



National Dental
Centre Singapore

SingHealth



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NATIONAL DENTAL CENTRE SINGAPORE

A Trusted Provider
of Oral Healthcare

The National Dental Centre (NDC) of Singapore achieved two major milestones in the past year, both attributed to the strong showing of teamwork amongst staff.

In December 2010, we achieved a sterling pass at the Joint Commission International accreditation exercise and benchmarked our standards of care against the world's best. Weeks later, we overhauled our paper records system to a more efficient, fully electronic one that unifies the patients' dental and critical medical history as well as all imaging records. The space gained will be re-purposed for new clinics to meet the needs of a growing, ageing population.

Initiatives to reduce wait times for high demand services and care coordination have expanded. We will continue to partner the Ministry of Health and other dental institutions to manage these. Through our Patient Care Fund and direct fee remissions, over 700 patients had their dental health taken care of in spite of financial hardship. We will always place our patients at the heart of all we do. The mentors among us will, by their teaching and conduct, continue to shape values to undertake this core belief in the coming generations.

DR KWA CHONG TECK
Executive Director, National Dental Centre Singapore

PATIENT CARE

The NDC continually seeks to raise its standards of patient care measured against the world's best institutions. The NDC's efforts were affirmed this year when the Centre received accreditation by the Joint Commission International board on 11 December 2010. The NDC was successful on its first accreditation attempt.

The NDC is the first dental specialty ambulatory centre in Asia to make the mark, scoring a sterling pass for the 486 elements measured. It took two prior years of tough preparation, with every patient care process rigorously reviewed, followed by intensive staff communication and training. The accreditation affirms the commitment of the NDC's staff in pursuing quality care for patients.

The Centre further harnessed information technology in FY2010 with the roll out of the first phase of the centre-wide Electronic Dental Record (EDR) system in February 2011.

EDR interfaces with the NDC's pre-existing digital imaging and Outpatient Appointment Management systems and the SingHealth SAP Enterprise Resource Planning System. It also allows for data mining for standard statistical reporting, clinical process improvement projects and research.

The system, custom-built by staff from the NDC, Integrated Health Information Systems Pte Ltd and National Computer Systems Pte Ltd, will free up one floor of the Centre used to house paper records and plaster models for new clinics. It cost about S\$3.7 million to implement.

FY2010 also saw a range of clinical practice improvements which worked towards better patient access to care.

In April 2010, the NDC launched a plan aimed at cutting down unscheduled orthodontic visits. It involved simple changes to existing clinical procedures and improved patient education targeted at the root

“My work carries the mark of my mentors – their wisdom and devotion to healthcare. I aspire to pass this passion on to those I teach.”

Ms LORRAINE CHRISTINE JOHNSON
Manager, Dental Surgeries

cause of unscheduled visits. Since then, the number of unscheduled returns has dropped markedly by about 50%.

A team led by orthodontist Dr Chan Feng Yi studied ways to cut unscheduled orthodontic patient visits made without pre-appointments, typically due to dislodged appliances or discomfort. Their work led to fewer disruptions at the clinics and ultimately less inconvenience for patients.

Last year, the Centre also launched a study aimed at ensuring that more serious cases receive treatment quickly. With the combined use of a dental emergency categorisation system and additional manpower allocated to walk-in patients with pain, the waiting time for those in severe pain improved significantly. Since intervention in November 2010, most patients are seen within the hour.

FY2010 also saw the NDC working to improve the rate of patients returning for follow-up care after undergoing Root Canal Treatment. An educational brochure was produced in two languages (English and Mandarin) to aid in getting important messages across. Since the implementation of the process, recall rates have successfully doubled from the 22% to 37% range in 2008, to a mean of 48% as at March 2011.

As needs change in Singapore's growing population, the Centre will continue to monitor and manage service processes to ensure that every person who seeks treatment at the Centre receives timely and appropriate care, in a safe environment.

EDUCATION

The NDC leads at the forefront of education for dental practitioners in Singapore. Its education mission is core to the NDC's identity as a national centre and will feature strongly as the Centre grows into an academic centre.

The Centre is currently developing specialist training courses in fields where it has strong clinical expertise. The goal is to establish in-house courses

to ensure a constant supply of institution-based specialists that excel in their respective fields.

The NDC had its first dental implant certification course for Oral and Maxillofacial Surgery and Periodontology residents at the Centre for clinical attachment. The workshop targeted at residents training to become specialists, familiarise them with implants and systems used in the NDC.

FY2010 also saw the NDC providing over 230 hours of education activities organised by various clinical departments. The Centre extended training opportunities to the larger dental community outside of the NDC so that the industry as a whole may benefit at the same time. Continuing training is vital to ensure updated care delivery processes, in terms of techniques and technologies.

Another key education event for the Centre was the NDC-Karolinska Institutet Joint Scientific Meeting 2010, entitled *Dentistry in the New Millennium – A Decade On* held in conjunction with the SingHealth-Duke-NUS Scientific Congress. Pre-congress symposiums were held earlier at the NDC for its staff.

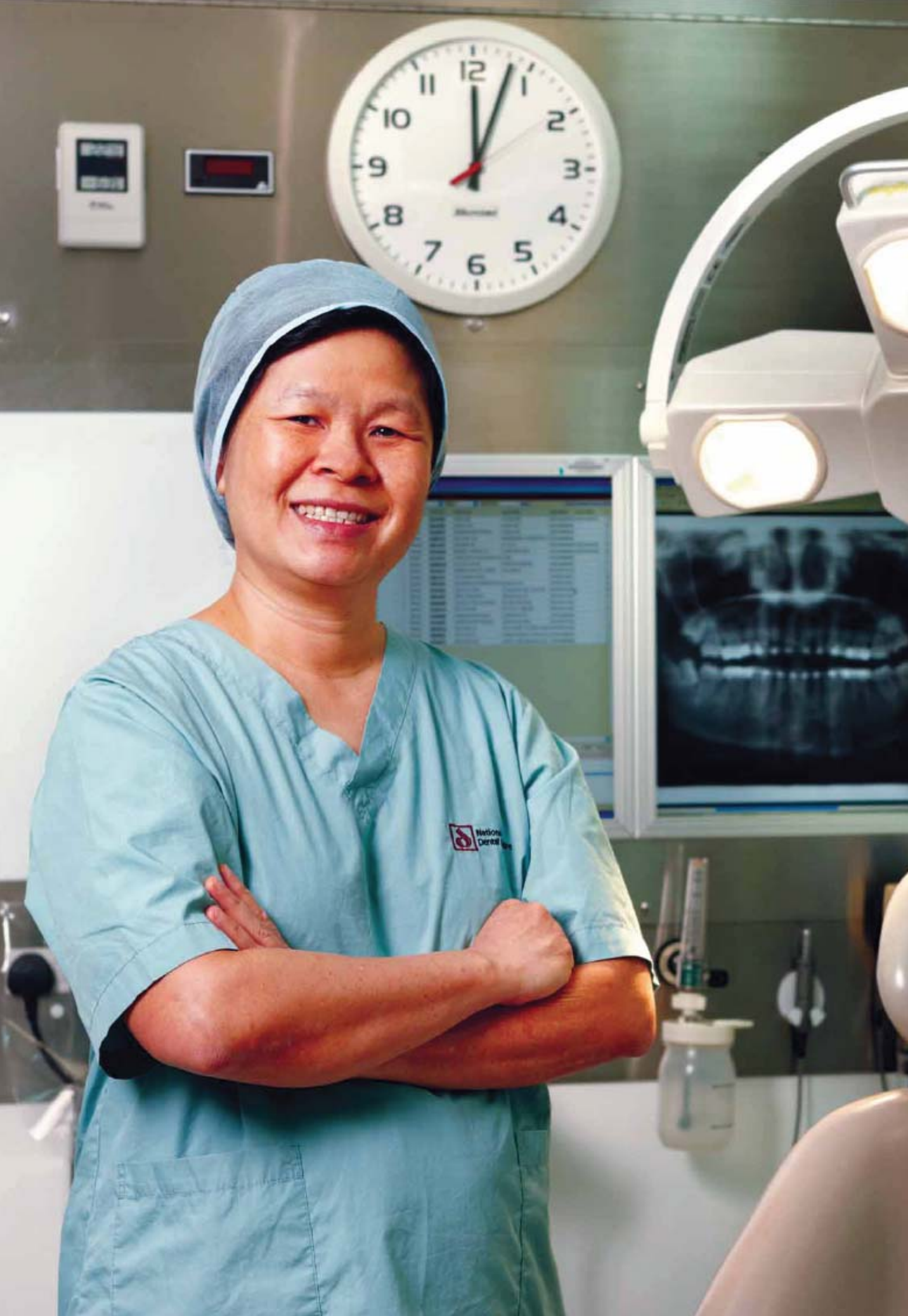
The NDC also hosted an open house in March 2011 for junior college students aspiring to be dentists. The students were introduced to various aspects of dentistry and shown around the facilities in the Centre.

The NDC is also a major training provider for dental auxiliaries and is an accredited training centre for the National Institute of Technical Education Certificate programme for dental assisting and dental technology.

In FY2010, together with the Institute of Technical Education (ITE), the NDC hosted visits from Holmesglen Institute, a vocational training institution in Sydney, Australia. 16 trainee dental technicians participated in a two-day teambuilding exercise.

RESEARCH

The NDC regards research as an integral part of its work to further clinical





DR POON CHOY YOKE
Director & Senior Consultant,
Oral & Maxillofacial Surgery, NDC

Dr Poon Choy Yoke's students remember her passion for clinical excellence and professionalism as well as her penchant for being direct with criticism. "It was in the interest of her mentees and ensuring that the patient got the best possible care that she would point out our mistakes," recalls one of her students, who now teaches her own batch of clinicians.

Dr Poon says her desire to teach is probably 'innate'. She recalls role playing as a teacher to an imaginary class when she was a child, using the side of her mother's cupboard as a blackboard. "Or perhaps it is just because we were poor and could not afford toys," she laughs.

Dr Poon's mantra for mentoring has been consistent in her 14 years of teaching. It is first culled from her own learning experience in secondary school.

"My secondary school principal taught me: 'Whatever your hands find to do, do it to the best of your ability'. This has become my motto for life."

Dr Poon considers mentoring others a way to 'pay it forward' and to show gratitude to her teachers. "Armed with the knowledge and skills we have learnt and honed, together with the values and ethics my mentors have imparted, there is a sense of responsibility to pass it on to others, especially the next generation."

“Our pursuit of greater knowledge and new discoveries in dentistry will enable us to make quality oral healthcare a reality for all.”

DR KWA CHONG TECK
Executive Director

knowledge, develop thinking clinicians and improve quality of care. The direction of research is guided by the national Biomedical Sciences (BMS) initiatives.

In FY2010, the Centre received a total of S\$424,400 in research awards. There are currently 31 research projects in place and the NDC has published 14 papers within this period.

Nurturing the right culture that supports research continues to be a priority for the Centre. This includes organising activities that encourage conversations on research and also paving the way for young clinicians to embark on research activities.

The 2011 Research Day in April, themed *Dentistry and Bioengineering* showcased and raised awareness of the current applications in Bioengineering. Speakers Dr Zu Yanbing and Dr Somenath Roy, from the Institute of Bioengineering and Nanotechnology A*STAR, presented talks on *Is Point-of-Care Genotyping Possible?* and *PCR – Free Detection of miRNA Under an Optical Microscope* respectively during the half-day event. A facility tour and networking session for discussion followed after the event.

The objective of an annual Research Day is to provide a platform to update clinicians on research activities in the NDC and exchange research ideas and experiences. Clinicians are also kept informed of the research initiatives and Academic Medicine directions of SingHealth.

The Centre's ACORN Office also held a half-day in-house training programme on 31 July 2010 for newly appointed registrars, attendees at the research orientation session were introduced to the basics of research 'must knows' such as compulsory research applications before starting a research, funding sources and pointers for planning and conducting projects. The session aims to provide young clinicians a head-start in research.

The NDC is committed to grooming staff with an interest in research. This is made possible through protected time schemes, administrative and funding support, even for fledgling projects. Our staff showcase their work

at various overseas conferences. Thematic projects have led to six PhD titles awarded to clinicians.

OUR PEOPLE

The NDC believes in building up and retaining its talent pool and commit significant resources to continuing education. The NDC invests in and provides ample development opportunities for staff and far exceeds the national requirements for dentist licensing.

An example is the annual overseas teacher exchanges with the Karolinska Institutet which serve to expand the clinicians' pedagogy experience. The NDC is also refining its talent management systems to achieve the Centre's Academic Medicine ambitions.

The NDC provides avenues to recognise and reward staff who contribute to the teaching and research culture at the Centre in addition to their clinical practice.

In FY2010, Dr Alvin Yeo was conferred a PhD by the University of Groningen (The Netherlands), for his work on *Novel Polycaprolactone-tricalcium Phosphate Scaffolds customised for Reconstruction of Dentoalveolar Deformities*, increasing the existing research talent pool to four.

For auxiliary staff, competency-based assessments now form part of the performance evaluation framework. To encourage a high standard of support services, the NDC offers dental assisting staff and technicians formal training places in ITE certificate courses to add to their qualifications.

The emphasis on training within the Centre is balanced with activities that promote staff well-being and awards for their contributions to public service. Last year, the NDC held staff wellness programmes including activities that target improvements in the overall physical and mental health of its staff. The Centre also held a Dinner & Dance event where 12 staff members were honoured with Long Service awards.

COMMUNITY

The NDC continues to help make dentistry possible for the financially needy by funding their treatments through its Patient Care Fund as well as direct remissions. Funding for this initiative comes from the SingHealth Foundation and the Centre as well as from fundraising activities.

The *Save Money, Save Lives Campaign* jointly organised with the SingHealth Foundation raised S\$9,935 for the NDC's Tooth Fairy Fund for needy patients. A charity bazaar organised by the Staff Wellness Committee raised S\$644.

In FY2010, the Centre also disbursed over S\$201,000 which benefited 700 patients.

Aside from reaching out to the needy, the NDC actively participates in community programmes. A dental team from the Centre provided dental care for athletes at the 2010 Youth Olympic Games. The team provided treatment over 18 days. This included emergencies and pain control, stabilising infections and arresting bleeding in addition to other routine treatments.







DR CHEN NAH NAH
Senior Consultant, Endodontic Unit
Restorative Dentistry, NDC

Dr Chen Nah Nah believes there is one good way to become a skilled clinician who will give the best to a patient.

Get up close and personal with great and inspiring teachers, “the leaders, giants in their fields”, learn from them and then teach others – as she has done in her 25 years of mentoring others.

She jokes that she teaches partly because of her nature. “I enjoy interactions with students and the ‘*kaypohnness*’ part of my personality wants to share ideas, views and opinions.”

Dr Chen describes dentistry as both a science and an art. The art being the soft skills and patient management, best learnt from a mentor, “through direct observations and learning from experts at the ‘*chairside*’, through teacher-student interaction”.

Her students value her for exactly that – a clear, focused approach to patients. “What has influenced me most is her relentlessly cheerful and positive attitude towards patient care,” said one practitioner who has benefited from Dr Chen’s mentoring.

KEY FIGURES	FY10	FY09
Workload per annum		
Day Surgeries	7,083	6,461
Dental Attendances	156,788	160,884
Dental Procedures	162,563	164,475
Staffing (as at end Mar)		
Total	343	329
Dentists	76	79
Nurses	15	13
Allied Health Professionals	44	43
Dental Surgery Assistants	61	55
Others	146	138

Note: Staffing figures refer to Filled Posts, in terms of Full-Time Equivalent, and may not add up to total due to rounding. No. of Dentists excludes Dental Officers deployed to armed forces, schools and polyclinics as well as postgraduate residents.

AWARDS & ACCOLADES

PATIENT CARE

Singapore Health Quality 30 Silver
Service Award 2010

SingHealth Excellence
Awards 2010

Outstanding Nurse Award
Lorraine Christine Johnson

Outstanding Clinician
Dr Mimi Yow

Outstanding Allied Health Professional Award
Huang Ngoi Yin

Outstanding Ancillary Staff Award
Jayaram Veeramani

Outstanding Administrative Staff Award
Chan Sai Hui

RESEARCH

National Medical
Research Council
Research Training
Fellowship

Dr Nattharee Chanchareonsook