

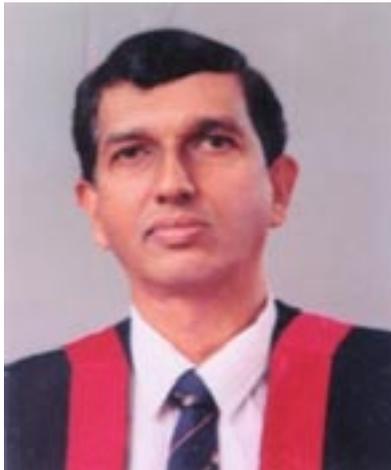
# Commonwealth Dental Association

*Working for Oral Health in the Commonwealth*

## CDA BULLETIN

The Newsletter of the Commonwealth Dental Association  
CDA is supported by The Commonwealth Foundation

### President's Message



*Hilary Cooray*

It is nearly 10 months since the new executive was elected on 5th September 2009 at the 6th Triennial Meeting in Singapore. A workshop on Infection Control in a Rural Setting was held prior to the Triennial Meeting. A policy statement developed at the workshop was adopted by the CDA. This has been circulated to all the member associations and also published in the last issue of the CDA Bulletin. A follow up meeting on Infection Control was held in Colombo on the 14th May 2010 during the meeting of the Asia Pacific Dental Federation Congress. Five member associations of the South East Asia Region participated and deliberated on the action already taken and future plans they hope to take in their respective countries. We would like to see more meetings of this nature being held in the regions to follow up on the implementation of the recommendations made at the workshop.

The Millennium Development Goals was the subject of discussion at the Commonwealth Health Ministers

Meeting held on 16th May 2010 in Geneva. In September 2000 the United Nations committed the member countries to a long-term programme of help for the poorest people in the World. Their declaration took the form of eight Millennium Development Goals to be achieved by a target date of 2015. The goals have a significant impact on health agenda and oral health can be linked to them.

Goal 5 is to improve maternal health – A poor maternal oral health may impact on delivery and birth weight as well as on child oral health since poor maternal oral health negatively impacts on delivery and birth rate as well as on child oral health.

In Goal 6, the challenge is to combat HIV / AIDS, malaria and other diseases. There is a link between HIV / AIDS and oral health. Oral health problems can be an early indicator of infections. Dental decay is the most frequent childhood disease. Proper infection control is necessary to avoid transmission of disease during dental treatment.

Goal 7 is to ensure environmental sustainability. In oral health care this involves using appropriate technology, effective infection control and safe disposal of medical waste.

The Commonwealth Health Ministers also decided to take "Non communicable diseases" as next year's theme for discussion.

For this year's activity, the CDA will be organizing a workshop on "The Use of Restorative Materials in Resource Limited Settings" in Lagos, Nigeria in Nov 2010.

**Hilary Cooray**  
*President*

### From the Editor



*D Y D Samarawickrama*

It has been a turbulent year so far. The world economy is only making sluggish recovery after the global bank collapse of yesteryear. Obviously, some countries are better placed than others to make economic recovery. However, even in those countries, there is some drastic belt tightening. There is little doubt that the profligacy of the past with borrowed money is coming home to roost. When the governments start trimming their budgets, organisations such as the CDA which are further downstream will feel the pinch in due course.

Other man made disasters such

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as the oil leak (yes, it is a leak, not a spill) in the Gulf of Mexico are only adding to the difficulties. Politics also had mixed fortunes. In some countries, transition from governing party to another has been painless and smooth. In others, this has not been the case. And armed conflicts have continued with a vengeance. There seem to be many such conflicts affecting one region or another with the result that not an insignificant amount of international aid is estimated to be given as military aid.

Add to these the natural disasters such as extremes of weather, earth quakes and volcanic eruptions and one can be forgiven for thinking that the end of the world is nigh! Yet as health care professionals, we have to carry on amid the chaos and the suffering and do our bit to uplift the lives of the people we are here to serve, especially the disadvantaged who seem to be lagging further behind.

Perhaps it seems appropriate to reflect on the Millennium Development Goals MDGs the UN member states adopted in 2001 after recognising the need to assist impoverished nations more aggressively. The MDGs were officially established at the Millennium Summit in 2000 and all 192 UN member states and at least 23 international organisations have agreed to achieve these goals by 2015.

As we take stock of the MDGs with only five more years left to the target date, it is clear that some progress has been made. According to a report by the United Nations Development Programme UNDP, with the exception of Sub-Saharan Africa and South Asia, primary school enrolment is at least 90 percent, malaria prevention is expanding and 1.6 billion people have gained access to safe drinking water since 1990. These are no mean achievements.

However, alongside the above successes, there are many goals and targets that are likely to be

missed unless urgent action is taken: undernourishment, maternal mortality at childbirth and extreme poverty and inequality leading to pockets of poverty even in middle income countries are some examples. Another is a target to halve the proportion of people living without access to water and sanitation. But the target on sanitation is way off-track. In sub-Saharan Africa, at the current rate of progress, it will not be met until 2076! This failure can affect progress in health and education which is dependent on access to safe water and effective sanitation.

It is against this backdrop that organisations such as the CDA must strive to make their contribution. It may look like a drop in the ocean when the cost of meeting MDGs is estimated in billions of dollars or pounds. But to give up is to lose hope. In the circumstances, it is heartening to note that the CDA is enjoying a revival of sort. For the first time, three National dental associations expressed interest in hosting the next Triennial. The final outcome was better than anyone could hope for: a joint Convention with the Malaysian Dental Association: to be held at Kuching, Sarawak and the Triennial to be hosted by the South African Dental Association. The debates within the Executive have also been inclusive and vigorous. And after the adoption of the CDA "*Declaration on Infection Control*" at the last Triennial in 2009, a regional meeting to monitor progress was held in Sri Lanka. A successful bid to the Commonwealth Foundation to host a workshop in Lagos, Nigeria adds to the list of recent achievements. It can also be seen as a seal of approval for the contribution CDA trying to make amidst the difficulties outlined earlier. This augurs well and we can look to the future with optimism.

Enjoy the read and please support the CDA as it tries to play its part in achieving the MDGs.

*DYD Samarawickrama*

## FINANCIAL REPORT July 2009 - June 2010



**Dr Anthony S Kravitz OBE**  
CDA Treasurer

The last year has once again had its ups and downs. Our income has reversed its recent downward trend and was much higher than in the previous year (Figures 1 and 2) – not least because of the very generous sponsorship funding for our Triennial Meeting in Singapore from Dr Mike Knowles of International Life Sciences and also from the National Australian Bank.

Subscriptions remained steady, helped by the increase in subscription rates agreed at the Triennial. However, unfortunately, one of our largest association members (Canada) has decided not to renew their membership and the loss of their funds – and indeed their support – has produced a major hole in our finances. Added to this, almost all our individual subscribers ("CDA Friends"), many of whom have sent us donations for years, seem to have deserted us in these dire financial times.

Thankfully our main sponsor – the Commonwealth Foundation (CF) – has continued to give us financial support, underpinning our administrative activities to a large extent and giving us "seed funding" for our workshops, enabling us to go ahead with these. We have had a good offer from the CF

*Continued on page 3*

for our forthcoming year and this is enabling us to plan our next activity with confidence (Figure 3). Nevertheless, we are mindful of the pressure on us from the CF to raise a higher proportion of our annual income than hitherto from subscriptions and sponsorship, so we will continue to actively pursue various lines to raise sums from these.

One of the major calls on our expenses is administration costs. Ms. Ulrike Matthesius of the British Dental Association carries out our day to day administration, for which the BDA charges us a flat rate. To date the British Dental Association have been very generous to us and continue to charge us a very reasonable amount, probably less than their actual costs, so our administration costs are also running at about half of what they were 4 years ago. As they are mainly covered by a CF grant, administrative costs continue to form only a small part of our outgoings (Figure 4).

Our main expense now is (overwhelmingly) our activity – the reason, after all, why we exist. Our Triennial General Meeting consumed just over 60% of our total expenses for the year and the annual Commonwealth Health Ministers' Meeting (CHMM) in Geneva about another 7% (we have cut the annual cost of our attendance for this by half, also). The reception at CHMM, which we formerly hosted using sponsorship monies, has now been taken over by the Commonwealth Secretary-General. The rest of this part of our expenditure is taken up by other travel expenses, mainly for our President who represents us around the world (about 2% of costs). But, it should be recorded that our President Dr. Hilary Cooray has been subsidising most of his travel costs from his own pocket.

So, summing up, the outturn is that we have run at a small deficit of about £615 for the year, a little less than projected in the budget I presented to members

in Singapore, but our first deficit for many years (Figure 1). Whilst this represents a reasonable result based on our turnover and the

current financial climate, it does mean that for a second, successive year we have not been able to add to our reserves.

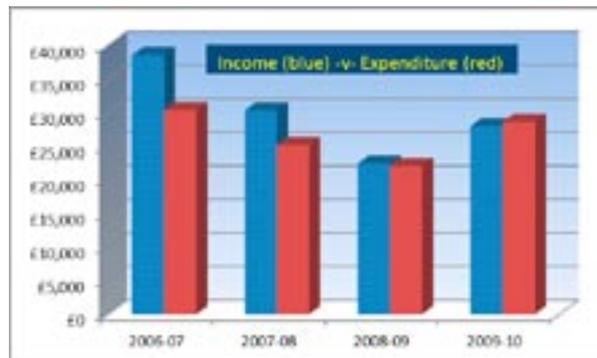


Fig 1

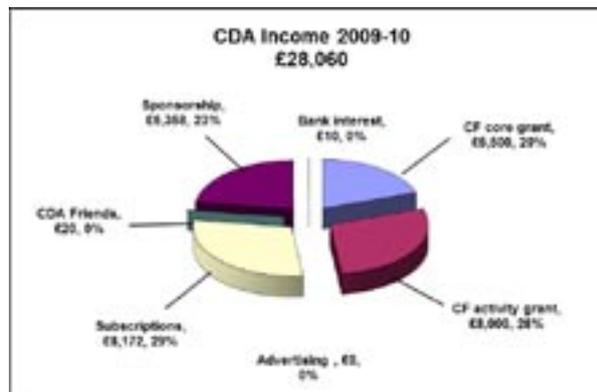


Fig 2

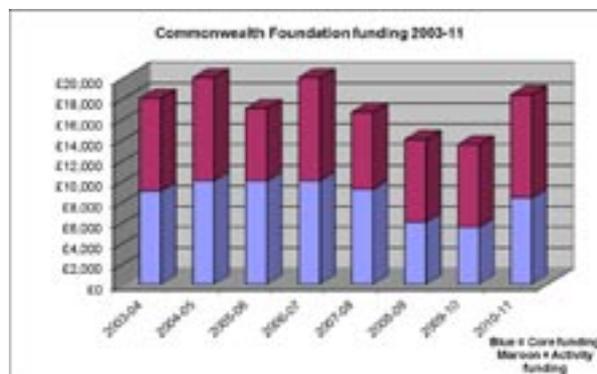


Fig 3

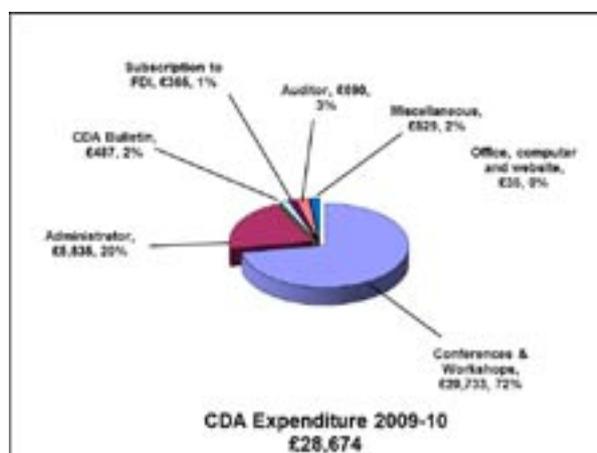


Fig 4

## ANNOUNCEMENTS

### CDA 7th Triennial Meeting 2012

The CDA Executive is pleased to announce that the next CDA Triennial Meeting will take place in Cape Town, South Africa, in late August/early September 2012.

The CDA is grateful to the South African Dental Association for hosting the meeting. We are looking forward to working with the local organising committee on the programme for workshop and business meeting.

More information will be provided in future bulletins and direct circulations to NDAs.

### New CDA Workshop in Lagos, Nigeria, November 2010

A workshop on the issue of "The Use of Restorative Materials in a Resource-Limited Setting" is being planned for 23/24 November 2010. The workshop will be held in Lagos, Nigeria, and is being organised by the Nigerian Dental Association and the CDA.

The event will take place over two days, with a variety of lectures and discussion groups on different restorative materials and their use in resource-limited settings. A full programme will be circulated to all NDAs in the late summer. As always, the CDA will do its utmost to support as many delegates as possible.

Dentists who wish to attend this exciting new event and who may need sponsorship for their attendance are invited to express their interest by email to:

**[administrator@cdauk.com](mailto:administrator@cdauk.com)**

(note that an expression of interest does not constitute a guarantee for funding as the event is still being costed).

The CDA office is looking forward to hearing from you.

## REGIONAL MEETING REPORT

### Report of the CDA Regional Meeting on Infection Control Held in Colombo, Sri Lanka

#### Introduction

During the Annual Congress of the Asia Pacific Dental Federation APDF, a Regional Meeting of the CDA was held.

#### Purpose

This was to follow up what actions have been taken by the countries in the Region following the adoption of the CDA Policy Statement on Infection Control.

#### Meeting

Dr. Hilary Cooray, the President of the CDA, welcomed the delegates from Sri Lanka, Malaysia, India, Singapore, and Pakistan. There were two other members of the CDA Executive present at the meeting: Dr. Lee Soon Boon from Malaysia and Professor Samarawickrama, Editor of the CDA Bulletin.

Dr. Cooray explained that the CDA Policy Statement was formulated following a workshop in Singapore last year. This was the first of many regional meetings to be held as a follow up to the workshop at regional level. He pointed out that such follow up action was necessary if any good was to come out of the workshop in Singapore.

After the opening statement, Dr. Cooray handed over the conduct of the meeting to Professor Samarawickrama. He began the proceedings with the tabling of the CDA Policy Statement.

#### At National Level

Following the agenda, Professor Samarawickrama invited delegates to first consider actions taken at national (government) level.

#### Sri Lanka

Dr. Jayasundara Bandara, Deputy director General, Dental Services, presenting a report on

behalf of the Ministry of Health, stated that action has been taken to classify Infection Control as a major health policy area. At a meeting of Chief Dental Officers of the South East Asia region, it was agreed to highlight Infection Control as a major policy area.

Guidelines and indicators have been developed for Quality Assurance in Dental Care which encompassed Infection Control. An Infection Control Manual prepared by the College of Microbiologists is already in use. Standard Operating Procedures for All Dentists would be implemented during 2010 and 2011. A manual on handling emergencies and a glossary of terms are also under development.

Infection Control is also a major component in undergraduate dental curricula. It was also a vital and an essential part in the training of School Dental Therapists. It was compulsory for nurses, clinic attendants and other staff to attend formal training courses. On the job and in-service training, the latter lasting 3 months, is provided to Dental Clinic Assistants.

Provision of capital is through annual capital budget. Major tertiary hospitals have Central Sterile Supply Departments (CSSD). Other dental clinics have table top autoclaves.

All items such as disposable gloves, face masks, disposable syringes, needles and goggles are provided to all dental clinics under the Ministry. General purpose detergents and disinfectants are provided for each facility. An Infection Control Nurse inspects and reports to the Head of the Institution. Each hospital has its own Infection Control Committee.

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**Waste disposal:** At major health institutions, incineration is carried out. In rural hospitals, waste is burnt in a buried metal vessel. A sharps bin is a must in all clinics. Hospital waste disposal is carried out under the supervision of an Infection Control Nurse.

Hepatitis B vaccine is provided for all health care workers including Oral Health Care workers.

A display board in each dental facility describes the services offered, Infection Control measures taken, contact telephone numbers and addresses to report feedback.

Public Health midwives carry out public education programmes to raise awareness among the public of the need for high standards of Infection Control. There is a National Hand Washing Day and there is additional publicity about Infection Control on special days such as the Oral Health Day.

On being questioned about the use of autoclaves in private clinics in Sri Lanka, Dr. Bandara stated that a Private Health Institutions Regulatory body is in place and it lays down standards for private clinics.

#### **Malaysia**

A Patients Safety Council is in place. Malaysian Government considers patient safety as a major concern and Infection Control is one aspect. The Media's attention is drawn to this aspect.

Malaysian Dental Council guidelines specify the minimum standards that have to be followed by dental practices. Policy statements give Infection Control a high priority. These guidelines have been updated regularly with the last update in 2009. Private dental clinics also come under the Private Health Care Facilities Act.

Proper waste disposal is in place.

#### **Singapore**

The Government has imposed a strict policy on the barrier technique. All dental clinics must have autoclaves. Waste disposal is only via authorized disposal companies who are employed to remove waste and sharps. Spot checks are carried out by the Ministry of Health prior to the renewal of annual practice licences.

#### **India**

Infection Control is being introduced into the curricula of health worker training programmes. Infection Control is set to become a major health policy concern. Recently, a Clinical Establishments Bill was tabled in parliament. Provision has been made to supervise private clinics too.

#### **Pakistan**

Waste disposal is satisfactory in the main cities. In government clinics, incineration is done. In rural areas, there is no proper system in place. Not every clinic has an Infection Control nurse.

Representatives from Pakistan also commented that the public was of the opinion that dentists were mainly responsible for the spread of infection. Action has to be taken to overcome that misconception. In addition, female health visitors spread messages on infection control to households.

#### **National Dental Associations**

##### **Sri Lanka**

Sri Lanka Dental Association (SLDA) recognizing the importance of Infection Control, conducted a workshop in 1998 with the participation of local and foreign experts to prepare guidelines for Dental Health Care Workers. The Proceedings of this Workshop were published by the SLDA.

Infection Control is a regular topic at clinical meetings and Annual Scientific Sessions. In addition, special guest lectures on the subject by eminent local and foreign experts have been organized regularly.

The national parliament has recently passed a Private Health Services Regulatory Act. A regulatory body has been set up to monitor private hospitals and clinics including dental clinics. SLDA is represented in this regulatory body. This body will ensure among other things that proper Infection Control procedures are followed.

A majority of private dental clinics use autoclaves while the rest still use electric sterilizers to boil instruments. A loan scheme has been arranged by the SLDA for dental surgeons to obtain loans from banks to upgrade their equipment.

SLDA is working with the industry to develop a central source of supply of sterile material.

##### **Malaysia**

Malaysian Dental Association (MDA) has highlighted the importance of Infection Control through seminars. It also creates awareness through regional meetings in rural areas. Selected dentists from remote areas are trained in Infection Control who then go back to their areas and train others – "train the trainer". Health workers are also trained to give oral health messages.

MDA plays a big role supporting government programmes dealing with infections and other similar threats. When frontline civil servants were vaccinated against infections such as swine flu, the MDA intervened and got dentists also included as a category for vaccination.

##### **Singapore**

The Singapore Dental Association (SDA) supports the authorities in implementing Infection Control guidelines. It also provides continuing education to practitioners. Waste disposal is an important issue.

##### **Pakistan**

Pakistan Dental Association (PDA) is trying to educate health visitors in Oral Health matters.

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## **Dental Practices**

### **Sri Lanka**

Dentists practicing in rural areas might not be able to afford expensive equipment. Therefore, the support of the private sector has been enlisted so that equipment can be obtained at reasonable prices. It is intended to display posters describing the Infection Control procedures followed in the clinic and also the significance of Infection Control.

### **Pakistan**

There is evidence of self help among dentists in some regions where dentists join together to purchase equipment such as autoclaves for their practices.

### **Barriers to Implementing Effective Infection Control Measures**

The Group after some discussion agreed that:

1. Government attitudes
2. Lack of patient awareness and
3. Funding

were major barriers to implementing effective Infection Control measures.

### **Future Plans**

Dr. Cooray stated that the National Dental Associations should highlight what is needed to implement effective Infection Control measures. The CDA can facilitate a partnership between the developed and the less developed countries. The CDA can also intercede with the health ministers at the Commonwealth Health Ministers Meeting (CHMM) to highlight Infection Control and Oral Health as important areas needing attention.

The following action points were agreed:

1. The profession needs to have a dialogue with Health Ministers with a view to raising the need for maintaining high standards of Infection Control through policy directives, investment in equipment and training.
2. The NDAs need to interact with industry with a view to enlisting their support to implement high

standards of Infection Control. The industry can support training programmes through sponsorship, make available suitable equipment at affordable prices and offer financial schemes to enable practices to purchase equipment.

3. Where there is no proper waste disposal system in place, large incinerators could be built for a group of hospitals which can also be used by the private sector. Obviously, contractual agreements need to be negotiated.

4. To have another review meeting of the Asia region during next year's Asian Pacific Dental Congress to be held in the Philippines.

The meeting concluded with a reception hosted by the Malaysian Dental Association.

## Dental Digests

### **Relationship between mercury levels in blood and urine and complaints of chronic mercury toxicity from amalgam restorations**

Amalgam continues to be a restorative material in many countries in spite of opposition from the environment lobby. However, controversy surrounding mercury toxicity is not going to go away.

In this study, 56 adult patients attending an oral medicine clinic with complaints perceived to be related to chronic mercury toxicity were investigated. Their symptoms and co-morbidity were recorded and mercury levels in blood and urine were tested using atomic absorption spectrometry.

The results showed that none of the patients had elevated mercury levels in blood or urine above normal threshold levels. However, subgroup analysis showed that patients with oral lesions,

autoimmune disorders and multiple sclerosis had significantly higher mercury levels. Nevertheless, these levels were still within threshold values. Further testing by multiple regression analysis adjusted for age and gender was done. This showed that the mercury levels in blood or urine and numbers of amalgams were not significant for multiple sclerosis or autoimmune disease.

*Eyeson, J, House I, Yang YH and Warnakulasuriya KAAS Brit Dent J; 2010; 208, 162 – 163 (online paper)*

### **Dental fillings for the treatment of caries in the primary dentition**

Only three studies were included in this review.

**Study 1:** Assessment of clinical performance of aesthetic crowns vs. conventional stainless steel crowns in 11 children who had at least 2 mandibular primary molars needing crowns. At 6 months, the outcomes assessed included failure of restoration, occlusion, marginal integrity, proximal contact and gingival health.

**Study 2:** comparison of resin-modified glass ionomer with amalgam over 3 years using split-mouth design. Forty pairs of Class II restorations placed in 40 patients were reported only at 6 and 12 months because of the loss greater than 30% of follow patients at 24 and 36 months.

**Study 3:** Assessed compomer and amalgam in pairs of primary molars in 30 children. Due to loss of patients at follow up, only 24 month data were reported.

According to these 3 studies, there were no significant differences found in all 3 trials for all the outcomes assessed.

*Vengopal V, Harneker SY, Patel N and Siegfried N. Cochrane Database Syst Rev 2009, Issue 2*

## From the Commonwealth Nurses Federation E-News June 2010

### COMMONWEALTH HEALTH MINISTERS MEETING

Commonwealth Health Minister's held their annual meeting in Geneva, Switzerland on 16 May 2010. The theme for the meeting was: The Commonwealth and the health MDGs by 2015. Ministers were given an update on the progress of Commonwealth countries in achieving the health Millennium Development Goals (MDGs) and they discussed how health systems could be strengthened to support achievement of the health MDGs and the challenges in and opportunities for financing activities to achieve the health MDGs.

### CHPA MDA SURVEY RESULTS

In preparation for the Commonwealth Health Ministers' meeting, during the first two weeks in March 2010 the CHPA emailed a short seven question survey to their national member associations. The survey was designed to explore the knowledge of national health professional associations about the health MDGs; their perception of whether or not their government was actively involved in actions to achieve the health MDGs; and whether or not their own association was actively involved with their government in actions to help achieve the health MDGs. The survey also sought respondent views about priority actions for themselves and their governments in achieving the health MDGs. Survey questions included both quantitative and qualitative data.

Seventy-five civil society organisations representing health professionals (community health workers, dentists, doctors, nurses and pharmacists) from thirty five Commonwealth countries responded to the survey. Ninety per cent of respondents stated they were familiar with the health MDGs. A copy of the survey report is available from: <http://www.commonwealthnurses.org>.

### INAUGURAL CHPA Pre-CHMM DEBATE

On Saturday 15 May, the Commonwealth Health Professions Alliance hosted an inaugural pre-Commonwealth Health Ministers' meeting civil society debate. The topic for the debate was:

*The Health MDGs - possible or impossible for Commonwealth countries.*



The 'possible' team was led by Dr Mark Collins, Director of the Commonwealth Foundation, and included Ms Ramziah Binti Ahmad, President of the Malaysian Nurses Association and Commonwealth Nurses Federation Board Member for the Pacific Region; and Dr Sundaram Arulrajah, President of the Commonwealth Medical Association. Dr Danny Sriskandarajah, Director of the Royal Commonwealth Society led the 'impossible' team which included Dr Bhupinder Sandhu, President of the Commonwealth Association for Paediatric Gastroenterology and Nutrition; and Ms Janet Davies, Director of Nursing and Health Services, Royal College of Nursing United Kingdom. The Commonwealth Foundation provided funding support for the debate.

The 'possible' team argued that for Commonwealth countries to fail to achieve the health MDGs would be a betrayal of trust and hope. They outlined the milestones that had already been met by many countries in reducing child mortality and combating HIV and AIDS, malaria and tuberculosis. They shared recent research which demonstrated that maternal mortality was also decreasing gradually.

The 'impossible' team suggested a reality check and that despite some progress the chances that the health MDGs will be achieved by 2015 are extremely unlikely. They pointed out the significant gaps in donor aid and in-country investment in health and argued that the evidence from the past ten years did not, unfortunately, bode well for a dramatic change in the next five years to 2015.

### WHO GLOBAL CODE ON MIGRATION

The 63rd World Health Assembly held in Geneva Switzerland 17-21 June 2010, endorsed the *Global Code of Practice on the International Recruitment of Health Personnel*. The adoption of the Code was unanimous. The voluntary Code provides an ethical framework to guide countries in the recruitment of health workers. The Code is only the second to be adopted in the history of the WHO. The other is the *International Code of Marketing of Breast Milk Substitutes* which was adopted in 1981. The forerunner to the WHO Code was the 2003

*Commonwealth Code of Practice for the International Recruitment of Health Workers.*

A copy of the WHO Code is available from:

[http://www.who.int/hrh/migration/code/WHO\\_global\\_code\\_of\\_practice\\_EN.pdf](http://www.who.int/hrh/migration/code/WHO_global_code_of_practice_EN.pdf)

The Code has eight 'guiding principles' which are outlined in Article 3 and which urge governments to take the Code into account when developing their national health policies; conduct international recruitment of health personnel in accordance with the principles of transparency, fairness and promotion of sustainability of health systems in developing countries; promote and respect fair labour practices for all health personnel and ensure the employment and treatment of migrant health personnel is without unlawful distinction of any kind; and work toward establishing effective health workforce planning, education and training, and retention strategies that will reduce the need to recruit migrant health personnel.

The Code also has Articles on responsibilities, rights and recruitment practices; health workforce development and health systems sustainability; data gathering and research; information exchange; and implementation of the *Code*.

A copy of the Commonwealth Code is available from:

[http://www.thecommonwealth.org/shared\\_asp\\_files/uploadedfiles/%7B7BDD970B-53AE-441D-81DB-1B64C37E992A%7D\\_CommonwealthCodeofPractice.pdf](http://www.thecommonwealth.org/shared_asp_files/uploadedfiles/%7B7BDD970B-53AE-441D-81DB-1B64C37E992A%7D_CommonwealthCodeofPractice.pdf)

#### CONTACT INFORMATION

CDA uses electronic information as its primary means for communication so it is important that it has an up to date record of E-mail addresses. People do occasionally change their E-mail address so please keep us up to date with yours.

## Oral Health in the Pacific Islands

Mary A H Doherty (1), Anthony S Blinkhorn (2) & Ellison S Vane (3)

(1) Visiting Research Assistant, (2) Chair of Population Oral Health: Global Child Dental Health Taskforce, Centre for Population Oral Health, Westmead, NSW 2145, Australia; (3) Head of Population Oral Health and Research Unit, Dental Department, National Referral Hospital, Honiara, Solomon Islands.

### Introduction

The people of the Pacific Islands face oral health problems of varying magnitudes. This review presents the available data and provides some insight into the state of oral health in the region.

Very few oral health surveys have been conducted in the region over the years. To simplify the process and allow meaningful comparisons of data, this review focuses on caries prevalence amongst 5-6-year-olds and 11-12-year-olds where possible using the DMFT index.

### Geography

The Pacific Islands region is difficult to define geographically. Islands lying south of the Tropic of Cancer (except Australia) are traditionally grouped into three divisions: Polynesia, Melanesia, and Micronesia. For the purpose of this review, the island groups have been considered as follows:

**Polynesia:** Hawaii, French Polynesia, American Samoa, Samoa (formerly Western Samoa), Cook Islands, Tonga, Tuvalu, Tokelau, Niue

**Melanesia:** Fiji, New Caledonia, Papua New Guinea, Solomon Islands, Vanuatu

**Micronesia:** Guam, Marshall Islands, Palau, Kiribati, Federated States of Micronesia, Nauru.

### Polynesia

Studies carried out in the 1970s showed marked geographical differences: in the Cook Islands the mean DMFT for 6-year-olds was 0.31 compared to 0.27 in Mangaia; mean DMFT for 12-year-olds were 6.13 and 3.12 respectively. In French Polynesia and Samoa. The inhabitants of isolated islands appear to be practically free from disease while those living on the less remote islands are ravaged by endemic caries.

The high DMFT values in French Polynesia (5.2 for 11-year-olds) and the Cook Islands (6.0 for 11-year-olds) appeared to be linked to an increase in sugar consumption. The population of the Tokelau Islands experienced a similar decline in oral health. The surveys conducted amongst the Tokelau community in 1963 and 1999 reveal that for children aged 5-10 years, the mean DMFT had risen from approximately 3 in 1963 to 5 in 1999; Early childhood caries showed an even greater increase with the mean number of decayed teeth in those aged 1-4 years rising from 1 in 1963 to 6 in 1999. It is significant that sugar imports in the region increased by up to eight times over this time period.

Many studies focused on the permanent dentition alone; those which investigated the primary dentition commented on the high caries prevalence and the 'increased susceptibility'. Table 1 provides comparative data for surveys conducted in 1989 and those conducted in the previous five years.

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Table 1 DMFT data (for children aged 12 years) from 1989 and from previous 5 years (South Pacific Commission, 1990)

Table 1 DMFT data	Data from 1989	Data from previous 5 years
Cook Islands:	4.9	----
French Polynesia:	3.6	6.6
Niue:	2.5	2.6
Tonga:	1.0	1.9
Tuvalu:	2.4 (1986)	2.0

Table 2 gives most recent data (for children aged 12 years) (WHO Global Oral Data Bank 2008)

Table 2 DMFT data	DMFT (Year)	DMFT (Year)
Cook Islands:	----	1.3 (1995)
French Polynesia:	3.2 (1986-88)	3.2 (1994)
Niue:	2.5 (1984)	1.8 (1995)
Samoa:	2.5 (1987)	2.5 (1994)
Tokelau:	----	4.8 (1999)
Tonga:	1.0 (1986)	3.1 (1998)
Tuvalu:	2.4 (1986)	2.0 (1994)

The most striking change after taking the 2 tables together is the drop in DMFT for French Polynesia, from 6.6 in 1985 (Table 1) to 3.2 in 1994 (Table 2). It must be noted that in 1974 in French Polynesia the mean DMFT for 13 year olds was 12. While many of those countries with previously high DMFT values have seen a decrease over the years, other countries such as Tonga and Tokelau with little disease previously have experienced a rise in DMFT.

### Melanesia

A survey in the New Hebrides demonstrated differences in DMFT between urban areas and non-urban areas; the urban areas had mean DMFT scores of 3.32 and 2.43 respectively for 12-year-olds. The outer islands reported scores of 0.88 and 0.17 respectively for the same age group. The very low DMFT on Ambryn was thought to reflect fluoride intake, 50% of the children on this island were found to have fluorosis compared to just 1% of children from elsewhere.

Similarly, a study in 1969 of three regions of New Caledonia showed a marked difference in dental health between the urban population Noumea and the rural communities. Mean DMFT for 11-12-year-olds was 5.13 in Noumea, 3.64 in the rural part of the main island and 2.18 in the outer lying Loyalty Islands. A more recent survey in 1995 gave an overall DMFT of 4.09 placing New Caledonia in the 'moderate' category on the WHO scale of caries severity.

The DMFT in Fiji in 1979 was 0.5 and 1.4 for 8-year-olds and 11-year-olds respectively in an urban area and 0.6 and 1.8 for the same age groups in a rural area. DMFT in 1985/86 was 0.6 in 7-8-year-olds and 1.1 in 11-12-year-olds. This DMFT data puts Fiji ahead of the WHO goals for 12-year-olds of 3.0 or below. The percentage of 5-6 year olds with caries-free dentitions (18.7%) was however far below the WHO goal of 50%. A similar age group (6-8-year-olds) examined in Fiji in 2004; suggest that caries severity may have increased since the 1985/1986 survey but caries prevalence has remained relatively constant.

The Solomon Islands in 1970 reported moderate to low levels of DMFT in the permanent dentition and a high DMFT in the deciduous dentition with only 17% of 3-4-year-olds being caries free. This pattern of high caries prevalence in the deciduous dentition is well documented throughout the Pacific Islands region. Unpublished data from a study conducted in 2007 reveals a low level of caries in the Solomon Islands population; 36 % of 6-year-olds were caries free and the mean DMFT for 12-year-olds was found to be 0.62.

### Micronesia

A study of the Gilbert Islands (now known as Kiribati) in 1971 revealed some of the lowest DMFT scores in the region; mean DMFT for 11-12-year-olds was 0.45 and for 7-8 -year-olds, DMFT was 0. The prevalence and severity of fluorosis indicated that the low caries experience was linked to high fluoride intake. While the DMFT on the Gilbert Islands remained low compared to other Islands, it was shown to be increasing with DMFT for 8-year-olds at 0.71 and DMFT for 11-year-olds at 1.41. The same study revealed a relatively

*Continued on page 10*

high mean DMFT for the Cook Islands and French Polynesia; 2.72 and 2.43 respectively for 8-year-olds and 5.95 and 5.15 for 11-year-olds.

A survey reported in 1990, gives mean DMFTs for 12-year-olds in various countries in the region:

Table 3 DMFT data for children age 12 years (South Pacific Commission, 1990)

<b>Table 3</b>	DMFT
Palau	3.7
Marshall Islands	
Kosrae (main island)	2.2
Yap (outer island)	0.9
Guam	2.4 (1986)

## Discussion

This review offers an insight into the state of oral health amongst the Pacific Islanders. It is limited to some extent by the availability of data and the issue of data comparability between studies.

There is a lack of recent data for many countries but efforts are being made to address this issue. An important factor in these studies is the standardisation of data collection. The use of different age ranges can prevent straightforward comparisons between data. A broad age range for example 6-12 years also limits the usefulness of the data. Without further subdivision, more complex age-related patterns may be masked. One age group used for international comparisons is 12-year-old children. However, it is important to recognise limitations of the method used. The commonly used DMFT index does not accurately reflect the severity of the caries; a high DMFT score can indicate multiple teeth ravaged by caries and awaiting extraction or multiple teeth successfully restored with small occlusal fillings. Similarly, a mean DMFT score does not provide information about treatment approach either. It may be prudent to present the F-ratio (F/DMFT), sometimes known as the Care Index, to establish the proportion of carious teeth which have been restored.

The unique environment of the region and its population can complicate both the collection and the interpretation of data. The hugely diverse population with an array of ethnic backgrounds poses a complex problem. Ethnic grouping may be necessary to produce more representative results.

Attempts to compare DMFT data from rural and urban areas can be complicated by the transient nature of some populations. A fall in the prevalence of caries in older children in urban areas might have been due to the changing make-up of the urban population.

Industrialisation and urbanization of these nations, in particular those which lie on trade routes, has brought a change in lifestyle, an increase in sugar consumption and a resultant deterioration in oral health. While there is evidence of increasing DMFT among certain populations, a reduction in DMFT has been demonstrated in some others with the introduction of preventive measures such as fissure sealants, oral health education and fluoridation.

Therefore, to provide a more complete oral health profile, it is important to document not only the DMFT indices but also the oral healthcare services available.

Manpower and workforce planning for health workers is complex. Data from a survey conducted by the CDA in 2007 are shown in Table 4. This reveals a large variation in population to dentist ratio throughout the region with some countries suffering from a clear shortage of oral health personnel.

**Table 4** Number of oral health personnel in Pacific Island nations (Kravitz, 2007) [1]

<b>Table 4</b>	Dentists	Therapists	Hygienists	Population/Dentists Ratio
Cook Islands	8			2,250
Fiji	100	70	64	9.059
Kiribati	2			42,247
Papua New Guines	20	115		283,527
Samoa	10	40	4	17,691
Solomon Islands	19	14		29,076
Tokelau	1			1,392

Tonga	16	16		7,168
Tuvalu	1			11,810
Vanuatu	4	6		34,812
<i>Comparative data for Australia and New Zealand</i>				
Australia	10,609	1,388	375	1,910
New Zealand	1,630	550	220	2,454

An important aspect of workforce planning is the availability of training institutions for health workers. The FDI World Dental Federation lists the Fiji School of Medicine as the only teaching institution in the region with training for dentists, therapists, hygienists and technicians. The University of Papua New Guinea however includes several oral health programmes amongst its courses, including Bachelor of Oral Health, Bachelor of Dental Surgery and Diploma in Dental Technology. While there are training institutions available outside the Pacific region, the usefulness of these institutions for training Pacific Islander oral health personnel is limited partly due to the fees and entry requirements and also to curricula which are not suited to the specifics of this region. Another difficulty is attracting overseas trained health workers back to the area.

The geography of the region and the scattered nature of the islands pose certain difficulties for health workers in terms of referral services and the availability of specialist advice. To address this issue of geographical isolation, telehealth has been trialed in the area. While there is said to be considerable potential for sustainable telehealth services in the region, there are still significant barriers to overcome: computer illiteracy, incompatible technology, limited accessibility to computers and their maintenance.

### Implications

Developing an oral health strategy requires a coordinated and planned approach preceded by a survey of current oral health status. With an understanding of the current state of oral health, healthcare leaders can identify priorities and set clear goals before designing an oral health strategy. To ensure sustained long-term improvements in oral health it is essential to develop oral health promotion projects in conjunction with a broad range of complementary actions. In 1990 the South Pacific Commission recommended collaboration with other sectors such as agriculture, education, law and media to ensure effective and wide-ranging oral health policies. Prevention programmes, particularly the use of fluoride and fissure sealants, must be integrated with wider strategies aimed at regulating food standards, improving food labelling and reducing the consumption of refined sugars.

The 'common risk factor approach' with its focus on improving general health conditions for the whole population rather than adopting single isolated oral health interventions calls for the establishment of partnerships between health professionals, educational bodies, local and national governments, manufacturing industries and other agencies to address risk factors common to many chronic conditions.

### Conclusion

Although limited to some extent by data availability, this review builds a profile of the region's oral health status and provides an indication of the changing patterns of disease. To ensure a continued improvement in oral health in these islands, regular epidemiological surveys should be carried out and determined efforts must be made to develop and implement appropriate healthcare strategies.

*This extract is published with the principal author's permission. Please contact the author for more information at the address given below. The full paper can be found in the International Dental Journal (2010) 60 122 - 128*

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[1] Survey of the Dental Workforce in the Commonwealth 2007:  
Dr Anthony Kravitz <http://www.cdauk.com/>

## National Oral Health Policy of Uganda

This summary is based on a presentation by:

*Dr. C Ssali*

*Ministry of Health, Uganda*

### Situation Analysis

A rapid (2004/2005) assessment survey carried out in 2004/05 covering 10 districts highlighted that 51% of the community had experienced an oral health problem of which only 35% had received treatment.

Most prevalent conditions were: tooth decay, pain, tooth loss, early childhood caries, bleeding gums, loose teeth, Noma, bad breath, oral HIV lesions and harmful practices such as tooth bud extraction.

As far as human resources were concerned, there were 72 dental surgeons (1 per 330,300 people of whom 39% based in Kampala district). There were only a limited number of specialists. In addition, there were 159 PHDOs (25% in Kampala district). However, only 35% of HC IVs have a PHDO. The majority of Technologists retired, died or nearing retirement; there were only 3 trained dental equipment technicians, all of whom were based at Mulago.

Financing of oral health care services was by direct oral health care budgetary allocation amounting to less than 0.1% of GDP. Basic oral health services are free in government health units. Secondary and tertiary services are provided at a fee. In most cases, the burden of financing of the dental services is borne by the patients.

### Infrastructure and Equipment

Regional referral hospitals received dental equipment in 1992 and district hospitals received dental equipment in 1972. About 80% of the Health Centre IV facilities have a hydraulic chair and set of hand instruments.

The private sector provides a significant proportion of oral health care in the country. However, this

is mainly concentrated in Kampala district and other large centres. The monitoring of the quality of services remains a challenge.

### Background

Oral health policies in Africa have been fundamentally unachievable. They have employed uniform intervention strategies for non-uniform needs and failed to address key determinants of disease. Where viable interventions existed in the past, their accessibility for most communities, has been limited or entirely excluded. Oral disease is an important public health concern that requires an explicit policy.

### The Problem

There was no Oral Health Policy in Uganda. This lack of clear-cut goals and objectives (Policy) had made the implementation of oral health care programmes difficult with the provision of sustainable quality oral health care within a framework of ever increasing poverty and scarce resources untenable.

### The Scope

The policy will apply to dental practitioners from the public and private sectors, organisations and institutions providing oral health services from the public and private sectors and organisations and institutions involved in the management and regulation of oral health services.

### The Vision

It is hoped that the Policy shall lead to the establishment of a comprehensive oral health system fully integrated in general health and based on primary health care, with emphasis on promotion of oral health and prevention of oral disease.

It is further envisioned that the system will lead to equitable access to good quality oral health care services for all individuals and communities in order to ensure improved levels of oral health

and function.

### The Goal

This is to improve the oral health of Ugandans in order to promote a healthy and productive life.

### The Objectives

These are to provide guidelines that define national oral health programmes, facilitate population wide initiatives to promote oral health, assist managers and service providers customize locally effective oral health strategies and detail out a framework for monitoring and evaluating the effectiveness of the strategies taken.

### Guiding Principles

- Primary Health Care
- Equity and Gender
- Human rights based approach
- Integration and Collaboration
- Information
- Research

### Policy Strategies

These will be based on national programmes in oral health, promotion of oral health and implementation of locally effective oral health strategies.

### National Programmes in Oral Health

- Formulation, implementation and review of a national oral health policy
- Ensure that the determinants of oral health are addressed in all policy matters
- Advocate for the provision of dedicated national funding for the education and training of appropriately skilled oral health personnel
- Manage specific National interventions through monitoring of implementation of national programmes
- Coordinate oral health information collection and dissemination
- Develop clinical practice guidelines

*Continued on page 13*

- Support districts in their activities

### Promotion of Oral Health

- Raise the awareness of oral disease risk and appropriate means of oral health care
- Integrate oral health policy elements and strategies into programmes and policies of all sectors
- Identify and develop collaborative approaches to initiatives that address common risk factors

### Locally Effective Oral Health Strategies

- the provision of basic oral treatment
- the provision of appropriate disease prevention and health promotion measures
- the implementation of cost-effective and evidence-based strategies

### Monitoring and Evaluation

Information should be provided regarding national oral health programmes in place, population strategies carried out, oral health strategies prepared, interventions implemented and community oral health assessment data collected

### Policy review and development

Policy review will be done by a panel annually to assess the implementation and outcomes of this policy, and to make recommendations accordingly.

### Institutional Framework

This will be based on national, district and HSD levels.

#### At National level will be:

- Formulation, implementation and review of a national oral health policy
- Resource mobilization
- Ensure that the determinants of oral health are addressed in all policy matters
- Develop and manage specific National interventions

- Coordinate oral health information collection and dissemination

- Develop clinical practice guidelines
- Facilitate collaboration with other sectors
- Monitor the implementation
- Support districts in their activities

#### At District Level:

- Develop specific operational guidelines that address the unique and pertinent oral health conditions within their communities
- Identify and allocate resources for provision of oral health services
- Strengthen current information systems to ensure collection, use and dissemination of oral health information
- Monitor the process of implementing the oral health strategies at the HSD level
- Evaluate the effectiveness of the policy

#### At HSD level:

- Raise the awareness of oral disease risk and appropriate means of oral care
- Integrate oral health policy elements and strategies into programmes and policies of all sectors
- Provide services directed at the relief of pain and sepsis.
- Provide appropriate disease prevention and health promotion measures
- Undertake activities to identify and develop collaborative approaches to initiatives that address common risk factors
- Collaborate and partner with the private sector in service provision, quality assurance, and information collection and management
- Ensure collection, use and dissemination of information

### Legal Aspects

The Oral Health Section of the Ministry of Health in collaboration

with the Uganda Medical and Dental Council, and Uganda Dental Association shall formulate and disseminate laws, regulations and enforcement mechanisms related to development and regulation of Oral Health Services.

### Monitoring and Evaluation

The effective implementation of the Oral Health Policy will depend on the mechanism of monitoring and evaluation at the HSD, District and National level based on selected indicators which are not detailed here.

### Constraints in policy implementation

These are the following:

- Lack of oral health personnel in the districts
- Lack/old dental equipment
- Little funding on oral health services
- Low prioritization of oral health services
- No transport for support supervision in the districts

### Recommendations

These are as follows:

- Increase funding of oral health services
- Districts to recruit dental surgeons up to health center IV
- Equip district hospitals and health center IVs with new dental equipment (consider under ORET, World Bank project etc)
- Start implementation of the oral health policy.

## Dental Digest

### Caries preventive effect of glass ionomer and resin-based fissure sealants on permanent teeth: a metanalysis

Six studies were included in this metanalysis. The odds ratio after pooling was 0.96 (95% confidence interval, 0.62 – 1.49). This indicated that there was no difference in the caries preventive effect of glass ionomer cements and resin-based fissure sealants.

*Vengopal V, Mickenautsch S, Bezerra AC and Leal SC J Oral Sci 2009; 373 - 382*

### Is diagnostic delay related to advanced-stage oral cancer? A meta-analysis

Nine studies carried out in 9 countries were included in this analysis. The results have shown that a delay in diagnosis was a risk factor for advanced stage oro-pharyngeal cancers. The association was stronger when the analysis was limited to oral cancer. Early diagnosis remains an important predictor of prognosis and survival.

*Gomez I, Seoane J, Varela-Centelles F, Diz P and Takkouche B Eur J Oral Sci 2009, 117; 541 - 546*

### Patient satisfaction with care by dental therapists

There is an increase in the number of dental therapists trained in the UK. At the same time, new legislation has been enacted to allow dental therapists to take on a wider role in dental practice. Although there is general support among the dentists for a skills-mix, some have been concerned whether treatment by therapists is acceptable to the patients.

Therefore, the aim of the study was to investigate whether there were any differences in patient satisfaction after a visit to a dental therapist compared to a visit to a dentist. Patient questionnaires and the Dental Visit Satisfaction

Scale were used in the study. The latter has a 10-item scale of patient satisfaction and 3 sub-scale outcomes of: information – communication, understanding – acceptance and technical competence. Two hundred and forty questionnaires were given to consecutive patients attending an appointment with a dental therapist and 400 questionnaires were given to patients attending dentists in 8 different practices.

Of the 640 questionnaires distributed, 430 (67.3%) were returned. Patients attending dental therapists were found to have a significantly higher level of overall satisfaction ( $p < 0.001$ ) than those attending for appointments with dentists. The same was evident when 3 sub-scales were also considered.

*Sun N, Burnside G and Harris R Brit Dent J; 2010; 208, 212 – 213 (online paper)*

## Commonwealth dentists standing for FDI Council

There are four FDI Council vacancies to be filled at this year's International Dental Congress, to be held in September in Brazil.

A number of candidates for the Council positions are from dental associations which are members of the CDA.

They are:

Dr Arif Alvi,  
Pakistan

Dr How Kim Chuan,  
Malaysia

Dr Ashok Digamberrao Dhoble,  
India

FDI member associations can access the full list of candidates and their presentations via the website:

[www.fdiworldental.org](http://www.fdiworldental.org)

## CDA Contacts

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*Dr Sam Thorpe -  
Executive Secretary*

## CDA Administration

### General Matters:

For queries of a general nature and membership please contact the CDA Administrator, Ms Ulrike Matthesius at: [Administrator@cdauk.com](mailto:Administrator@cdauk.com)

### CDA Secretary Matters:

please contact the Executive Secretary, Dr Sam Thorpe at: [Sam.Thorpe@cdauk.com](mailto:Sam.Thorpe@cdauk.com)

### Financial Matters:

For subscriptions, invoices and other financial matters, contact the CDA Treasurer, Dr Anthony Kravitz at: [Anthony.Kravitz@cdauk.com](mailto:Anthony.Kravitz@cdauk.com)

### Communications:

For website and contacts database updates, contact: Mr David Champion at: [David.Campion@cdauk.com](mailto:David.Campion@cdauk.com)

## CDA WEBSITE



The CDA website provides a facility for the dissemination of information to all the Commonwealth dental associations and includes access to the former CDA Newsletters and subsequent Bulletins.

The website also contains articles of relevance to the CDA, a Who's Who of the current Executive Committee and, importantly, contact information for CDA and its officers.

Whereas previously the CDA had a large number of Newsletters

and Bulletins printed and posted to Commonwealth Associations, the cost of printing and distributing has been saved by only making the Bulletin available on the web and by email.

The printing costs saved are now used to further the CDA's other objectives and compensate for the increasing difficulty of attracting support grants in the current financial climate.

The CDA Executive wishes to remind associations that the CDA

website is being used for information and announcements so they should make a point of visiting it from time to time. If they wish to be notified by E-mail of any new information put on to the website then they should send CDA the E-mail address of the person to be notified. The E-mail should be sent to:

**webmaster@cdauk.org**

The CDA website address is:  
**www.cdauk.com**