three years in order to accumulate sufficient funds for the lecturer to visit more than one centre

The JN and WLS Jacobson Annual Lecture in Radiology was delivered by Dr Ashwin Hurribunce in six centres in July this year. His lecture entitled "A Systemic Approach to Clinical Imaging Services" was of a high standard and well received by all.

Professor Umesh Lalloo delivered the Arthur Landau Lecture entitled "Respiratory Science through the ages – A retrospectroscope" in Johannesburg and Durban during August, in Bloemfontein in September and will be delivering the lecture tomorrow in Cape Town. Prof Huddle thanked Prof Lalloo for the effort put into the preparation of the talk and the excellent manner in which he presented it in Johannesburg.

Guidelines for the Peter Gordon-Smith Lectureship are still to be drawn up, but a significant increase in the amount of funds available for distribution will have to be built up to make a lectureship worthwhile. Senate will be considering a suggestion that a biennial award be made to an individual for "Service to The Colleges of Medicine of South Africa Medicine of South Africa". The award will be in the form of a medal and illuminated certificate. It is also suggested that nominations come from College Presidents and Councillors, members of Senate and support staff.

The workshop on Logbooks held on 11 May 2008 in Durban was a great success and a document on suggestions for the use of logbooks was sent to Presidents and Secretaries of all the constituent Colleges. Their input will be debated at Senate.
I wish to conclude my report with an update on the expansion of our premises in Durban. The three properties adjacent to No. 10 now belong to the CMSA and we are in the process of advising the Architects of our requirement for a board room, examination hall and office space. With the assistance of our Trustees we hope to raise sufficient funds to cover the estimated cost of R8.2 million.

Finally, I would like to extend my sincere appreciation to Mrs Anita Walker who really runs the office extremely efficiently and Mrs Antoinette Conning who deals with all the CPD activities.
I would also like to thank Prof Anil Madaree and the members

who come to the meetings at very inconvenient times. Thank you for your input and assistance in keeping this Committee running".

REPORT ACCEPTED WITH ACCLAIM

10. REPORT OF THE EDITOR OF TRANSACTIONS: PROF G OGUNBANJO

In the absence of the Editor, Prof Gboyega Ogunbanjo the CEO reported on the July–December issue of Transactions. It was indeed a bumper edition with issues covering a broad spectrum of the business of the CMSA.

NOTED WITH APPRECIATION:

That Prof Ogunbanjo had procured four full page colour advertisements which would reduce the costs noticeably. This was sterling work on the part of the Editor and appreciation was expressed for his enthusiasm and hard work.

ACCLAMATION

11. ANNUAL APPOINTMENT OF AUDITORS

AGREED:

That Deloitte & Touche be reappointed as the CMSA Auditors for the ensuing year.

12. CORRESPONDENCE

None.

The business of the meeting was concluded by 19:35.

ADVERTISEMENT

Osteoarthritis

National clinical guideline for care and management in adults

Developed by the National Collaborating Centre for Chronic Conditions at the Royal College of Physicians

Royal College of Physicians
Setting higher medical standards

Osteoarthritis (OA) is the most common form of arthritis and one of the leading causes of pain and disability in the UK. Frequently described as 'wear and tear', its symptoms vary from minimal to severe pain and stiffness and its prevalence increases steadily with age. OA brings an immense burden to the patient, their family and carers, the NHS and society at large. This guideline for its care and management in adults is the full version of the most recent recommendations from the National Institute for Health and Clinical Excellence (NICE). OA is responsible for considerably morbidity and is a common reason for GP consultation. It is also difficult to treat and the varied treatment options need to be carefully matched to the person's needs and lifestyle. The guideline contains a number of recommendations which are not currently routine practice for many clinicians, such as early consideration of topical non-steroidal anti-inflammatory drugs for knee and hand arthritis. People living with OA and those involved in their care also need to be fully aware of the possibilities for self-management, and the options for thorough assessment of the condition and the optimal sequencing of therapies. The guideline is an invaluable resource for researchers and healthcare professionals who can contribute to the better care and management of OA in adults. We hope and expect it can be used both to practical benefit and to raise the profile of this sometimes neglected condition.

Contents

- Introduction
- Methodology
- Holistic approach to osteoarthritis assessment and management
- Education and self-management
- Non-pharmacological management of osteoarthritis
- Referral for specialist services
- Areas for future research

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Published FEBRUARY 2008

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Annual Report of the College of Emergency Medicine of South Africa for the period

1st June 2006 to 31st May 2007

It is a great privilege to present the third Annual Report of the College of Emergency Medicine of South Africa. Our new Specialty of Emergency Medicine continues to grow from strength to strength, as reflected in the following activities and achievements.

University Representation

We are pleased to report that five South African Medical Universities now offer post-graduate Registrar training in Emergency Medicine. Representatives of all these 5 Universities have been co-opted onto the Council of the College of Emergency Medicine:

- Professor Lee Wallis Universities of Cape Town and Stellenbosch
- Professor Efraim Kramer University of the Witwatersrand
- Dr Andreas Engelbrecht University of Pretoria
- Dr William Lubinga University of Limpopo

As our discipline is new, close co-operation and consensus decisions from all major academic institutions involved in the training and provision of emergency care is essential for the ongoing development of our Specialty.

Fellowship by Peer Review

A Fellowship of the College of Emergency Medicine (FCEM(SA)) by Peer Review has been awarded by the CMSA to the following two leaders in the field of Emergency Medicine for their ongoing dedication and commitment to the development of Emergency Medicine in South Africa:

- Dr CJ van Loggerenberg
- Dr HC Britz

Associate Membership

In recognition of their active involvement in emergency care in this country, the following 3 doctors were nominated as Associate Members of the College of Emergency Medicine:

- Dr R Dickerson
- Dr AW Geard
- Dr W Lubinga

Diploma in Primary Emergency Care (DipPEC(SA))

To date, a total of 433 candidates have now successfully obtained the Diploma in Primary Emergency Care (DipPEC(SA)) qualification since the College of Medicine first introduced this Examination in 1986.

The list of hospitals approved for training towards the DipPEC(SA)) has been revised and updated. Several additional provincial and private hospitals have been added, thereby allowing even more candidates the opportunity to attempt this Examination.

To encourage post-graduate doctors to study Emergency Medicine, and to raise the standard of emergency care in South Africa, Community Service Medical Officers who have completed the new 2-year internship programme may now attempt the DipPEC(SA) Examination after completing a further 2 months of full-time (or equivalent part-time) experience in a CMSA-accredited Emergency Department.
The recommended reading list for the DipPEC(SA) has been revised and provides useful information which can be used by candidates in preparation for this Examination.

Medal Awards

Dr CS Frith is to be congratulated on being the recipient of the Walter G.J. Kloeck Medal for the most outstanding candidate in the DipPEC(SA) Examination in 2006.

Fellowship of the College of Emergency Medicine (FCEM(SA))

To date, 13 candidates having successfully completed the FCEM(SA) Part 1 Examination. To assist future candidates, the Fellowship Regulations have been revised to allow candidates to write the four Primary Examination subjects (Anatomy, Pathology, Physiology and Pharmacology) in divided attempts if they so wish.

The College of Emergency Medicine would like to congratulate Dr AJ Kropman upon being the first successful candidate to pass the very first FCEM(SA) Part 2 Examination held in South Africa.

Fellowship of the College of Emergency Medicine Ad Eundem

In view of ongoing assistance in helping develop emergency medicine and his numerous visits to South Africa, Professor Robert F Corder of the University of Maryland, Baltimore has been nominated for Fellowship of the College of Emergency Medicine (FCEM(SA)) Ad Eundem.

Emergency Medicine Society of South Africa

It is very pleasing to note that 103 recipients of the DipPEC(SA) have joined the Emergency Medicine Society of South Africa (EMSSA), adding strength to the growing voice of Emergency Medicine in South Africa. Members of EMSSA receive the journal "Critical Care & Emergency Medicine South Africa (An International Compendium)" free of charge. Special thanks are extended to Dr Charl van Loggerenberg and Dr Simon Robertson for providing this Journal to our emergency care practitioners.

Emergency-Related Short Courses

A table listing current emergency-related short courses available in South Africa has been added to the CMSA Website and News Bulletin to assist candidates in their preparation for College Examinations, as well as providing a useful resource for all post-graduate doctors practising emergency care in South Africa.

As a membership benefit, a discount of R100-00 is offered to all paid-up members of the CMSA on 16 of the 19 listed Courses. The College extends its appreciation to all these training organisations for their continued support, and encourages College Members to take advantage of this offer.

Membership Categories

Following the establishment of the College of Emergency Medicine of South Africa in May 2004, we are pleased to report significant growth in all our Membership Categories:

- 15 Fellowships (FCEM(SA))
- 8 Associate Members
- 433 Diplomates (DipPEC(SA))

The College of Emergency Medicine is proud of all medical practitioners who strive to raise the practice of emergency care in our country, and is pleased to be able to honour and reward colleagues who achieve excellence in this vast discipline.

Walter Kloeck
President

Patricia Saffy
Secretary

(Apologies to Dr Kloeck and Dr Saffy for omitting to publish this report, together with the annual reports of the other constituent Colleges, in the July-December 2007 edition of Transactions Editor)

The Colleges of Medicine South Africa CMSA Policy Forum Tertiary Academic Medicine and Specialist Training

24th and 25th October 2007

Prepared by Conference Organiser, Brigid Strachan 22nd November 2007

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Executive Summary

- **The aim of the Forum** was to bring together leaders, policy makers, decision-makers and stakeholders to discuss strategic issues with regard to tertiary academic medicine and specialist training in South Africa. The output from the event was agreement to continue to create a forum for discussion and debate on issues relevant to academic medicine and specialist training; and a memorandum was sent to relevant government departments informing them of the CMSA initiative to improve specialist and sub-specialist training.
- **Delegates** to the forum were officers of the Colleges of Medicine South Africa, delegates from each of the constituent Colleges, the Deans of Health Science Faculties, leading individuals in health care, and government leaders in health care, education and finance. There were 110 delegates. Delegates were given CMSA files which included all presentations, 5 articles and a literature overview on the financing of academic medicine.
- The Forum involved an **opening event** and keynote address at a dinner at the Mount Nelson Hotel, Cape Town, on the evening of 24th October. Deliberations continued at the Colleges of Medicine, Rondebosch, Cape Town, on the 25th October 2007.
- The Forum was **generously supported by DFID,** the UK Department for Foreign International Development. The Deputy Chairman of DFID Southern Africa, Mr Simon Croxton, attended the event.
- **Strategic inputs** were part of the programme and were presented by the National Department of Health, National Treasury, National Department of Education. the President of CMSA, Chairman Postgraduate Committee for Education and Training (Medical) HPCSA, the South Africa Registrars' Association, a health care consultant from Benguela Health Pty Ltd, and two visitors from the United Kingdom.
- **Discussions at the Forum led to the following conclusions:**
  a. Problems identified included:
     - The lack of policy for the planning and financing of tertiary services
     - The lack of a forum for discussion on issues of governance, planning and financing of academic medicine and tertiary services
     - This has led to concern about the sustainability of tertiary academic medicine the training of specialists and sub-specialists with negative consequences for the health system as a whole.

  b. Action proposed was:
     - The CMSA continue with the initiative started and ensure a forum which debates issues affecting the development of academic medicine and specialist and sub-specialist training;
     - For the CMSA to contribute to a needs analysis for growth in specialist and sub-specialist numbers, to continue their work in maintaining standards for examination and assessment, to ensure curricula are regularly revisited, and to standardise many aspects of national specialist training;
     - For the CMSA to play an advocacy role in consultation with NDOH, DOE, Treasury, Department of Public Administration and the Deans of Health Sciences, in an effort to address the financing and governance issues which affect academic medicine;
     - To engage with the NDOH on the possibility of elaborating the regulations in Section 51, of the Health Act 2004 on academic complexes, in order to address the need for a new national framework for the governance and financing of academic medicine.

1. Introduction

1.1. Objectives of the Forum, Delegates and Programme

The Colleges of Medicine South Africa (CMSA) *Policy Forum on Tertiary Academic Medicine and Specialist Training was held in Cape Town on 24 and 25 October 2007.* The Forum was funded by DFID who generously agreed at short notice to make this event possible.

The objective of the Forum was to bring together leaders, policy makers, decision-makers and stakeholders to discuss strategic issues with regard to tertiary academic medicine

and specialist training in South Africa. The forum was limited to 110 delegates.

The output from the forum is a report and a memorandum to relevant government departments on the CMSA initiative to improve specialist training. A further output is agreement that the CMSA continue with the initiative of debate on the topic.

The CMSA recognise that training takes place at all levels of care. **The focus of the Forum was on tertiary academic medicine** as it is this sector that is particularly under threat, affecting specialist and sub-specialist training and education, and affecting the sustainability of the health system. Future such meetings anticipate addressing issues of specialist education, training and assessment and the academic service context at all levels of the system.

1.2. Outcome of the Forum

Delegates were positive about the Forum, with complimentary comments about the organisation and structure of the programme. It was considered a useful platform that brought together key stakeholders, especially and including the National Departments of Education, Health and Treasury. The debate amongst delegates concluded with strong affirmation to address the issues discussed at the Forum in order to ensure sustainable and quality tertiary academic medicine, and specialist training.

Prof Aidan Halligan, the keynote speaker from the UK, did not meet the CMSA requirements and expectations. All other inputs, formal and informal, were of a high calibre.

Critical to the future process is the need to address the financing and governance of tertiary academic hospitals, planning and production of specialists, conditions of service and retention of specialists in the public health sector. These issues should be addressed in a process going forward by the CMSA in collaboration with other stakeholders.

2. Presentations to CMSA Forum

Strategic inputs were part of the programme and presented by the National Department of Health, National Treasury, National Department of Education, the President of CMSA, Chairman Postgraduate Committee for Education and Training (Medical) HPCSA, the South Africa Registrars' Association, a health care consultant from Benguela Health Pty Ltd, and two visitors from the United Kingdom. (See Annexure 3 for Forum Programme). Key issues from some presentations are highlighted below. All presentations are available on request.

2.1. Financing, Costing Models and Governance: Issues for Tertiary Academic Medicine, *Dr Nicholas Crisp*

This presentation was based on a technical paper commissioned by CMSA especially for the Forum (see Annexure 4). The paper and presentation raise a number of issues:

- **No clear policy** on the development of tertiary hospital care, and academic hospitals in particular;
- An ongoing **shift in resources to primary health care** at the expense of growth in other sectors in the health system;
- A **real and projected decline in the budget of central tertiary hospitals** and the need for serious attention to be given to hospital funding;
- Concerns with the costing of tertiary services, teaching and training in the service context and **the use of the conditional grants as adequate financing mechanisms** for these functions (namely, the National Tertiary Services Grant and the Health Professions Training and Development Grant);
- The **teaching function within the health services is not adequately accommodated** and relevant legislative opportunity allowed in the Health Act has never been developed;
- The **financing, governance and management framework** for tertiary medicine and academic hospitals requires change with the need for consideration of a future hierarchy of statutory and other management forums dealing with national, intra-provincial, institutional and facility relationships;
- And, in conclusion, the **need to address a deteriorating situation** requiring a coherent plan to finance the tertiary hospital sector and to address the relationships between key role-players.

2.2. The Funding of Tertiary Health Care in South Africa: Financing Trends, Mechanisms and Management Options

Dr Mark Blecher National Treasury

It was emphasised by National Treasury, that all sectors in the health system do need careful planning and financing, despite the focus of the Forum on tertiary medicine. Highlights in considering tertiary medicine were:

- That there has been **significant growth in the funding of health services with R20 billion added** to the health sector between 2003/4 and 2009/, but very little has been allocated to tertiary hospital funding. The baseline central hospital budget has only increased R228 million in the R20 billion increase. The result is that central hospitals are only growing at 0.8% per year, which essentially means no growth at all.
- The question was asked why this is the case. It is not due to lack of money and is **therefore a lack of planning and implementation, particularly in relation to the modernisation of tertiary services plan (MTS).** The question was asked whether the conditions for the financing of tertiary hospitals should change given the lack of growth in this sector.
- Central to the health system is the **training and retention of medical specialists** and it is clear that there are critical shortages of specialists in most hospitals at all levels. There is an estimated shortage of more than 1500 specialists in the public sector hospital system.
- The CMSA in co-operation with the National Departments of Education, Health and Treasury **needs to model future specialist needs** and plan to increase specialist output.
- Effective future tertiary services will require **full revenue retention** to incentivise efficient management, with an **improved governance model** allowing more autonomy for larger hospitals.
- Funding for tertiary hospitals should be diversified with

the tertiary hospital system being **financed from both public and private spending.**

The conclusion of National Treasury was that there is a critical need to improve the planning and budgeting of tertiary services and specialist output, in the context of budget growth, a new model for governance and revenue retention.

2.3. The Modernisation of Tertiary Services Project, *Siyabonga Jikwana, National Department of Health*

The National Department of Health outlined its plan for the Modernisation of Tertiary Services, conceptualised in 2003.

- The **MTS plan** includes: ensuring access, preserving centres of excellence, reducing inequities, ensuring service quality, and defining levels of care and services for each level.
- The process of implementation of the **MTS Plan involves reconfiguration** (downgrading and upgrading various hospitals) based on a geographic mapping.
- The NDOH did note **under funding of hospital services** by 26% or R5 billion, and that a real growth in budget of 6% was required.
- Progress in implementation of the MTS has started with an **audit of radiology and oncology equipment** and the financing of this equipment.

In discussion concern was expressed about the NDOH **rational for the downgrading** of certain existing tertiary hospitals in the context of the need for growth in the sector, and that geographic mapping and road access may not be sufficient as a planning tool for this process.

2.4. The Role of the Department of Education in Health Sciences Education, *Prof Ian Bunting, NDOE*

In his presentation Prof Bunting highlighted the following:

- The legislated role of the National Department of Education which makes the Minister of Education responsible for the development of policy on Higher Education
- The development of a new funding stream to the clinical training component of Health Science education.

2.5. Presentations on Specialist Training and Research *Prof Zephne van der Spuy, Prof Bongani Mayosi and Dr Evangelo Apostelaris*

The presentations focused on specialist training and the development of clinical research. They highlighted the following issues:

- That there is a **declining infrastructure** and health service context available for specialist training
- Numbers of **new registrars are being limited** and cut despite the need for growth in specialists
- **Assessment processes** need refinement
- **Formal learning time** is limited due to the 'crushing burden of patients' and the work programme for registrars is 'untenable' with an 80 hour week in some specialities
- **Career opportunities** are limited or nonexistent leading to loss of newly trained specialists to the private sector or emigration
- When specialists are employed in the public sector they are **poorly paid** compared with private income/opportunities and unable to sustain family demands
- **The health care team** comprised of doctors, nurse and other health professionals has 'been whittled away'
- The **AIDS pandemic** leads to demoralisation and depression in staff
- The **practice of medicine** has become much more difficult and the **profession less** attractive as a career option with registrars feeling 'undervalued'.

Monitoring **clinical research performance** is problematic but there is a consensus that clinical medical research has reduced over the years. In the UK research was undertaken on how to generate clinical research with actionable recommendations. The Academy of Science of South Africa is now to fund a similar initiative in South Africa.

Overall attention needs to be given to the expansion of registrar numbers and career opportunities, conditions of employment in terms of pay and hours, access to opportunities for research and development, and value accorded to the profession by the National Department of Health and other stakeholders.

2.6. Presentation on Academic Medicine and Quality Health Care

Prof Richard Lilford, University of Birmingham.

Prof Lilford gave an extensive presentation on the links between a good clinical research infrastructure and the development of quality health care. Prof Lilford highlighted the following points:

- Settings where there is clinical research have better health outcomes
- Clinical research is a lever for change in health care
- Clinical research leads to improvements in health care which impact on economic development locally and internationally
- The importance of centres of excellence and how to create the infrastructure for their development
- How to generate research capacity through grants, fellowships and research units
- The importance of translational research.

3. Forum Discussion

The points below reflect **discussion in Forum sessions**, and a **collation of replies from a questionnaire** given to delegates. The two issues for discussion and in the questionnaire were: what are the problems/issues, and what action should be taken to put in place a process to address the problems? Within this context, the delegates were asked what is the role of the CMSA is in contributing to a way forward. Some of the points raised do not fall directly within the CMSA mandate as an examining body, they do however impact on the development of academic medicine and specialist training, and have therefore been reflected.

3.1. The Issues

Not enough funding?

- Prioritisation of primary and secondary health care at the expense of tertiary health care and tertiary academic hospitals
- Provincial departments of health reallocating funds away from conditional grants (namely National Tertiary Services Grant and Health Professions Training and Development Grant) to cross subsidise provincial budgets

- Lack of clarity on the issue of the Health Professions Training and Development Grant and the National Tertiary Services Grant
- Revenue generated by hospitals taken by provincial departments of health and not retained for hospital development
- There is a gap between the finance that Treasury is advocating is available for health budgets, especially tertiary service development, and what provincial departments of health are allocating to tertiary health care
- There is a lack of capacity in service and financial planning for the Modernisation of Tertiary Services
- The future of the 'modernisation of tertiary services' is not clear and has no policy foundation
- In summary, the policy, planning and budgeting for tertiary services, especially academic services in this context, is a problem that must be addressed.

Lack of sustainability of academic service training platform:

- Lack of stability due to declining resources
- Limited and declining posts for specialists, sub-specialists and registrars
- Under-budgeting by national and provincial departments for tertiary services
- Real under-funding of health science education and training on the service platform (teaching done "out of goodwill which is leading to anxiety and breakdown")
- Bed closures at the end of the budget year to fix deficits
- Dismantling existing functional units, namely tertiary hospitals and centres of excellence in favour of 'ideological future ideas'
- Poor conditions of service for academic clinicians and specialists
- Therefore lack of retention of quality staff and academics
- Lack of accountability for doctors involved in RWOPS (private practice)
- Governance issues between faculties, academic hospitals and Provincial Departments of Health that take the form of faculties having no role in decision making for matters that affect specialist training.

Lack of a forum for policy, planning and decision-making:

- There is no forum for discussion and yet decisions are taken, often by default, which affect specialist training and impact on service delivery
- There is a need for a forum for discussion between HEI's, NDOH, Treasury, Department of Public Administration and the medical profession
- Persistent tension exists between university faculties and provincial departments of health
- Concern was expressed over whether the conditional grants are effective and how we can ensure money is efficiently spent
- The ongoing paradox of downscaling tertiary academic hospitals, coupled with increase in investment in healthcare by Treasury, and requirements for expansion of human resources by National Department of Health was highlighted
- Due to the absence of a Forum for discussion and planning, there is no national plan for registrar training and numbers
- An issue which is often raised is whether it is appropriate to have another medical school in the Eastern Cape to strengthen services and output of specialists in that Province.

Problems in the Teaching and Training and the Environment:

- Lack of career pathways
- Poor staff morale
- Lack of retention of specialists
- Lack of new technology
- Inadequate theatre lists
- Decline in excellence of research and lack of time for research
- Administrative work is a burden and has increased exponentially
- Staff cuts – specialists, registrars, and other health professionals
- Lack of consultation by relevant role-players (provincial departments of health)
- Quality of future specialists trained in the system is a concern
- HIV/AIDS increases the service burden and makes the profession less attractive

Issues in Specialist Training:

- An estimated national shortage of 1500 specialists
- No unitary examination standard
- No national approach to MMed and sub-specialist training
- Variation in training time for registrars
- Alignment between process of training and process of assessment is not sufficient
- What should the research component be for registrar training
- Should there be a component to specialist training that teaches management and leadership skills
- Need for development of new specialities such as Community Paediatrics and Community Gynaecology
- Need to clarify the role of logbooks and the assessment of clinical competence
- The location of the specialisation of Family Medicine is not clear

The role of the CMSA in addressing problems and policy Issues:

- Does the CMSA have a role in advocacy in policy debates given the service environment impacts directly on training
- Who determines numbers of registrars
- What is policy on the development of sub-specialists and new specialities
- Should there not be critical mass guidelines for specialist training which must be adhered to in teaching hospital units
- Should there not be minimum equipment guidelines for specialist training units
- How is there accountability in decision-making with regard to issues that affect the training of specialists and academic service environment?
- At present follow up is not proactive, problems do not get addressed, issues are not solved – can CMSA assist with this situation?

Many questions were raised in discussion, as is evident from the breadth of the discussion highlighted in bullet points above.

The Forum was considered as a start of a context for discussion. Many of the issues will need to be addressed by the CMSA and other role-players in the process going forward.

3.2. How to take the process forward?

The points below reflects discussion from the closing session on 'what to do', and what the CMSA should do in particular. *In general*:

- Consensus was that the **process initiated** by the CMSA Forum **should continue**
- CMSA should **contribute a needs analysis on specialist development,** in the cintext of the of health system in South Africa
- The CMSA and individual Colleges should work with, and be **represented on appropriate structures of the National Department of Health**
- The **CMSA** must play a **policy role** in areas that affect specialist training directly, and must play an **advocacy role** in areas which impact on specialist training and academic health services.

***Specifically* there were a number of suggestions on issues about which CMSA should entertain debate and discussion on which do fall within the CMSA mandate**.

These were:

- The need for guidelines for the requirements for teaching units in each discipline or College: staff ratios, equipment, skills infrastructure, training programme, unitary examination and other features of training.
- The CMSA, by being involved in examinations and assessment, must ensure standards of specialist training are maintained
- Through influencing standards, the CMSA is involved in ensuring quality of training and quality of specialists and must assert this role
- The process to facilitate the alignment of the processes of training and assessment between the universities and the Colleges should be pursued
- The CMSA should develop statutory requirements for specialist training, authorisation of visiting or immigrant graduates and specialists, and retention of registration
- The CMSA with other role-players should assess whether there is a need for another medical school to train specialists or whether we consolidate what we have
- Colleges and Faculties must ensure teaching and training takes place at all levels of care
- The CMSA should assess the relevance of including leadership training in specialist training courses and possibly institute such courses
- The CMSA should continue to discuss remuneration with the NDOH, SAMA and DPSA as this issue impacts on the future of academic medicine
- The CMSA should be represented on the Medical and Dental Board of the HPCSA.

There were a number of areas in which delegates recommended the CMSA should play an advocacy role. These areas are listed below. This advocacy will take the form of either CMSA advocating issues as an organisation, or the specialists/ Colleges/disciplines responsible for training being part of the process with other stakeholders: Issues for advocacy are as follows:

- There is a **need for an audit** of the teaching and academic service platform for specialist training
- The CMSA should become **involved in advocacy for partnership** and discussion between the CMSA, HPCSA and National Departments of Health, Education, Public Service and Treasury
- The CMSA should become involved an advisory body to **the National Department of Health** on specialist service development, specialist needs, the training and retention of specialists
- There is the need for the **establishment of a national framework for academic medicine** and the CMSA can be a part of this process
- All decisions on academic medicine must be taken at national (and not provincial) level and this should be enabled through **the development of a national governance structure for academic medicine** which includes National Departments of Education, Health, Treasury, HEI's and the Colleges of Medicine
- This national structure should address the development of a **national framework for joint agreements** on a modus operandi between provincial departments of health, universities and services providers
- **It is necessary to review the financing mechanisms for tertiary hospitals** and the impact on the development of academic medicine
- **Tertiary academic service** funds should be ring-fenced with appropriate structures put in place to decide how funds should be spent
- **It is necessary to encourage the development of the budget plan for tertiary medicine,** and definition of required resources and services – staffing and remuneration, equipment, services, centres of excellence, national specialist units, telemedicine units
- The development of the budget plan and new governance mechanisms should address the *academic service platform at all levels of care*
- Identification and planning of sustainable **funding for clinical training and education** on the service platform
- **Changed governance and budgeting for academic hospitals** and the inclusion of clinical heads of department in planning and hospital decision-making
- **The development of budget holding units** rather than centralised hospital budgets controlled by provincial departments of health
- **The need to unblock the employment of foreign nationals**
- And, advocacy for the enablement of all the above through the **development of regulations in** Section 51 "Establishment of Academic Health Complexes" in the Health Act 2004.
- In essence the CMSA and other stakeholders must **advocate how to take academic medicine forward.**

' We need to think outside the box and come up with new solutions'
'We must stop passing the blame and work together to improve healthcare in South Africa,
'We need to develop a common vision on what academic medicine can do to improve health care' and
'We must get feedback'.

4. Next Steps

Consensus was that the Forum was useful as a useful gathering of stakeholders, and provided a forum for open

discussion of problems. The primary concern of delegates was that the Forum should not be another 'talk shop with no action', and therefore how to take the issues forward, find solutions and implement change is of considerable importance.

For 2008 CMSA would like to take the process forward through the following activities:

- **Organising another Forum for March 2008.** The issues at the Forum would include governance of academic complexes, and the role of the private sector in academic hospitals.
- Undertaking meetings with a few **key role-players in the private sector** in order to **raise finance for academic medicine**
- Investigating how to include **leadership training in specialist education**
- Providing a **Forum for the development of a common vision** and understanding amongst College members on the policy issues which impact on specialist training and health care.
- Ideally raising funding for an ongoing technical committee which would provide support to the CMSA on policy and technical issues related to academic medicine and specialist training.

5. Briefing to Stakeholders

The Report of the Forum and way forward was to all delegates of the Forum.

The President of CMSA, Prof Zephne van der Spuy, sent a memorandum to key stakeholders highlighting the issues addressed in the Forum.

Stakeholders sent the memorandum were:

DG for Health	Mr Thami Mseleku
DG for Education	Mr Duncan Hindle
DDG For Public Finance	Mr Andrew Donaldson
Chairman HPCSA Medical Committee Postgraduate	Prof Bongani Mayosi
President, HPCSA	Prof Nicky Padayachee
Chair Medical Deans	Prof Wynand Van Der Merwe

Role of the Colleges – One delegate's View

The College is primarily an examining body and this both defines and limits its role.

The main strength of the College at present is that it represents all of the specialist disciplines in the medical sciences and is thus ideally positioned to act as a facilitator between national and provincial governments on the one hand and the universities on the other. In particular, the colleges set the standard for the MMed examinations, and therefore influence university curricula and the standards required for training of registrars. This places the Colleges ideally for the role of facilitator in disputes between the provinces and the universities over the facilities required for training of registrars.

In order to expand its role and influence, it is imperative that the college continues to support the national initiative towards a single, unified exit examination for all specialists. The Colleges should work with the universities to reach agreement that the universities will accept the Colleges as the external examiners for the examination portion of the MMed degree. In terms of the SAQA regulations, the college should approach all regulating authorities with a recommendation for a single, national equivalence examination in each discipline that would be accepted by all universities for the MMed degree.

Achieving this goal will allow the college to go far beyond its present rather limited role.

As the sole body with the ability to qualify specialist medical practitioners, the colleges would then be in a position to act as an agent for the HPCSA, assisting in the registration of specialists, not only nationally, but also in the more difficult area of establishing equivalence of foreign qualifications. Furthermore, the colleges could act as an agent for the HPCSA in managing CPD certification, re-registration and certification in new areas of practice. This would enable the HPCSA to exert a far better regulation of the standards of clinical practice.
In this role, the College could insist that all specialists would have to maintain membership of the college (as is the case in Australia) in order to maintain their certification. The increased income streams from running all of the specialist qualifying examinations, from the management of CPD activities and from all specialists being required to maintain their membership would provide the cash flow required for these endeavours.

Such a position of strength would also allow the Colleges to stipulate clinical training requirements for registrars in various disciplines, enabling the colleges and the universities to insist that provincial health authorities provide appropriate case-mix, currently relevant pharmaceutical agents and specialised equipment to allow training to completion of all registrars licensed within the province.

Finally, the College should avoid playing a political role and concentrate entirely on its function as an examining body, with the educational and regulatory roles that could arise from this as indicated above.

Tertiary Academic Medicine, Specialist Training and Education: a way forward

Ralph Kirsch, Brigid Strachan and Zephne van der Spuy

Summary
In October 2007 the Colleges of Medicine of South Africa (CMSA) hosted a "Policy Forum on Tertiary Academic Medicine and Specialist Training". There was a remarkable degree of agreement that Tertiary Academic Medicine urgently required increased, ringfenced, funding. At the same time clear short- and long-term strategic goals for all aspects of both Tertiary Academic Medicine and Specialist Training should be developed by a high level group which should include representatives of the National Departments of Health, Education, Public Administration, the Treasury, the CMSA, Health Professions Council of South Africa (HPCSA) and the University Health Science Faculties. It was strongly felt that the CMSA could facilitate this process by convening task groups to develop proposals for various aspects of the "way forward" aimed at solving South Africa's needs for both Tertiary Academic Medicine and the training of specialists.

Introduction
On the 24th and 25th October 2007, 110 delegates, including Office Bearers of the CMSA, delegates from its constituent Colleges, Deans of Health Science Faculties, leading individuals in health care and Government leaders in health, education and finance met at the College's Cape Town offices to discuss strategic issues pertaining to tertiary academic medicine and specialist training in South Africa. While the CMSA recognises that academic activities and specialist training takes place at all levels of care, because of the current anxiety about the future of tertiary care, it was decided to concentrate on tertiary academic medicine on this occasion. Keynote addresses were presented by senior representatives of the National Department of Health (DoH), National Treasury, National Department of Education (DoE), the President of CMSA, the Chairman of the Postgraduate Committee for Education and Training (Medical) of the HPCSA, the South Africa Registrars' Association, a South African health care consultant and two visitors from the United Kingdom.

Formal presentations
CMSA President, Zephne van der Spuy, set a positive tone for the meeting by urging the highly representative group to find common cause and to develop strategies to meet the national needs for well trained specialists and excellent tertiary care.

Aidan Halligan, former Director of Clinical Governance and Deputy Chief Medical Officer for the UK, pointed out that the delegates could by boldly, harnessing their combined knowledge, and skills produce solutions for academic medicine and postgraduate education in South Africa. Delegates should not be daunted by the enormity of the task. After all "fine timber does not grow with ease, the stonger the wind, the stronger the trees."

Mark Blecher, representing National Treasury, indicated that while there had been a significant growth in overall health funding the budget for central hospitals had increased by only 0.8% per year since 2003. South Africa was not prioritising tertiary hospitals in its funding. Treasury had attempted improve this funding via the tertiary services grant. They had assumed that provinces would use this money as an addition to the provincial allocation thus making up for the lack of growth in funding. This had not happened.

Medical specialists were an essential for secondary and tertiary care. There was currently a shortage of more than 1500 specialists in public sector hospitals. Blecher felt that it would be very useful if the CMSA, the DoH and the DoE developed a plan for increasing specialist numbers.

He concluded that there was a need to build consensus around the DoH's Modernisation of Tertiary Services (MTS) proposals. These needed detailed plans for implementation. The financing and governance of tertiary hospitals needed to be re-examined. Finally, an improved model of financing health science education was required.

Ian Bunting, representing the DoE reminded delegates that health science education funding was in the form of a block grant based largely on student numbers. The grants were not increasing because the number of students was relatively small. Furthermore, universities have the discretion on how to allocate this money. Thus only earmarked, ringfenced, funding will succeed in making a difference to health sciences. This should be tied to specific deliverables. Bunting stressed that planning was the responsibility of DoE which had to ensure that national needs, including those for health science graduates, are met.

Nicholas Crisp, managing director of Benguela, a specialist health consulting company, had developed two models a "tertiary service" (TS) model which determines the cost of providing tertiary health services; and a "teaching, training and development" (TTD) model which determines the cost of clinical teaching, clinical training and formal teaching of health science students. The models were tested in the Western Cape. The TS model proved that the tertiary hospitals studied were extremely efficient. The cost per service was significantly less than the **Uniform Patient Fee Schedule (**UPFS) for the billing of public hospital services. The TTD model showed that there are more students receiving tuition than expected, that there was a significant degree of decentralisation of clinical training and that the services are stressed.

Crisp called for collaborative governance and management. There should be a 'top-down' process with decision-making structures equipped to perform long-term strategic analyses and able to enforce their decisions. Simultaneously, there must be a 'bottom-up' process for specific governance arrangements to manage the tertiary facilities and the relationships between provincial authorities and universities.

The funding framework for all public hospitals should be nationally determined and tertiary allocations should be a part of that single framework. There should be a hierarchy of statutory and other

management structures for dealing with issues at all levels of engagement. An interdepartmental national structure (health, education, public administration and treasury) reporting to the National Health Council Committee for Academic Medicine and Hospital Services should be developed. This will include provincial structures comprising members from the provincial health department and universities in the province; bilateral structures for each university with representatives from the provincial DoH, the university and the hospitals linked to the university and facility level structures with representatives from facility management and the university faculty.

Crisp concluded that there was an urgent need for a single coherent plan for the whole health system with an integrated financing plan. That the national tertiary services grant (NTSG) and the health professions training and development grant (HPTDG) should remain as conditional grants and the functions that they purport to fund should not be funded through the provincial equity system. Finally there was a dire need for formal, even statutory policy, governance and management mechanisms to be instituted with the key role-players to address the deteriorating situation.

Siyabonga Jikwana from the DoH discussed the Modernisation of Tertiary Services (MTS) project initiated by the National Department of Health in 2003. The MTS project aimed to develop a ten-year plan for the modernisation and reconfiguration of public sector tertiary and quaternary hospital services in order to ensure that such services are optimally configured to provide the South African population with equitable access to efficient, high-quality, cost-effective tertiary and quaternary care, in a manner which is affordable and sustainable in the longer term. The plan calls for an agreed strategic framework and planned target configuration for national referral, regional and provincial tertiary services; funded human resources and capital and procurement plans; appropriate recurrent funding mechanisms and a detailed implementation and transition plan. The process has involved the integration of more than 100 stakeholder inputs with technical analysis and modelling and consensus building.

A set of principles and values were developed by the MTS to guide the future development and reconfiguration of public referral hospitals in South Africa. They are the following:

"Government must actively work to realise progressively the right of access of all South Africans to appropriate, high-quality referral hospital care, given available resources.

Current centres of excellence in tertiary care must be preserved and not undermined by change. The reduction of inequalities must explicitly involve the strengthening and development of services, and should not be a crude process of "redistribution".

Ensuring equitable access to care does not always require that services must be evenly distributed in geographic terms. The health system should facilitate the health service user in accessing services.

Any reconfiguration of services must ensure that service and care quality is of the highest attainable level at all times given available resources.

Public referral hospitals must become the employer of choice for health professionals, through comprehensive action on remuneration, working conditions, and development of clear career paths.

Health professionals training, especially that of medical specialists must be more closely linked to the requirements of the public health system, to allow the production of personnel with the required skills.
Clinical equipment and physical infrastructure must be modern, fully functional, adequately maintained and replaced on a regular basis.
Services must be adequately and sustainably funded.

Service delivery must be efficient, effective, and well managed, offering value for money in the use of public funds. Management and funding arrangements must support and promote the smooth operation of an integrated referral system, and not reinforce divisions between levels of care or across provincial boundaries.

Reconfiguration of tertiary hospital services cannot be considered in isolation from the adequacy of regional hospital services."

The MTS plan defines several categories of hospitals. These include regional hospitals, "developing tertiary" or large regional hospitals, "fully developed" tertiary hospitals, national referral services and central referral hospitals.

Jikwana detailed the services to be provided at each level. The MTS plan depends on well defined catchment areas and referral structures. The catchment population, the number and level of facilities, the distance between facilities, cost of transport plus estimates of referrals, workload and specialists required were used to model the cost of tertiary services.

The implementation plan for the MTS has been based on the following key assumptions:

- That there will be a phased achievement of improvement;
- That provision must be made for an increase in drug expenditure;
- That there should be significant capital investment in radiology and for sustainable maintenance and replacement of buildings and equipment
- And it is also anticipated that health care professionals will need a large pay increase.

The aim is to reconfigure hospital services by 2014. By then all designated tertiary hospitals must be fully developed. There will be 6 national referral hospitals (Universitas, Pretoria Academic, Albert Luthuli, Groote Schuur/Red Cross, Johannesburg General and Polokwane Hospitals) and two Central referral units Groote Schuur/Red Cross and Johannesburg General Hospitals.

The MTS calculations suggest that tertiary services are currently underfunded by32% and understaffed by 1500 specialists. MTS will need more specialists (±3300) and increased funding (±R26 billion). Capital costs will be ± R9.5 billion.

To date Provincial implementation plans have been developed. MTS will be phased in. In doing so it will attempt to prioritise areas of particular need. Thus the team have completed an audit of oncology and radiology equipment needed in all provinces. The results indicate the urgent need to replace the existing equipment as it is old and dangerous to patients. One billion rand has been

allocated to revitalise existing oncology and radiology centres throughout the country for the 2007/8 budget year.

Percy Mahlati, Deputy Director General of the National DoH commented that county's present approach to tertiary academic hospitals and specialist training is largely focussed on cost because of fiscal constraints. He advocated a broader more comprehensive approach which looks at the impact of the proposals on the entire health service. Health professionals should play an increased role in informing decision-makers

Higher education is an area that must be addressed. The allocation of training posts has, in the past, not been based on national needs. Mahlati urged training institutions to be more responsive to the needs of the health system.

Mahlati had previously appealed to the College and the profession to assist in determining national needs for specialists. He reiterated his request that the medical profession should help the DoH to determine the number of training posts for each category of health professional in order to meet the needs of our country. Decisions regarding the number of trainees must be dealt with on a national level.

Zephne van der Spuy, President of the CMSA examined the "Challenges in training and in retaining specialists." This was not easy in our setting. The first and most important prerequisite for postgraduate education is time to teach and to do research, She quoted TB Turner, Dean, Johns Hopkins School of Medicine 1957-1968 who stated: "At this point I must issue a stern warning to the medical schools in some of the medically underdeveloped countries. The clinical faculty is being reduced to educational impotence by the crushing burden of service to patients. Admittedly, the human problems are great and distressing; vast numbers of patients clamour at the doors of the teaching hospital, enough to absorb the complete energies of the teaching staff. But to permit excellently trained and carefully selected faculty members to exhaust themselves in this manner to the inevitable deterioration of teaching and research, is most short-sighted indeed. It should be recognised by all concerned, and particularly by those in authority, that the primary purpose of the teaching hospital is to serve the teaching needs of the medical school, that is, the preparation of young persons for careers in medicine."

Adequate facilities are vital. Registrars need exposure to sufficient patients and procedures to learn. They should be taught to use the modern, diagnostic, procedural, surgical, and therapeutic techniques. The hospitals in which they train should be adequately staffed with appropriately trained nurses, physiotherapists and other members of the health care team. Currently most South African teaching hospitals are poorly equipped and understaffed.

The AIDS pandemic has impacted on all aspects of healthcare. Some disciplines are particularly affected. The high mortality rate has a profound affect on staff morale and is definitely influencing career choices.

Staff are expected to provide service, to teach and to do research. A lack of career pathing with published criteria for promotion and the imposition of quotas in Academic Tertiary Hospitals has meant that merit plays a lesser role in promotion than the extremely limited number of senior posts. As a result many excellent young specialists move to the private sector or leave the country.

Some provinces rigidly adhere to a 4 year registrar contract which is often inadequate. Registrar numbers are often too small to allow for study time. Many work an 80 hour week. Most registrars have no public service post to go to upon completion of their training and are lost to private practice or go overseas.

The CMSA has over the past several years reviewed all aspects of assessment in order to make the process more objective and fair. In future every registrar will have a logbook. They will also be assessed at regular intervals throughout their training program. The format of some examinations has been improved and in many instances the number of observations increased. Introduction of a research component is being debated.

Finally, some universities are now implementing programs which train the trainers. To date most teachers have modelled themselves on their own teachers. Postgraduate medical training depends on an apprenticeship model. Learning is largely experiential with academic input to back it up. To succeed there must be a good academic programme, sufficient study time and supervision by senior staff.

After specialisation continuing professional development programs are essential and recertification may become necessary. If we are to retain our newly qualified specialists every effort should be made to place graduates in posts within the public sector. Promotion of academic public service health professionals should be a joint University and Health Service process and should recognise the parity of academic and service activities. Further, promotion should be based on clear, published criteria and (local and regional) quotas should not be applied.

Sir William Osler believed that the best teachers are those "who have, first enthusiasm, that deep love of a subject and desire to teach and extend it without which all instruction becomes cold and lifeless; secondly, a full and personal knowledge of the branch taught: not second-hand information derived from books but the living experience derived from experimental and practical work done in the best laboratories." Teachers should do research and training should be research based. We should emulate an overseas hospital which proudly proclaims that its vision is to "improve care through research"! The ideal would be to achieve an ethos of caring, research and learning everywhere in the healthcare system. This proposal usually evokes angry opposition but as Lord Rosenheim, Past President of the Royal College of Physicians, pointed out some years ago "The revolt against research must not be allowed to pass unchallenged. It is, I believe, essential that medical education should take place in a questioning atmosphere of research if we are to produce doctors for tomorrow with a scientific and enquiring outlook, prepared for the major advances that will occur during their active careers."

South Africa can retain specialists in its public sector by offering them career paths in which the criteria for promotion are published and where there are no quotas or other hidden barriers to promotion. Adequate remuneration is important. Young specialists should have time to develop their careers. This includes the ability to attend conferences and sabbatical leave. The hospitals in which they work should be well staffed and appropriately equipped.

Van der Spuy concluded by reminding delegates that examinations were the central function of the CMSA. Its 25 constituent colleges offer 126 different examinations culminating in 78 qualifications. The number of candidates have increased from 756 in May 2202 to 1360 in May 2007. Over the past few years the pass rate has been between 58 and 62%, This compares well with sister colleges abroad. She urged all stakeholders to make health service careers attractive so that newly qualifying specialists would want to be a part of it.

Bongani Mayosi, Chairman of the Postgraduate Committee for Education and Training (Medical) of the HPCSA examined "Tertiary Academic Hospitals as Centres of Excellence and Infrastructure for Training Specialists". The functions of academic medicine include education and training which fall under the DoE; clinical and public health service which is the responsibility of the DoH; and health research which is the responsibility of the Medical Research Council (MRC), National Research Foundation (NRF), DoH, DoE and the Department of Science and Technology (DST). The performance of Tertiary Academic Centres should be measured by examining the quality and quantity of healthcare professionals produced, the quality and relevance of the clinical and public health service provided and the quantity, quality and impact of their health research.

While there is no agreement on the best way to monitor research performance, publication counts are one of the measures widely used to determine the contribution of various countries to global research output. The overall number of SA publications in Institute for Scientific Information (ISI) databases increased between 1981 and 2007 but our share of the global output declined significantly reflecting the fact that other countries were increasing their productivity at greater rate than we were.

This relative decline was most marked in clinical medicine (-22%). The UK has assembled a panel of experts to produce "actionable recommendations" after an in-depth study of their research output. Many of the problems identified apply to SA. UK Barriers to Clinical Research include a lack of infrastructure; conflicting demands of service and teaching which erode research time, the very long time required for combined specialty and research training; and poor recruitment and retention of clinical research staff. Thus having hospitals is not enough. Clinical research requires special training, dedicated time, dedicated staff and equipment.

The decline in research has stimulated the Academy of Science of South Africa, a statutory body created to "provide effective advice and facilitate appropriate action in relation to the collective needs, opportunities and challenges of all South Africans" and which may "at the request of any person or on its own initiative, investigate matters of public interest concerning science and on the strength of the findings act in an opinion-forming and advisory manner" to launch a Consensus Study on "Clinical research and related training in South Africa" The panel which must report within 12 months will look at how government, parastatal institutions, academia, and industry can interact more constructively in creating a favourable environment for clinical research. How to improve the level of funding of clinical research for investigator-driven studies, and how to equip clinicians-in-training to embrace clinical research as an indispensable element of delivering effective healthcare.

Richard Lilford, Professor of Clinical Research, Birmingham University, UK discussed "Clinical Research in the UK." Lillford pointed out that South Africa's problems were similar to the UK and thus many of their solutions were the same.

It is vital that Treasury is persuaded to allocate more dedicated funds for research. Academic tertiary hospitals have the critical mass of human resources required to provide a fertile environment for research.

There are several reasons for increased investment in research.

- Greater productivity: Research provides a questioning environment, a culture in which dogma is challenged, in which improving understanding is important and finding better ways of functioning is a major goal. This breeds enthusiasm and results in greater job satisfaction and increased productivity. Research is responsible for much of the increased output of academic institutions.
- Research is a lever for change; just the act of doing research makes a difference to the way a facility functions.
- Solving one's own problems: Developing countries like South Africa need to do their own research because few diseases prevalent in developing countries enjoy a high research priority in developed countries.
- Growing the economy: There is a growing recognition that traditional economies, dependent on activities like mining and agriculture cannot compete with a knowledge based economy. One way of developing this is to plough money into research and training more researchers.
- Value does not only come in commercial terms. Investment in health-related research increases the health of the population, life expectancy and thus productivity.
- Countries in which there is competition for research funding generally do the best research. Centres of excellence should compete for the bulk of the funding. Some funding should be reserved for fledgling units. Generating research capacity is vital. Grants should be made conditional on capacity development. There should be senior and junior clinical research fellowships with reasonable salaries particularly if they are to attract young doctors.
- Finally, incentive payments should be offered for research. This worked extremely well in the UK where it was shown to improve the standard of care for chronic diseases significantly.

Evangelos Apostoleris presented the "Registrar's perspective." Registrar perceptions are that South African training programmes are good. This is borne out by the increased competition for training posts.

However, registrars are under severe pressure. The volume of work is enormous and there is little time for teaching, research and study. This could be solved by the introduction of a "registrar contract" which defines the number of hours of service and ensures ring-fenced time for learning, teaching and research. Mentor programmes would assist registrars greatly.

Academic tertiary hospitals should provide an environment needed for specialist training. This must include adequate numbers of teaching and support staff, appropriate equipment and laboratory support. Governance needs to be improved. The CEO, Dean and Heads of Department need to work closely to provide an adequate training environment.

South African registrars face the enormous challenges of the HIV pandemic, resistant TB and an increased burden of trauma. These drain the resources particularly where hospitals are understaffed. Teaching staff need to be available since registrars require both direction and supervision.

At present many registrars are relatively poorly paid, have poor working conditions, inadequate consultant cover and no career path in the public service to follow once qualified.

Registrars would prefer a single national exit examination to the current mix of College and University examinations. They would like to do research but this would need adequate supervision and dedicated time.

For the public sector to be the employer of choice the DoH would have to provide career paths and an improved environment for patient care as well as time for personal development, teaching and research.

Max Price, Past Dean, Faculty of Health Sciences, University of the Witwatersrand, chaired the Forum Discussion."

High level issues identified include the inadequate funding of Tertiary Academic Hospitals. This is due to priority being given to primary and secondary health care; provincial departments of health reallocating funds away from conditional grants (National Tertiary Services Grant and Health Professions Training and Development Grant) to other components of health care and, in some provinces, to the use of some of the health component of equitable share funds (discretionary funds) in areas other than health.

There was a real concern about the lack of sustainability of the academic service training platform. In many instances resources are declining. Bed and outpatient clinic closures have resulted in fewer patients to teach on and cuts in theatre time have impeded the training of registrars in the surgical disciplines. Teaching and training posts continue to be reduced resulting in increased service demands on remaining teachers and trainees. Equipment is becoming dated, old and dangerous. Many important new drugs are not available and cuts in vital health care professional posts especially nurses have resulted in many of the most sought after teacher clinicians leaving the public service. This has led to a decline in teaching and research output. RWOPS (private practice) has aggravated the effects of the staff shortage.

Governance issues include a lack of appropriate agreements between stakeholders. There is an urgent need for appropriate joint management structures at national, provincial and local levels.

There was concern about the future of the Modernisation of Tertiary Services programme. If accepted this programme will have a major positive effect on the functions, funding, staffing and equipping of the Academic Tertiary Hospitals.

The Way Forward

There was consensus that the CMSA should convene task teams consisting of relevant stakeholders in order to develop strategic plans for Academic Tertiary Hospitals and in particular their role in specialist and subspecialist training. These groups should include representatives of the DoH, DoE, Treasury, CMSA, HPCSA and Deans.

Examples of possible task teams, their composition and functions are shown in Table1.

Table 1. Proposed Task Teams

Task Team	Members	Functions
Human Resources audit task teams	DoH, DoE, Treasury, Public Administration CMSA, HPCSA and Deans	Determine the number, type and geographic distribution of specialists and subspecialists in public and private sectors. Determine the number, type and geographic distribution of training posts for specialists and subspecialists. Determine the number staff and trainees required to meet the current and projected service, teaching and research needs of tertiary hospitals and national referral centres with reference to Government's HR and MT proposals and taking into account the need to achieve critical mass. Develop strategies for overcoming this shortfall.
Academic Hospitals task teams	DoH, DoE, Treasury, Public Administration, CMSA, HPCSA and Deans	Audit the teaching and academic service platform for specialist training with reference to in patient and outpatient services, specialist/subspecialist clinics, theatres, equipment etc required for training specialists and subspecialists.
Finance task teams		Determine the funding needs and funding streams for tertiary academic hospitals with particular attention to ensuring that the costs of tertiary care, teaching and research are met and ring fenced. In doing this the plant, equipment, running expense and staff costs should be based on estimates of patient numbers and their needs and should take into account the increased costs of teaching and research and the increased complexity of service provided by academic centres.
Research task teams	DoH, DoE, DST, Treasury, Public Administration CMSA, HPCSA, Deans, MRC, and NRF	Audit health science research examine need for research staff (including capacity development), infrastructure and funding .Developing policies to promote the research in academic teaching hospitals
Policy task teams	DoH, DoE, Treasury, Public Administration, CMSA, HPCSA and Deans	Develop a national framework for academic medicine Develop a national framework for joint agreements on governance and on the modus operandi between provincial departments of health, universities and services providers

It is proposed that task teams would have a single function and would report back to a forum to be held in 2008 and which would be attended where possible by the same delegates who attended the 2007 meeting. These task teams would represent the bottom up approach advocated by Nicholas Crisp.

Table 2. Proposed statutory management structures

Structure	Members	Function
National interdepartmental structure	Departments of Health, Education, Public Administration and Treasury Reporting to the National Health Council Committee for Academic Medicine and Hospital Services;	Involved in all decisions on academic medicine including the number and type of training posts, the number of teaching staff, the number of research staff etc. • Finalise the National framework for Academic Medicine • Finalise the national framework for joint agreements on governance and on the relationship of the national DoH, DoE the provincial DoH, and the Universities • Revise financing mechanisms for academic tertiary hospitals
Provincial structures	Provincial health department, Universities in the province; hospitals linked to the universities	Develop structures for applying policies developed by the National Structure
Bilateral structures,	Each university with provincial DoH	Develop structures for applying policies developed by the Provincial Structure
Facility level structures	Facility management and university faculty.	Develop structures for applying policies developed by the Bilateral Structure

At the same time the CMSA together with the HPCSA the Universities and SAMA should approach the DoH and DoE to set up the Governance structures advocated by Crisp (Table 2).

The proposals developed by the task teams and strengthened by the second CMSA Forum could then be forwarded to the appropriate Government structure, possibly the "National interdepartmental structure", which would have legislative ability as well as the capacity to implement policy.

In preparing this paper the authors had the opportunity to revisit the proceedings of the Forum. The most striking feature was the degree of consensus about the problems facing the Academic Tertiary Hospitals and Specialist Training. This consensus extended to the proposed solutions and how these might be pursued. All of the stakeholders urged the CMSA continue with the process. It is hoped that the CMSA will accept the challenge and will convene task teams necessary for the process to continue. The authors believe that the twin goals "of meeting the national needs for well trained specialists and providing excellent tertiary care" are both vital and achievable. The CMSA should continue to facilitate the process wherever possible in partnership with other stakeholders including all faculties of health sciences and appropriate government departments and structures.

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Pain management in Primary Care - current perspectives

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Abstract

According to a 1998 *World Health Organization Survey* of 26 000 primary care patients on five continents, 22% reported *persistent pain* over the past year. Part of the problem lies with some health-care providers who have failed to keep up with the advances in pain medicine and continue to follow the *biomedical approach,* which regards a specific pathway as the only source of pain. In this model, all pain is regarded as a warning signal of tissue injury, and if conservative treatment fails, some surgical technique will be able to correct the problem.

The modern paradigm of pain management has moved from this *biomedical* to the broader *biopsychosocial approach,* where pain mechanisms now integrate input from sensory, emotional and cognitive systems.

Introduction

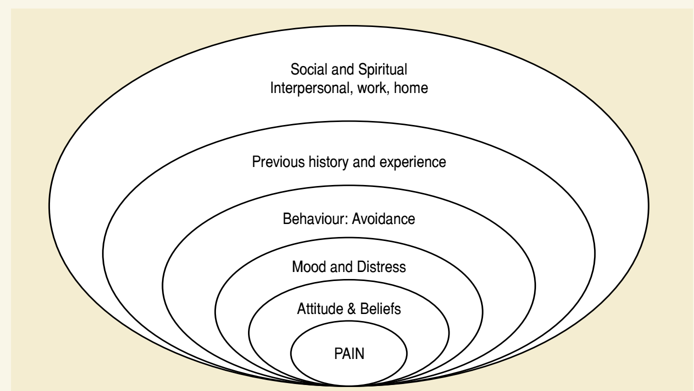
The *pain processing (nociception) system* was historically conceptualised as a *"hard-wired" pain pathway* which reproduces a pain sensation in direct proportion to the extent and severity of the painful (noxious) insult. However, this concept was challenged from the 1940s and the *gate-control theory* of pain mechanisms published by Melzack and Wall in 1965, had a profound influence in the field of pain research and in the development of various forms of pain therapy.[1] This theory integrates the views of neurophysiology and psychology and states that spinal transmission of pain impulses is continuously modulated by the relative activity in the small (*A-delta and C)* fibres and the large *(A-beta)* fibres and by *descending messages* from the brain that originate in the cerebral cortex and brainstem. In subsequent years the theory has been criticised as an over-simplification and a series of "gates" at different levels of the spinal cord and in the higher centres have been postulated.

The modern *discipline of pain management* was launched by the publication of the first edition of John F. Bonica's *Management of Pain* in 1953,[2] and he established the first *interdisciplinary pain clinic* in 1947 at the University of Washington in Seattle to treat the pain of war veterans.

Despite many advances over the past 50 years, poorly controlled pain remains a worldwide problem. According to a 1998 *World Health Organization Survey* of 26 000 primary care patients on five continents, 22% reported *persistent pain* over the past year.[3] Part of the problem lies with some health-care providers who have failed to keep up with the advances in pain medicine and continue to follow the *biomedical approach,* which regards a specific pathway as the only source of pain. In this model, all pain is regarded as a warning signal of tissue injury, and if conservative treatment fails, some surgical technique will be able to correct the problem.[4,5]

The modern paradigm of pain management has moved from this *biomedical* to the broader *biopsychosocial approach,* where pain mechanisms now integrate input from sensory, emotional and cognitive systems.[4,6,7]

Figure 1: Biopsychosocial model of pain[4,6,7]



The current *definition of pain* as proposed by the IASP, reads: *"Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage"*.[8] This definition identifies the complex and multidimensional experience of pain, where the patient's physical, cognitive, emotional and behavioural characteristics mediate the pain experience.[9]

With *acute pain* of known cause, there may only be a minor contribution from the emotional and cognitive dimensions – in patients with a *chronic pain* disorder for many years, these dimensions may play a major role in pain perception.[10]

A multitude of brain regions (known as the *"pain matrix"*) are activated following a pain stimulus. Rather than registering the pain signal to produce pain perception, the *brain matrix* constructs the pain experience by *integrating multiple inputs*, including biological (sensory) factors, present and past psychological events and socio-cultural influences.

Acute pain

Acute pain is a *normal biological response* to injury or tissue trauma and a signal of ongoing or impending tissue damage, e.g. post-operatively. It protects the organism from further injury and

promotes healing after injury. Acute pain is a symptom that must be treated or its cause eliminated.[11,12] Untreated acute pain may cause unnecessary suffering and increase morbidity. It may also lengthen the recovery time after tissue injury.

There is increasing recognition that *long-term changes* may occur within the peripheral and central nervous system following the noxious input of painful stimuli. Even brief intervals of *untreated acute pain* can induce long-term neuronal remodelling and central *sensitization ("plasticity")* and may lead to chronic pain in some patients. This *"plasticity" of the nervous system* then alters the body's response to further sensory input, it becomes more sensitive to pain impulses and even innocuous stimuli may then trigger pain perception.[1,11,12,13]

Central sensitization is a complex process involving many neurochemical and molecular processes, and is induced by the release of neuropeptides such as *substance P* and *glutamate*, which then activate the NMDA-receptor-complex.[2,13,14] The subsequent intracellular events may lead to long-term neuronal changes, characterized by a more sensitive nervous system and *hyperalgesia*.

Acute post-operative pain may be followed by persistent pain in 10-40% of individuals, in particular after procedures such as inguinal hernia repair, thoracotomy, and breast surgery.[15] *Central sensitization* after tissue and nerve injury is also believed to be a mechanism for this phenomenon. Current data therefore support a *comprehensive and multimodal approach* to post-operative pain management.[16] Pain intensity should be assessed routinely, just as one monitors other vital signs, to ensure that acute pain is managed appropriately.

Primary types of pain[11,12]

Nociceptive pain (e.g. trauma, surgery)

Nociceptive pain occurs when intact peripheral nerve endings *(nociceptors)* are stimulated by noxious stimuli that may be mechanical, thermal or chemical. Tissue damage generates release of peptides and other components of the inflammatory soup with eventual peripheral sensitization. Peripheral sensitization is one way in which the nociceptive system can be upregulated in response to tissue injury.

Neuropathic pain

While nociceptive pain is the result of stimulation of the nervous system, neuropathic pain is due to a *lesion in the peripheral or central nervous system*, e.g. in patients with diabetic or AIDS polyneuropathy and post-herpetic neuralgia.

Dysfunctional pain

There is a large group of chronic pain patients where no peripheral abnormality or neurological deficit can be detected. The mechanism of pain is *abnormal sensory processing* of non-painful stimuli once the central nervous system has become sensitized.[11,14,17] These include the *idiopathic pain disorders* such as irritable bowel syndrome, chronic headaches, post-whiplash disorders, fibromyalgia syndrome and others.[18]

Both neuropathic and dysfunctional pain may be present in the absence of an ongoing peripheral stimulus or "organic cause", and it is wrong to assume that these patients are only "psychological" or "hysterical".[11,17,18]

Mixed pain

These include patients with *cancer pain* and *low back pain* (in particular low back pain following surgery, or *failed back surgery syndrome*) where neuropathic, nociceptive and myofascial components may contribute to the patient's pain experience.

Chronic pain

The IASP has defined chronic pain as *"pain that persists for longer than the time expected for healing, or pain associated with progressive, non-malignant disease",* usually taken to be three months.[19]

Chronic pain often persists long after the tissue trauma that triggered its onset, has resolved and may be present in the absence of identified ongoing tissue damage.[20] Chronic pain is a dysfunctional response which mostly does not warn the individual of underlying disease or injury and has been widely acknowledged as a *"disease in its own right".*[21]

Chronic pain may be associated with an underlying chronic disease such as arthritis. However, the largest group of chronic pain patients in the current *epidemic in developed countries,* comprises the chronic pain syndromes of unknown etiology.[12] These pain syndromes have no confirmatory laboratory evidence and are diagnosed on the basis of clinical criteria, e.g. the headache syndromes, irritable bowel syndrome, fibromyalgia and non-specific (or "simple") low back pain.

The tendency to consider chronic pain as either psychological or physical, implies a false dichotomy – both play a role in most chronic pain disorders, although the balance between organic pathology and psychosocial contributions may differ in different pain disorders. The emotional component of pain is complex and is influenced by past experiences, patient-beliefs and fears.[22,23] Negative beliefs and an attitude of hopelessness may generate *maladaptive illness behaviour* with increased pain-reporting.[22]

Box 1: Management of chronic pain – biopsychosocial

1. Goals of management
2. Interdisciplinary approach
3. Effective communication
   - *Emphasize patient's active role*
4. Pharmacological
   - *Primary analgesics*
     Paracetamol
     NSAIDS / Coxibs
     Opioids
   - *Secondary analgesics*
     Antidepressants
     Anticonvulsants
     Local anaesthetics
5. Physical therapy / exercise / manipulation
6. Sleep quality
7. Behavioural therapy
8. Occupational therapy *(Return to work)*
9. Interventional methods

Pain assessment[24,25,26,27]

Pain is a subjective, complex and personal phenomenon and can only be assessed indirectly by *patient report*.

Methods used for *acute pain* screening are insufficient to provide a comprehensive view of the multidimensional impact of *chronic pain* on the patient. In a patient with chronic pain, assessment should not be limited to *pain severity*, but at least also include pain-related *functional interference* and the *emotional impact* of the pain.

Uni-dimensional pain scales assess *pain intensity* and include numerical rating, visual analogue scales (VAS) and picture scales (facial expressions).

Multidimensional pain scales assess the effect of pain on mood, activities and quality of life, and include the McGill Pain Questionnaire and the Brief Pain Inventory.

A full *clinical examination* may provide clues to the causes of pain and formal *psychological evaluation* is indicated in a subset of chronic pain patients to assess them for maladaptive pain behaviour, somatoform disorder, etc.

Management of chronic pain syndromes

The *biomedical approach* has traditionally promised a cure by cutting or blocking the pain pathways pharmacologically or surgically. The *biopsychosocial approach* views pain as a dynamic interaction between physical, psychological and social factors, and more realistic *treatment goals* for patients include[28]:

- The reduction, mostly not elimination, of pain
- Improvement in physical / social functioning
- Improvement in mood and associated symptoms such as sleeping pattern
- Development of active coping style and self-management-skills
- A return to work
- Reduction in utilization of medical services

Evidence increasingly lends support to the use of an ***interdisciplinary approach*** where multiple therapies are provided in a *co-ordinated* manner, and where there is *active interaction* and a *common philosophy* that promotes *active patient involvement*, between participants.[28,29]

It is recommended that a *core-team* is involved in the *primary care management* of chronic pain patients. Its composition will differ from area to area, also depending on the availability of resources and the complexity of a patient's pain problem. A *core-team* may consist of a *pain management physician* (mostly a *primary care doctor* with a special interest in pain management) a *physiotherapist* and *occupational therapist*. Additional members of an *interdisciplinary team* in larger metropolitan areas may include, but are not limited to, an anaesthetist with interventional skills, a neurologist, an orthopaedic surgeon, a psychiatrist / psychologist, and a biokinetesist.

The roles of team members may also overlap and the *physiotherapist* may also be responsible for education, an exercise programme and to assist in applying the principles of *cognitive behavioural therapy*.[28]

It has been demonstrated that *interdisciplinary management*, which emphasizes *functional restoration* produces the best outcomes in the management of chronic pain patients.[30]

Education

It is important to *validate* the patient's pain complaint and to *explain* that factors that have initiated the pain problem are often different from those that maintain it. Fear-avoidance and catastrophyzing may intensify the pain-experience.

The patient should be informed about the goals of the treatment programme and certain *chronic pain myths* should be dispelled, including:[31]

- Search long enough and you will find the cause and the cure
- Abnormal scans validate and explain your pain
- Only organic pain is real
- You have to learn to live with it
- Let pain be your guide – rest when it hurts
- Hurt is equal to harm.

The outcome of pain management is often determined by what the doctor, therapist and patient expect.[31]

Physiotherapy, exercise and occupational therapy

The role of the *physiotherapist* is broad and includes education on pain mechanisms and self-management, goal-setting and a graded activity programme, pacing and helping patients to acquire problem-solving skills.[32]

An important element in physical rehabilitation involves improvement in function through *therapeutic exercises* designed individually to increase functional activity.

Passive manual methods are de-emphasized in modern physiotherapy and should be integrated in a more active and comprehensive programme. *Physiotherapists* who are too somatically focussed, e.g. on the *"degenerated disc"* may reinforce illness behaviour and perpetuate the problem.[32]

The physiotherapist should be informed on the cognitive and behavioural components of pain presentation and assist in addressing inappropriate pain-behaviour.

Occupational therapists work closely with physiotherapists in activity planning and in assessing domestic and workplace circumstances.[32] Return to work, even in the presence of some degree of pain, is an important component of chronic pain management.

Principles of pharmacological therapy[33,34,35]

- The goal of pharmacotherapy should be to improve *pain intensity and functioning* while avoiding cognitive impairment and organ toxicity.
- Many patients don't present with pure nociceptive or neuropathic pain, but rather have a *mixed pain syndrome,* therefore *rational polypharmacy* is often appropriate.
- The World Health Organization (WHO) *analgesic three-step ladder* for the rational use of analgesics in cancer pain, has also been applied for *non-cancer pain* for many years, in particular for nociceptive pain.
- There is a move away from this *empirical approach* in chronic pain pharmacotherapy, to an approach that is targeted at the particular *pain mechanism* responsible for the patient's pain (e.g. drugs that influence central sensitization).[11]
- For *continuous analgesia* consider long-acting medication on a regular basis, rather than *"as needed"*.
- Analgesics are generally more effective for *nociceptive pain*, and less effective for *neuropathic pain*.

Non-opioid analgesics

Paracetamol is still recommended as first-line therapy for osteoarthritis.[36]

Non-steroidal anti-inflammatory drugs (NSAIDs) may be combined with paracetamol or opioids. Common side-effects include GI irritation / peptic ulceration and inhibition of platelet aggregation. *COX-2 specific agents* (e.g. *celecoxib and prexige*) reduce these risks, but are also *(similarly to older NSAIDs)* associated with renal dysfunction and potential cardiovascular side-effects, in particular in *older patients* on *long-term medication.*

Opioid analgesics

Weak opioids

Codeine phosphate is a very weak analgesic and has almost no analgesic effect by itself. Its role in chronic pain management is very limited *(if any).*[35]

The long-term use of *polycomponent codeine combinations* (containing caffeine, meprobamate and others) is strongly discouraged in chronic pain. Their potential for nephro-toxicity is greater and they are often associated with rebound pain.

Tramadol is an opioid of moderate strength and also inhibits nor-adrenaline and serotonin re-uptake from nerve endings. A number of studies have demonstrated the efficacy of *tramadol* in chronic pain conditions such as neuropathic pain, osteoarthritis, fibromyalgia and low back pain. It has a proven *synergy* with paracetamol, is not associated with peptic ulceration, renal dysfunction or cardiovascular side-effects and has a very low addictive potential.[35,36]

Strong opioids[37,38,39]

Current evidence supports the use of strong opioids in a *carefully selected* subset of patients with *chronic and resistant non-cancer pain*.

A detailed assessment should be performed by an experienced *pain management physician* before strong opioids are prescribed. Strong opioid treatment for chronic pain should not be considered life-long treatment and only *sustained – release opioids*, e.g. *transdermal fentanyl* and *sustained release oral morphine,* should be used.

Adjuvant drugs[28,33,40]

Neuropathic pain is mostly treated with medications that influence neurotransmitters, e.g. *antidepressants* and *anti-epileptic* drugs. *Opioids* are mostly reserved for patients with refractory neuropathic pain.

Antidepressants

- *Tricyclic antidepressants (e.g. amitriptyline)* are effective for neuropathic and non-neuropathic pain and the analgesic effect occurs at lower doses than the antidepressant effect. These drugs are associated with bothersome anti-cholinergic side-effects and serious cardiovascular side-effects in older patients with established heart-disease.
- *Selective serotonin re-uptake inhibitors (SSRIs)* are predominantly serotonergic drugs and are mostly *ineffective* in treating chronic pain.
- *Serotonin and norepinephrine re-uptake inhibitors (SNRIs), e.g. duloxetine* have proven efficacy in some patients with neuropathic pain and fibromyalgia (even in the absence of major depressive disorder).

Anti-epileptic drugs

Anti-epileptic drugs act at several sites that are relevant to pain perception and are believed to enhance central inhibition and limit neuronal excitation.

Of the *first generation agents, carbamazepine* is indicated for trigeminal neuralgia. It has limited efficacy in patients with diabetic neuropathy and post-herpetic neuralgia and is associated with many side-effects and toxicity.

Second generation antiepileptic drugs are better tolerated and have much fewer central nervous system side-effects, e.g. *gabapentin and pregabalin*. Pregabalin inhibits discharges from injured nerves by inhibiting calcium-channels pre-synaptically. It has a better bio-availability than gabapentin and effectivity has been proven in several trials in patients with diabetic neuropathy and post-herpetic neuralgia, as well as in fibromyalgia patients. *(It is approved as such by the US Food and Drug Administration.)*[11]

Principles of behavioural therapy[22,28,31,41,42]

Several behavioural approaches may lead to long-term reduction in pain intensity and improvement in physical and social functioning. In some chronic pain patients, the *patient's belief* about the pain and its effects is a better predictor of suffering and disability than the actual disease process and / or tissue damage.

Cognitive therapy aims to help patients identify maladaptive thinking patterns and develop the ability to challenge these thoughts. Errors of thinking include:

- I will never get better
- There is nothing I can do
- I am afraid to move
- The situation is hopeless because the pain is incurable

Engaging in pleasurable, stimulating and distracting activities are powerful means to limit disability.

Primary objectives in a programme of cognitive behavioural therapy include:

- Change view of pain from overwhelming to manageable
- Change from passive and helpless to active and competent
- Be aware of the association between negative thoughts and maladaptive pain behaviour
- Teach specific coping skills

Interventions[28,33,43]

Less invasive methods

- *Myofascial trigger point therapy* may provide pain relief and facilitate patient participation in active physical therapy, if it is correctly performed in selected patients with *myofascial pain syndrome,*[44,45] as part of a comprehensive pain management programme.
- *Nerve block therapy* may be useful to allow patients to participate in active rehabilitation. *Sympathetic nerve blocks* may be useful in some visceral pain states and in some patients with sympathetically maintained pains.[28,43]
- *Epidural steroid injections* may provide temporary pain relief in patients with radicular low back pain.
- *Pulsed radiofrequency* is a non-destructive procedure that may relieve chronic neuropathic pain in selected patients – however, more evidence is needed before official recommendation for this procedure in guidelines will be appropriate.[45]

More invasive methods

- These include *surgical procedures* such as *microvascular decompression* for trigeminal neuralgia and *joint-replacement surgery* for severe osteoarthritis. *Spinal surgery* should be reserved for patients who are strictly selected by an interdisciplinary team. Neurosurgical procedures include *micro-DREZotomy* for patients with intractable pain after plexus brachialis avulsion injuries.
- *Spinal cord stimulation* has evolved as a reversible, non-destructive and low-morbidity technique for chronic intractable pain associated with ischaemia and certain refractory neuropathic pain syndromes. It is however an expensive option.

- *Epidural* and *intrathecal drug delivery systems* have been used successfully over many years in a carefully selected group of patients with intractable pain when other therapies have failed.

Summary

The last 20 years have seen an explosion of both basic science and clinical research in the field of pain medicine. It is now clear that factors other than the injuring stimulus influence pain perception and that untreated acute pain as well as many psycho-social factors may contribute to the neuroplasticity *("central sensitization")* that may occur in response to an initial pain stimulus and lead to chronic pain.

Once *central sensitization* has taken place, relatively innocuous stimuli may activate pain perception *(hyperalgesia).* This has lead to the recognition of pain as the *"fifth vital sign"*, which should be monitored with the same vigilance as blood pressure, temperature, pulse and respiratory rate, e.g. in the management of patients after surgical or other forms of trauma.

Although John F Bonica brought recognition to the *multi-disciplinary approach* to pain management, the publication in 1965 of the *"gate control theory"* by Melzack and Wall revolutionized the concept of pain and pain management. The recognition of chronic pain not only as a symptom, but as a *disease itself,* has been a major conceptual change. This has meant a shift in the management of chronic pain to the *multi-(inter-)disciplinary biopsychosocial approach* where there is communication between team members and an emphasis on active patient-participation and functional improvement.

This approach includes *educational interventions* as well as *cognitive behavioural* approaches and supervised *exercise therapy*. Appropriate *pharmacological treatment* must be evidence-based and outcomes must include improvement in the patient's ability to function, not only pain-relief. *Invasive therapy* should be conservatively selected after comprehensive assessment and an appropriate period of comprehensive conservative management.

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Antenatal prevention of mother to child transmission of HIV

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Abstract

An effective perinatal mother to child transmission (PMTCT) programme will reduce perinatal acquired HIV infections. This goal is within reach of the South African public health sector. Early antenatal attendance and knowledge of HIV status allows sufficient time to implement highly active antiretroviral therapy (HAART) or ART intervention. Both measures have been proved to be efficient to reduce MTCT of HIV. A transmission rate of 2% can be achieved with a dual therapy regimen in non-breastfeeding women. Mono therapy with single dose nevirapine (sd NVP) often fails due to the once off nature of the intervention as opposed to ample opportunity to administer zudovudine (AZT) antenatally with dual therapy. A higher CD_4 threshold to initiate HAART increases the window of opportunity while women are reasonably healthy. Irrespective of the maternal disease the newborn babies receive the same ART regimen. Women requiring HAART following pregnancy with an interval of 6 months or longer since NVP exposure had the same virological response as compared to NVP naïve women. Dual or mono therapy for a second time will be as effective as with NVP naïve women. The present day routine use of ART will reduce the risk of obstetric interventions.

HIV positive children

During 2005 the global prevalence of HIV among children (less than 15 years) was 2.3 million; of these 1.8 million (80%) were in Sub-Saharan Africa. In 2006 there were 580,000 children newly infected and 370,000 children died due to HIV. The vast majority of children acquired HIV through vertical transmission from mother to child.[1]

During 2006 the sero-positive HIV prevalence amongst women attending antenatal clinics in the public health sector within South Africa was 29.1%.[2] The province with the lowest prevalence was the Western Cape (15.2%) and the highest prevalence occurred in KwaZulu Natal (39.1%). During 2006 the National Department of Health estimated that in South Africa only 47% of pregnant women in the public health sector were tested for HIV with an estimated range between the 9 provinces a mere 24 to close to 100%.[3]

The third South African AIDS Conference

At the third South African AIDS Conference it was clear that huge progress had been made towards increasing awareness of HIV/AIDS among the public at large,[4] in that there is agreement amongst public, private and non-governmental organisations representing all walks of life, about the disease and, in general, what measures are required to combat the pandemic. Huge progress has also been made in treating AIDS by commencing highly active antiretroviral therapy (HAART) when required for stages 3 and 4 disease. The number of people on HAART within the public health sector is ever increasing. The 230,000 people on HAART are globally the largest programme.

However, the number of new infections is increasing. The horizontally acquired infection is difficult to curtail. The strong driving forces of sexual behaviour do require a comprehensive approach. This will have to include every organisation and group, with health care workers being one of the many role players involved.

During 2006 only 14.6% of HIV positive mothers within the public health sector in South Africa received some form of antiretroviral therapy (ART) to prevent perinatal mother to child transmission (PMTCT) during labour, delivery and the postpartum period. An effective PMTCT programme will impact hugely on the number of perinatal acquired HIV infections. This is a goal within reach of the South African public health sector. Key Priority Area 1 (Prevention) number 3.2 of the HIV/AIDS and STI National Strategic Plan for 2007 to 2011 compiled by the South African National AIDS Council (SANAC) states[5]: Scale up coverage and improve quality of PMTCT to reduce MTCT to less than 5%.

Perinatal mother to child transmission of HIV

Without any intervention the vertical HIV transmission from mother to child will be 14 to 50%. The transmission rate can be vastly reduced by an effective PMTCT programme. An effective PMTCT is a most worthwhile and cost effective intervention and must receive high priority in Sub-Saharan Africa. The programme should begin with pre-pregnancy counselling and voluntary testing for HIV. Knowledge of HIV status prior to pregnancy allows a large widow of opportunity during which HIV positive women requiring HAART could commence treatment. This measure will improve their health and immunity and reduce their viral loads to undetectable levels. Women not requiring HAART will commence with ART during the antenatal period. HIV discordant couples should be referred to infertility clinics for artificial insemination.

Presently, pre-pregnancy counselling is an ideal not within our short and medium term grasp. Therefore the antenatal period remains the most important time for universal counselling and voluntary testing for HIV. All women must be encouraged to have early confirmation of pregnancy. With pregnancy confirmed, health care providers must continue straight away with the first antenatal or booking visit. Women attending antenatal care from early in pregnancy tend to have the least pregnancy complications. Gestational age is established accurately with ultrasound, medical problems and pregnancy complications are detected early and appropriate measures can be instituted timeously. In

addition, early antenatal attendance and knowledge of HIV status also allows women and health care providers a sufficient time window to implement HAART or for ART intervention. Both measures have been proved to be highly efficient in reducing MTCT of HIV.[1]

AN EFFECTIVE PMTCT PROGRAMME CONSISTS OF:

Measures taken during the first antenatal visit

Counsel all antenatal women about HIV and the PMTCT programme. This must be done individually in a room where privacy is assured. Thereafter each woman choosing to take part in the programme must receive individual pre-test counselling. Written consent must be obtained from women who want to be tested for HIV.

A rapid HIV test can be performed with one of the many reliable rapid tests presently available (Determine®, Oraquick®, First Response®, etc). A negative result indicates that the patient is HIV negative and post test counselling will focus on safe sexual practices in order to remain negative. A second test 6 weeks later is advisable if a woman is considered to be at risk of being in the window period, due to recent sero-conversion.

If the rapid test is positive, the patient is informed thereof and the importance of a second test explained. In circumstances where a laboratory is available to provide the result of an ELISA test within 2 hours, this is the preferred test. However, if this is not possible the confirmatory test can be done with a rapid test from another manufacturer. If this test is also positive, the HIV status is regarded as positive and post-test counselling is performed. The result is then noted on the antenatal record.

Patients that are found to be HIV positive must have a CD_4 lymphocyte count performed. This can be done on the same blood specimen sent for RPR testing, blood group and haemoglobin determination at National Health Laboratory Services (NHLS) laboratories.

The first antenatal visit includes taking a thorough history. The medical history taken from women that tested HIV positive must include questions aimed at an initial decision regarding the World Health Organisation (WHO) stage of the disease:

- persistent painful lymph nodes
- weight loss
- skin rashes and a chronic itchy skin
- recurrent sinusitis
- fever and rigors extending over a period of more than four weeks
- painful or difficult swallowing
- chronic coughing for more than two weeks
- TB treatment within the past year
- severe headache

A thorough clinical examination is also part of the first antenatal visit. Women that tested HIV positive must be carefully examined for:

- enlarged lymph nodes of more than 2 cm
- skin rashes
- signs of weight loss
- oral ulcers and oral or pharyngeal thrush
- abnormal physical finding of the respiratory system

If the history and physical examination indicates WHO stage 3 or 4 disease, the patient must be referred to an antiretroviral (ARV) or infectious diseases clinic for assessment and further management. Waiting for the CD_4 result will cause an unnecessary delay with potentially disastrous consequences. Early adherence counselling and commencement with HAART will be life saving.

The second antenatal visit and subsequent management

The second visit is usually 2 weeks later. At this visit the result of the CD_4 count is checked. A second assessment is required to finally stage the patient according to the WHO clinical staging. In addition, counselling regarding infant feeding options is given. The CD_4 count must be noted on the antenatal record. Subsequent management is as follows:

CD_4 count 250 cells/mm^3 or more and WHO stage one or two

These patients have a reasonably intact immune system and are generally healthy. They should receive **dual therapy**:

- Oral zidovudine (AZT) 300 mg twice daily from 28 weeks and 300 mg 3 hourly during labour
- Oral nevirapine (NVP) 200 mg to be administered once labour is confirmed

Laboratory haemoglobin (Hb) at 26 weeks is done if a recent laboratory Hb is not available. The ward Hb needs to be repeated 2 weeks following commencement of AZT and then with 4 weekly intervals. An Hb concentration of less that 8g% is a contra-indication for the use of AZT. HIV positive women with low Hb concentrations and a normochromic normocytic anaemia need NOT be investigated for micronutrient deficiency. The anaemia invariably will be caused by the viral infection. Often the anaemia will also be due to iron deficiency. These women will have a hypochromic microcytic anaemia. "Double iron" therapy (2 ferrosulphate tablets 3 times a day) and folic acid 5 mg per day will result in a rise in the Hb concentration, allowing AZT to be commenced.

A transmission rate of 2% can be achieved with this regimen in non-breastfeeding women[6]. A transmission rate of 1.9% was achieved in Thailand irrespective of the obstetric management. This regimen will greatly improve the estimated 6 to 8% transmission rate presently achieved with a dual therapy protocol that commences with AZT at 34 weeks.

CD_4 count less than 250 cells/mm^3 and WHO stage three or four

These patients do not have an intact immune system and need to be carefully evaluated for opportunistic infections. They will receive:

- Co-trimoxazole two tablets per day.
- HAART if the gestational age is more than 12 weeks and less than 34 weeks.
  - When <12 weeks with a CD_4 count less than 50 cells/mm^3 or severe HIV illness, commence HAART as soon as treatment ready.
  - When $\geq$34 weeks dual therapy is provided as it will not be possible to assess treatment readiness and initiate HAART prior to delivery. However, if the CD_4 count is less than 50 cells/mm^3 or with severe HIV illness, commence HAART as soon as treatment ready.

The guidelines provided by the National and Provincial Departments of Health in South Africa recommend a CD_4 count of 200 cells/mm^3 or more for either single dose NVP or dual therapy with NVP and AZT as recommended above.[7,8] A higher CD_4

threshold increases the window of opportunity to initiate HAART while the patient is reasonably healthy. In addition, the problem of NVP resistance will be solved, as the interval between delivery and the need for HAART will be 6 months or more in most cases as explained later.[9] The use of NVP as part of HAART will not be associated with hepatitis as this complication has only been described in cases with a CD_4 count of above 250 cells/mm.[3,10]

HAART during pregnancy

Treatment readiness must be assessed. Pre-treatment counselling includes:

- Ensuring a clear understanding of the disease progression and benefit of AVR drugs. Pamphlets are of great help.
- Stressing the importance of adherence (compliance).
- Encouraging disclosure of status to a treatment support person and sexual partner.
- Encouraging participation in a support group.

Baseline full blood count with a differential white cell count and alanine aminotransferase (ALT) is done. Patients with AIDS will often be anaemic and AZT and 3TC can cause anaemia. NVP can cause hepatitis.

To assess compliance patients are supplied with 7 days of co-trimoxazole 2 tablets per day (the packet must to be brought back at the next visit) and an appointment is given one week later.

HAART is initiated 1 week later if patients kept their appointments, complied with co-trimoxazole therapy, disclosed their status at least to support persons and whose baseline blood results are normal. This indicates treatment readiness. Further pre-treatment counselling includes:

- Drug specific side effects (nausea and diarrhoea occur commonly)
- Re-emphasise adherence
- Drug dosing specifics

HAART is then initiated:

- Stavudine (d4T) 40 mg (30 mg if weight less than 60 Kg) every 12 hours
- Lamivudine (3TC) 150 mg every 12 hours
- NVP 200 mg per day for 2 weeks

After 2 weeks the ALT is determined and if it is not elevated, NVP is increased to 200 mg every 12 hours. The ALT levels must be checked every 4 weeks.

Women on HAART stay on the twice a day regimen throughout pregnancy, labour and delivery. These women will have non-detectable or very low viral loads that depend on adherence. The PMTCT of HIV will be very low.

Important side effects of ARV that require discussion with an ARV specialist:

- NVP – a skin rash and hepatitis
- d4T – peripheral neuropathy, lactic acidosis and lipo-atrophy
- AZT – bone marrow suppression (anaemia, neutropenia), myopathy and lactic acidosis
- 3TC – diarrhoea, pancreatitis and anaemia

Neonatal antiretroviral therapy

Irrespective of the maternal disease, the newborn babies receive the same ART regimen:

- NVP syrup more than 4 hours post delivery and more than one hours prior to discharge. NVP must be given within 72 hours postpartum. The dose with a birth weight equal or more than 2 Kg is 0.6 ml and with a weight less than 2 Kg 0.2 ml per Kg.

If maternal NVP was taken less than 2 hours before delivery, NVP must be administered to the neonate within 60 minutes of delivery and AZT following the first feed.

- AZT syrup with the first dose of NVP and thereafter 12 hourly for 7 days. The dose with a weight equal or more than 2 Kg is 1.2 ml and if the weight is less than 2 Kg 0.4 ml per Kg 12 hourly.

The mother must feed the infant according to the decision reached following counselling during the antenatal period. The choice of the mother must be respected and reinforced to prevent mixed feeding.

Logic behind dual therapy

Mono therapy with sd NVP often fails due to the once off nature of the intervention as opposed to ample opportunity to administer AZT antenatally. In addition:

- 20% of transmission occurs antenatally, that is not addressed with sd NVP.
- The viral load is reduced at time of onset of labour, contributing to a lower intrapartum transmission rate and reducing the risk of NVP resistance.

Safety of ART during pregnancy

Efavirenz (EFV) presently is the only ARV drug known to be teratogenic and causes neural tube defects if used during the first trimester of pregnancy. This drug is one of the first line HAART drugs. Women on this drug must use reliable contraception. Women desiring to fall pregnant must have the EFV replaced with NVP. If on EFV and found to be pregnant, women less than 14 weeks must be changed to NVP. However, with a gestational age of 14 weeks or beyond, EFV can be continued. All women exposed to EFV during the first trimester must have a detail ultra-sound scan between 18 and 22 weeks of pregnancy to rule out neural tube defects.

The problem of NVP resistance

A single gene mutation of HIV is required to develop resistance against NVP. This is a problem of mono therapy with NVP. In the HIVNET 012 study in Uganda (subtype A and D HIV) with single dose (sd) NVP, 25% of women had resistant strains at 4 to 6 weeks postpartum.[11] However, all viruses reverted back to the wild type by 12 months. In the SAINT study in South Africa (sub-type C HIV) where the women received two doses of NVP, 67% of women had resistant strains at 4 to 6 weeks postpartum. By 12 months 20% of women remained with resistant strains.[12] Only sd NVP must be used with mono or dual NVP based regimens. The long half-life (60 hours) of NVP is an ideal property that obviates the administration of a second dose of NVP if inadvertently given to a woman in false labour. Measurable levels of NVP can be found in the serum of women 21 days following sd NVP.[13]

The relevant question is whether women requiring non neocleoside reverse transcriptase inhibitor (EFV) based HAART following sd NVP exposure are at a disadvantage? Jourdain *et al* compared NVP naïve and previous sd NVP exposed women and found that the clinical and immunological responses did not differ.[9] However, the virologic response of women with sd NVP exposure was significantly less likely to maximally suppress after 6 months on HAART (RNA viral load less than 50 copies per ml) than those without exposure (68% vs 38%).This is a cause of concern.

However, if this group was divided in groups with intervals shorter than 6 months and 6 months or longer since sd NVP exposure, the virological response in the NVP exposed group did not differ from the NVP naïve group.

Women requiring PMTCT for a second time

Due to the national antenatal HIV prevalence of more than 20% since 1998, it is common to have women pregnant for a second time.[2] The question then arises about the effectiveness of sd NVP to prevent transmission a second time. This is a pertinent question taking into account the problem of NVP resistance following sd NVP exposure. A prospective cohort study in Uganda provided valuable insight about the effectiveness of single dose NVP with a second pregnancy.[14] In the sd NVP naïve group, the HIV transmission rate was 17.5% and in the previous sd NVP exposed group 18.4% (p=0.92). In women who do not require HAART, sd NVP can be used with confidence as a component of dual or mono therapy for PMTCT. Women on HAART with a second pregnancy require routine follow-up with viral load estimation to assess the efficiency of their treatment.

Obstetric interventions that may influence PMTCT

The knowledge of the transmission risks of obstetric interventions mostly dates back to the era prior to the routine use of ART during pregnancy.[15] The present day routine use of ART will reduce the risk of interventions as illustrated by a transmission rate of 1.9% that was achieved in a non-breastfeeding study population in Thailand with dual therapy irrespective of the obstetric management.[6]

Amniocentesis

Presently this procedure is performed under ultrasound guidance with a thin needle containing a stilet. Avoid inserting the needle through the placenta.[16] The risk of transmission could be lower than with a needle stick injury. If the woman is on HAART with a non detectable viral load, the risk will be very small.[17] As amniocentesis will be performed early in the second trimester, women that will be using dual therapy should be covered with AZT and 3TC for 28 days. However, the procedure should only be performed if there is a definite indication that outweighs possible risks.

External cephalic version (ECV)

The knowledge that a foetal-maternal bleed could occur in 2 to 3% of cases during external ECV done on Rhesus negative women, does raise concern regarding transmission with ECV performed on HIV positive women. However, the pressure gradient across the placental barrier does favour a foetal-maternal bleed.[18] Therefore, knowledge gained from Rhesus negative women cannot be extrapolated to HIV transmission. Until more knowledge is available, ECV for HIV positive women should be limited to women who may not have medical care readily available when labour commences.

Rupture of membranes during labour

The transmission rates are increased with ruptured membranes and the risk increases the longer labour continues with ruptured membranes. If the duration of ruptured membranes continues beyond four hours, the risk of transmission increases significantly.[19] When transferring the progress of labour of HIV positive women with intact membranes from the latent phase of labour to the active phase on the partogram, their membranes must not be ruptured. However, progress of labour must be reassessed after two hours and if normal the membranes must be kept intact. If progress is slow, the membranes could be ruptured and progress again assessed after two hours. This measure will allow timeous delivery within the first four hours of ruptured membranes.

Intrapartum interventions

Transmission rates were reported to be higher with forceps and vacuum deliveries as well as when episiotomies were preformed.[15] However, when ARV's are used, the risk will be reduced. If a policy of vaginal deliveries for HIV positive women is followed, these procedures could be preformed when indicated, with a provision that a more conservative approach should always be favoured.

Caesarean sections (CS)

Elective CS sections have been reported to reduce transmission by more than 50%.[20] The most recent meta-analysis resulted in an even more pronounced beneficial effect. Women enrolled between 34 and 36 weeks that were delivered by elective caesarean section before labour and rupture of membranes, had a 66% reduction (odds ratio 0.34 and 95% CI 0.14 – 0.8) in transmission rates.[21] This information raised the question as to whether transmission rates of women on HAART with a non-detectable viral load delivered by elective CS may be less than following vaginal birth.

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Quality Assurance II: A practical application to educate and train future specialists

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Introduction

How can educational instruction be made more effective? One of the emerging philosophies of management is that of total quality management (TQM). TQM has received wide acclaim as an effective approach for achieving quality and performance enhancements mainly in industry. With its recognition and acceptance increasing by the day in the private sector, academic institutions have started to explore the potential for applying the TQM philosophy to education.

This non-paper provides a practical outline on how educators/ supervisors, at any level, can draw from the TQM philosophy and apply its fundamental elements effectively to teaching/directing/ providing guidance in ways that facilitate specialist candidate motivation, involvement, effort, learning, performance, and, most of all, their ability to contribute to specialty practice. It aims to accomplish this by:

1. drawing attention to the stakes involved in specialist education and its administration;
2. addressing what the role of educators/supervisors should be;
3. establishing parallels between TQM as it applies to business on the one hand and to education and training on the other;
4. defining TQM in the instructional context;
5. identifying essential building blocks or attributes for TQM-oriented education and training;
6. actually applying these attributes to teaching to the post-graduate level; and
7. establishing for educators/supervisors/mentors and educational administrators what TQM can do for them by analysing data obtained from feedback from candidate specialists on 'course' evaluations and on educationally directed questionnaires.

Role of the educator/supervisor

The educators/supervisors bear the responsibility of shaping the candidate specialists' learning and, through them, the potential of the human resource as it contributes to the results desired in the clinical management of patients. It is they who, in numerous ways, provide leadership in education and training. As there are transformational leaders in business, there can be transformational teachers in education who can accomplish more than what is customarily expected of them and contained in their job descriptions. Today, it is imperative for educators/supervisors to do more than just convey information and impart knowledge. They must, among other things, be able to mobilize resources, mould their candidate specialists, motivate them, and instil in them the commitment to a worthy cause.

In going beyond just conveying information to their candidate specialists, educators/supervisors must ensure that they also recognize and wholeheartedly accept that which is taught, so as to facilitate its actual transfer to practice. Unless such transfer to actual practice is accomplished, the potential of our human resource to make a more meaningful contribution may remain untapped.

An educator/supervisor committed to the philosophy of TQM can, with a sincere effort, get candidate specialists to really care about what is taught. It is only when candidate specialists truly care that they later actually applying their learning in ways that enhance their performance and, simultaneously, their ability to give effect to successful clinical management of patients. A TQM-oriented approach to teaching can serve as a powerful model for enhancing candidate specialist learning and in helping bring out the best in them as well as the educator/supervisor.

Defining TQM in a teaching/learning setting

The following descriptions serve to communicate the essence of the TQM philosophy as it applies to the teaching/learning context. The driving force behind total quality management is a relentless daily hunt for opportunities to improve quality and productivity in the learning environment. The concept of total quality improvement means getting every person in a clinical unit to evaluate continually and aggressively how every responsibility, every system, and the clinical management of patients can be improved. TQM is based on the participation of all members of an organization in improving processes, procedures, services, and the culture in which they work. And finally, TQM is a way of managing the patient that must be instigated by the clinical unit's top management and flow as a way of life throughout the unit, to focus on the patient and to strive to improve the clinical management, practitioner performance etc. continually, to ensure favourable clinical outcomes for patients and practitioners.

Key elements of the TQM philosophy as contained in the above definitions are:
1. a relentless hunt for ways to improve quality;
2. involvement of all practitioners/specialists;
3. clinical managerial leadership;
4. caring culture; and
5. patient focus.

These apply just as much to the teaching context as they do to clinical responsibilities. The following definitions guide the TQM-oriented teaching effort in a teacher/learning-focused setting:

- TQM in a teaching/learning setting is a philosophy and a set of guiding principles and practices the educator/supervisor applies to teaching that represent the foundation for continuous learning and improvement on the part of the candidate practitioner and the educator/supervisor. It is the application of procedures related to instruction that improve the quality of education and training provided to the candidate specialist and the degree to which the needs of the candidate specialist and their educator/supervisor are met, now and in the future.
- TQM in a teaching/learning setting is a process that involves

the educator/supervisor's adopting a total quality approach to teaching (i.e. attempting to improve the quality of instruction and, in the process, the candidate specialists' meaningful learning in every possible way) so that the needs of the candidate specialist and those of their educator/supervisor are best served. It is the never-ending pursuit of continuous improvement in the quality of education and training provided.

Methodology

The framework presented and the many specific practices outlined illustrate ways in which some fundamental TQM concepts can be applied to education and training.

The Instructional Context

This is the area of application of the competencies that are acquired by the candidate specialist during the education and training program. It must be unambiguously defined, including the full extent of the competencies to be acquired, and to what end they would be applied. This is in short the total area of specialisation as would be defined by the HPSCA.

The Candidate Specialist evaluations

This entails administering the evaluation of the educator/supervisor and learning opportunity for each learning event or groups of events in the program, preferably using a proforma questionnaire. The form included specific criteria/items that for which responses are registered ranging from 'very low rating = 1' to 'very high rating = 5.' Space should also be provided for additional comments.

The Education survey

This survey is conducted in an attempt to gauge candidate specialist perception of the TQM-driven instructional approach and to obtain feedback on the specific attributes constituting the approach. It's usually done at the block/semester's end. On this survey the candidate specialist is asked to rate the educator/supervisor on the "kind of example" that s/he set for them on a number of issues using a scale ranging from 'very bad example = –3' to 'very good example = +3'.

Performance measures

An important element of total quality management is to base decisions on data and performance measures. Therefore, rather than simply describing the instructional approach, wherever possible, the feedback from candidate specialists in the form of numerical ratings of performance on the evaluations and the educational survey should be provided. A hidden agenda behind the presentation of this instructional approach is the hope that educators/supervisors will adopt elements of the TQM philosophy and also use the framework as one possible benchmark to convey quality education and training for benchmarking is an essential element of a TQM process of improvement.

Building blocks of the TQM-oriented approach

The various elements of the instructional approach are provided and proposed as a set of guidelines for possible implementation. It presents some specific practices of the educator/supervisor in using this approach. Further, using candidate specialist feedback obtained through the program evaluations and the educational survey, it attempts simultaneously to illustrate the effectiveness of a TQM-oriented approach to educating and training.

Communicate your teaching philosophy up-front

The course syllabus/curriculum is used as a vehicle to communicate to candidate specialists the educator's/supervisor's TQM-oriented teaching philosophy ab initio. In going beyond the more typical "course objective", a "teaching objective" is also included in the curriculum/syllabus of every course. A clearly stated teaching objective serves as a first step in creating a climate conducive to learning, involvement, and commitment on the part of candidate specialists as well as the educator/supervisor. It sets the stage by defining their respective roles, with the ultimate goal of the instructional approach – that candidate specialists 'grow from the overall learning experience" and "…adopt and operationalize that which is taught'. Moreover, the concepts of team work (which also includes the educator/s as a team member), participation, and the desire to make a real difference through sincere commitment are all communicated and impressed on the candidate specialist through the teaching objective. These concepts constitute the essence of the TQM philosophy in general.

The following examples illustrate the above:

- To make the program a real learning experience, it is extremely important for all to be sincere and committed as candidate specialists. The candidate specialist must look not only to learn from what is covered in the learning sessions but, in the end, to grow from the overall learning experience so that they are able to make a real difference. They should be strongly encouraged to participate actively in class discussions, with the aim that they enjoy doing so. The educator/supervisor should look for candidate specialists to maintain a collegial and healthy learning environment, and be always available for help both in and outside the learning sessions. So the candidate specialist should be challenged to do their part, and the educator/supervisor should commit to always being there for them.
- Candidate specialists should be strongly encouraged to ask questions and to make sure that they clearly understand the content as covered in the learning sessions. Their objective as candidate specialists should not be to just learn from the book, but rather, to think critically, understand the interrelationships and complexities from a systems perspective, and to make a true commitment so that you are able later to adopt and operationalise that which is taught.

Influence candidate specialists by 'setting a good example'

If those who teach the specialty expect their candidate specialists to 'practise by example' in their future role as professionals and specialists then they, as their teachers, must 'teach by example'. The most fundamental, yet significant, building block of the proposed TQM-oriented approach to teaching is the concept of 'influencing by example'. As such, a strong and constant undercurrent of 'teaching by example' is maintained in whatever the educator/supervisor does.

The example that an educator/supervisor sets exerts a significant influence on the candidate specialists' actions and performance. Moreover, the kind of example that is set essentially determines his or her personal power and, consequently, the ability to influence through educational leadership in ways that would not be possible through the use of position power alone. Personal power, rather than position power, is often the differential between effective and ineffective leadership in influencing the behaviour of people in a normal context, be it in any sector of society or in education. Educators/supervisors can cultivate the much needed personal power to affect candidate specialist outcomes beyond what their position power alone could by "setting a good example".

To exert a greater influence through good example, educators/supervisors must truly believe in and themselves and practice that what they expect candidate specialists to do. Educators/supervisors must feel passionately about the issues they address and the stakes that are involved. They must feel just

as passionately about quality as we do about e.g. a hobby, sport or religion in order to make the implementation of quality efforts, such as through TQM, a success. As educators/supervisors, it becomes imperative to set, through good personal example, a standard for their candidate specialists to match. In every learning session, the educator/supervisor urges the candidate specialist not only to expect him/her to match the very same standards that s/he expects of them but rather, in addition, to expect even more from him/her as their teacher. These expectations could pertain to involvement, effort, the level of caring, commitment, preparedness, knowledge, quality of work, neatness and organization, timeliness, enthusiasm, or any such professional or personal attribute. The educator/supervisor assures his/her candidate specialists that s/he will not let them down and asks them, in due course, to hold him/her responsible for any such assurances. This serves as a means for the educator/supervisor not only to motivate him/herself, but also to remain focused on the cause of his/her candidate specialists and be driven to improve continuously in every way.

Shape a climate for excellence and get candidate specialists to "stretch" their goals!

It is important for educators/supervisors and candidate specialists to realize that often their individual potential remain unrealized simply because of the preconceived constraints they impose on themselves. An essential component of the TQM philosophy is the drive for continuous improvement, with no limits placed on what one can accomplish. The more goals are stretched, the greater is the likelihood of attaining higher performance plateaux through involvement, participation, commitment, and effort. In keeping with this, candidate specialists are invariably asked to "stretch" their goals. For, if they make an unyielding commitment to a cause, be it in what they want to learn, the grade they wish to earn, or what they want to accomplish as future specialists, their potential is unlimited. Just as the candidate specialist, the educator/supervisor must also stretch his/her objectives. Getting the candidate specialist to take pride in higher performance constitutes not only a prerequisite, but also serves as a catalyst in getting them to stretch their goals.

A primary objective is for candidate specialists to get more out of the learning program than just the coverage of material from a text. This is conveyed to them in the curriculum/syllabus itself, as demonstrated by the teaching objective. High, yet clear, standards are set for their performance. Clearly stated requirements of organization, neatness, timeliness, and responsibility are all aimed at developing sensitivity towards positive attributes in general, while trying to change attitudes that may be perceived as negative. In a frank manner, it is explained why it is so important for them to develop good habits, the benefits they can derive from these, and the pride they can take in the impression that high quality work conveys in life. In turn, the educator/supervisor recognizes that the candidate specialists now expect the same from him/her and, as such, s/he must deliver in terms of the quality of his/her own work, be it related to the content of learning session, how the learning aids, tasks or assignments etc. are prepared, the effort s/he puts in when grading, or the attention given to candidate specialists. The candidate specialist would seem not only to identify with the need to form good habits as a result but, even more importantly, to pick up on it.

Of importance in getting the candidate specialist to stretch their goals is the shaping and providing of a culture for excellence. Culture is '…a combination of all the intangibles that powerfully direct behaviour.' If candidate specialists are expected to excel, then the educator/supervisor must set a positive example for them and a standard to match. The educator/supervisor must be well prepared, have a strong interest in teaching, be enthusiastic about what s/he teaches and wants the candidate specialist to learn, put in their best effort, be knowledgeable, pay attention to detail, encourage participation and, most of all, show respect for the candidate specialist so as to motivate and involve them. Of all the attributes that can possibly foster quality, respect for people is the most critical. In this instance it's especially the educator/supervisor's respect for candidate specialists.

Table I depicts some of the performance focus areas that impact on the quality of education and training and learning.

Table I: Assessment factors

Assessment factors in the educator/supervisor	Assessment factors in the learning session /program
Enthusiasm, energy and interest in the subject	Challenges to be creative and not bogged down by traditionally held views and perceived constraints
Practice of mutual respect	Promotes a 'can do' attitude by encouraging and assuring that even objectives and goals that may seemed stretched or out of reached can in fact be attained
The way interacted with candidate specialists	Encourages involvement in ways that improves learning performance
Encourages participation	Encourages to expect or demand more in terms of the quality of education and training
Knowledge of the subject	Encouraging to expect more of themselves in terms of what candidate specialists can do and how they can make a difference as specialists
Willing to learn him/herself	Puts "the ball in the candidate specialists' court" in that through sincere effort they are actually able to shape their learning and determine their performance
Effort in attempting to teach effectively	Rewards in proportion to effort
Challenging to be creative, think proactively and expand conceptual horizons	States and abide by the statement that it takes team work (both on the part of the educator/supervisor and the candidate specialists – a two way street) to facilitate learning
Quality of work as represented by content and presentation material	Uses various means to facilitate effective communication between the and the candidate specialist candidate specialist so that the expectations on both sides are clearly understood
Paying attention to detail	Uses various means to facilitate effective communication between the educator/supervisor and the candidate specialist so that the expectations on both sides are clearly understood
Involvement with and personal attention given	Rewards sincere effort over and above merely right answers
Willingness to help and being available to help	Encourages improved performance of all
Being frank, open and up-front	
Teaching in ways that enhances performance	

Motivate candidate specialists through fairness, feedback and encouragement while instilling in them a deep sense of values and commitment

Feedback plays an important role in individual behaviour and performance. Be it positive or negative, it is inherently affective. It plays a crucial role in the fostering of goals any TQM-driven effort might aim to achieve, be it in medicine or in education. Similarly, fairness and encouragement serve as powerful motivators in any such context. The level to which the educator/supervisor is perceived as being fair by the candidate specialist can exert a strong influence on their level of motivation, involvement and effort. To ensure fairness to the best of his/her ability, the educator/supervisor grades all evaluations him/herself and always makes it a point to go over the evaluation very carefully during the learning session in which they are handed back to the candidate specialist for their review and reflection.

As part of the learning, realization, and acceptance process, the educator/supervisor should consider it extremely important that every candidate specialist knows exactly why points were lost on any question, what the answer should be and why, so that they feel comfortable, secure, and reassured of an objective and fair treatment. In order to motivate candidate specialists, it is important for the educator/supervisor to communicate with them at an individual level and provide feedback. In addition acknowledgement must be given where it is deserved. Feedback can also be used to open the channels of communication further, establish a closer bond, and to motivate.

In order to improve learning and effort performance, the work, the workplace, and/or the specialist must be altered. Unfortunately, what limits the improvement potential is that we typically look to change others and not ourselves. One impediment to TQM implementation stems from the fact that "other than the baby with an uncomfortably dirty nappy, few people believe they themselves need changing." If educators/supervisors expect candidate specialist to change during their journey of learning, so should they themselves.

Be sensitive to the many other aspects of the TQM philosophy

There is so much more that educators/supervisors can do and accomplish by drawing from the broader TQM philosophy and applying it to teaching/learning. Total quality initiatives require a total effort, a 'can do' attitude and, most of all, total involvement. Empowerment, teamwork, reward systems that encourage continuous improvement efforts while eliminating fear of failure, effective and open communication, and the sharing of common goals are just some of the attributes the TQM philosophy encompasses.

Conclusion

The teaching philosophy an educator/supervisor adopts and the example that s/he sets will have a profound influence on candidate specialists. Educators/supervisors who set a good example as teachers are more likely to make a real difference by being able to communicate more effectively what they "profess" in that candidate specialists are more likely to accept, adopt, and later transfer to practice that which is taught.

Commitment, honesty, openness and high ethics are essential prerequisites to adopting the TQM philosophy. Any inherent contradictions visible to the candidate specialist in what the educator/supervisor preaches on the one hand and practices on the other invariably create barriers to the acceptance of what is communicated by that educator/supervisor.

The stakes involved in education/supervision are enormous, making it imperative for educators/supervisors to provide as good an education as possible. Can educators/supervisors continuously improve and more effectively, educate, train, and influence our human resource? Yes and TQM can guide such effort. Educators/supervisors must be open to ideas, constantly evaluate the processes they use, and innovatively apply TQM elements to their own teaching, for TQM, basically 'stresses improvement in work processes.' If educators/supervisors take to heart the essentials of the TQM philosophy and apply them creatively to teaching, they can not only positively influence the outcomes of their candidate specialists, but also their own.
30th April 2007.

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Debit my Visa/Mastercard: V M

Name of Cardholder: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Card Number: ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry Date: ☐☐ / ☐☐ CPD Number: ☐☐☐

Amount: R ☐☐☐☐ **.00** (including p&p)

Signature: ______________________

Post/ Fax to:
Ms Carol Price
The Colleges of Medicine of SA
17 Milner Road
RONDEBOSCH
7700
Tel : (021) 689-9533
Fax : (021) 685-3766
(Or contact your closest branch)

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