Australian Research Centre for Population Oral Health
Annual Report 2010
Population oral health is concerned with the community’s oral health, access to dental care, provision of dental care and the labour force which produces dental care. It is that part of research in dentistry which focuses on the population as the patient, rather than on the individual. Through such research, improvements in oral health and better dental care are sought for all Australians.

Collectively, oral diseases and disorders create substantial impact and disability. The challenges of improving oral health and providing better dental care are far from fully addressed and warrant attention as public health issues. Oral health problems share many risk factors and directions for intervention with wider general health problems, including health promotion and access to primary care. Special attention needs to be paid to particular groups in the community; for example, those dwelling in rural and remote areas, Indigenous persons, migrants, the aged and the disadvantaged.

For oral health to make a stronger contribution to public health in Australia, improved information and understanding of oral health and dental care is needed as a prerequisite for the development and implementation of informed public health policy.

The Australian Research Centre for Population Oral Health (ARCPOH) was established by The University of Adelaide in 2001 to undertake research and research training in population oral health at a standard that is internationally recognised to be of the highest quality.
Internal collaborators

School of Dentistry
- Social and Preventive Dentistry
- Oral Epidemiology
- Geriatric Oral Health
- AIHW Dental Statistics and Research Unit (DSRU)
- Colgate Oral Care Dental Practice Education Research Unit (DPERU)
- National Oral Health Promotion Clearinghouse (NOHPC)
- Colgate Australian Clinical Dental Research Centre (CACDRC)

Faculty of Health Sciences (FHS)
- Discipline of Public Health, School of Population Health and Clinical Practice
- Centre for Military and Veterans’ Health (The University of Adelaide)

External collaborators

Universities
- Melbourne, Sydney, Monash, Deakin, Otago, North Carolina, Menzies School for Health Research, Centre for Military and Veterans’ Health (The University of Adelaide)

Health agencies
- Australian Institute of Health and Welfare (AIHW)
- Australian Government Department of Health and Ageing (AGDHA)
- South Australian Department of Health (SADH)
- South Australian Dental Service (SADS)
ARCPOH Management

Across the last seven years ARCPOH has had a team approach to its management.

In 2010 ARCPOH had the following management positions:

- Professor John Spencer (Director, ARCPOH)
- Associate Professor Kaye Roberts-Thomson (Deputy Director, ARCPOH; Director, DPERU; Director, NOHPC)
- Associate Professor David Brennan (Director, AIHW DSRU).

In August 2010, Assoc. Prof. Brennan relinquished the role of Director, AIHW DSRU. Subsequently the role of Co-Directors of DSRU until the end of 2011 was accepted by:

- Dr Jane Harford
- Dr Liana Luzzi.

(Photographs courtesy of P Liu, ARCPOH)

Professor A John Spencer

Director, ARCPOH
Professor of Social and Preventive Dentistry

John Spencer, MDSc, MPH, PhD, is a leading contributor of information and research around oral health and dental services in Australia through active involvement in surveillance activities, grant-funded research and higher degree student supervision. The main monitoring and surveillance activities with which he was associated were the preparation for the National Child Oral Health Survey and its initial implementation in Queensland, social inequality in oral health (periodontal disease) and access to dental services, the dental labour force in Australia and the monitoring of the implementation of the National Oral Health Plan through a set of key performance indicators.

Professor Spencer was involved in research leading to publications on fluorides, fluorosis and caries, and oral health inequalities.

Associate Professor Kaye F Roberts-Thomson

Deputy Director, ARCPOH
Director, DPERU
Director, NOHPC
Principal Research Fellow

Kaye Roberts-Thomson BDSc, MPH has research interests in oral epidemiology and dental public health, particularly in inequality in oral health and access to dental care. Her recent work has a particular focus on the oral health of Indigenous Australians, and health promotion for oral health.

In 2010 Kaye led a group which undertook work for the Australian Government on documenting access to dental care for rural and remote Indigenous Australians and possible pilot sites for various forms of mobile dental services. She also led a study on determinants of periodontal disease among urban Indigenous adults. A study conducted in 2004–2007 by a group of researchers including Kaye, and which tested an oral health promotion program to prevent dental decay in very young children, was recognised by the National Health and Medical Research Council (NHMRC) as one of the ‘10 of the best research projects 2010’.

Kaye also leads the National Oral Health Promotion Clearinghouse and the Dental Practice Education Research Unit, both of which seek to provide information on the latest research findings to a wider audience.
David Brennan, BA (Hons), Grad. Dip. (Computer & Information Science), MPH, PhD, undertakes health services research and oral epidemiological analysis. Originally from a biological sciences background, he also has qualifications in computer and information science and in public health.

He held a NHMRC Public Health Postgraduate Research Scholarship at The University of Adelaide in 1997–99, where he conducted his PhD research investigating the influence of provider, practice and patient factors on variation in rates of service provision. He has worked on projects involving both cross-sectional and longitudinal analysis of dental service provision, such as the Longitudinal Study of Dentists’ Practice Activity. In 2010 he was awarded a Career Development Award fellowship in population health from the NHMRC to investigate use of services and oral health outcomes over the period 2010 to 2013.

Jane Harford B.Bus., Dip.Soc.Sci., GDPH, Dip.App.Ec., PhD is a Research Fellow at ARCPOH. She joined ARCPOH in early 2003. She has a background in public health, health policy and health economics. Her research interests include the impact of population ageing on oral public health and on the provision of oral health care, strengthening a public health/primary care approach to oral health, the impact of various funding arrangements including government subsidies on oral health service delivery and status, and access to and priority setting in oral health care services. Jane currently holds an NHMRC project grant with other staff in ARCPOH to study community preferences for policy on the delivery of public dental services.

Jane is the ARCPOH representative on the Dental School’s Curriculum Review Implementation Committee and contributes to teaching in the areas of population oral health, health inequalities and evidence-based practice in the School’s undergraduate programs as well as teaching in the postgraduate Dental Public Health course.

Liana Luzzi is a Research Fellow at ARCPOH. Liana has been at ARCPOH since January 1999. She has completed a PhD in Dentistry (in 2005) and has a background in statistics (BSc (Ma.&Comp. Sc.)(Hons)). Liana is currently involved in health services research and analysis of data relating to oral health and access to dental care. She has worked on a range of projects involving both cross-sectional and longitudinal analysis of dental service use. Her research projects have included the development of a ‘relative needs index’ for dental care in SA and NSW, examination of job satisfaction of the oral health labour force in Australia, and examination of the use of emergency public dental services in South Australia. Liana has been involved in undergraduate teaching at The University of Adelaide since 2002. Liana currently co-coordinates and teaches a course to first year BDS and BOH students called ‘Evidence Based Dentistry’.
Governance

In formal terms ARCPOH is organisationally a component of The University of Adelaide. Its Director, like the heads of departments, other centres and academic units in the university, is responsible through the Dean of the School of Dentistry and Executive Dean of the Faculty of Health Sciences (FHS) to the Vice-Chancellor and Council.

The three component units of ARCPOH are also responsible to their respective stakeholders. Through the Director of DPERU there is a responsibility to Colgate Oral Care, and through the Co-Directors of DSRU there is a responsibility to the Director and Board of the Australian Institute of Health and Welfare (AIHW).

The National Oral Health Promotion Clearinghouse (NOHPC) is also located within ARCPOH. The Clearinghouse has a separate Advisory Committee. It has a responsibility to state/territory dental authorities and the Monitoring Group for Australia’s National Oral Health Plan (NOHP) which reports to the Australian Health Ministers’ Advisory Council (AHMAC) via the Australian Population Health Development Principal Committee (APHDPC).
Functions

To advise The University of Adelaide, the Director of ARCPOH and, where appropriate, collaborating organisations on:

- the important research questions in population oral health that could beneficially be addressed by ARCPOH, and the relative priority of those issues
- the formulation and regular updating of an appropriate strategic plan for the research program of ARCPOH
- operational planning for the research program of ARCPOH that encompasses collaboration and cooperation between relevant organisations, and the avenues through which resources can be found to support the program
- the means by which the outcomes of the centre’s research can be disseminated to inform public policy and professional practice
- the development and enhancement of the centre’s postgraduate research training activities, within the research program.

Membership

- Vice-Chancellor of The University of Adelaide or nominee (Convener) (Prof. Johann de Vries, Prof. Julie Owens)
- Director of the Australian Institute of Health and Welfare or nominee (Ms Amber Jefferson)
- Nominee of the Australian Government Department of Health and Ageing (Ms Veronica Hancock, Ms Margaret Noris)
- Nominee of Colgate Oral Care, Colgate-Palmolive Australia (Dr Barbara Shearer, Dr Susan Cartwright)
- Nominee of the South Australian Department of Health (Mr David Banham)
- Nominee of State and Territory Dental Services (Dr Martin Dooland)
- Nominee of the Universities of Melbourne and Otago (Prof. Murray Thomson)
- Nominee of The University of Adelaide, Discipline of Public Health (Prof. Christian Gericke)
- Community representative nominated by the Australian Council of Social Services (ACOSS) (Dr Tessa Boyd-Caine)
- Such other persons having expertise in public health including oral public health as may be thought desirable, including in the first instance a nominee of the Australian Dental Association (ADA):
  - Dr Karin Alexander (ADA)
  - Prof. Clive Wright
  - Assoc. Prof. Bruce Hollingsworth
  - Prof. John Lynch
- The Director of ARCPOH (Prof. John Spencer)
- Other representatives of the staff of ARCPOH (Assoc. Prof. Kaye Roberts-Thomson, Assoc. Prof. David Brennan, Dr Jane Harford, Dr Liana Luzzi).
Research program

ARCPOH is pursuing a broad strategy of coordinating the relevant research activities of the contributing components so as to enhance progress in the following main areas.

Distribution and determinants of oral health

Oral diseases and disorders remain widespread and extensive in the population. There is a fundamental requirement for research in documenting and exploring trends in oral diseases and their distribution in the population. Research that seeks to understand the determinants of change over time or variation between subgroups in the population is fundamental to the process of improving oral health.

Burden and impact of oral disease

Oral disease has traditionally been described in terms of clinical measures; for example, teeth with experience of disease. This research area extends the capacity to measure oral disease experience through measures of oral-health-related quality of life / wellbeing, and how oral disease impacts on daily living; for example, disability-adjusted life years. Such research has become crucial to identifying priority areas in national health agendas.

Research has identified marked variations in oral disease measures; for example, social gradients in oral health-related quality of life. An increased research effort is exploring factors underlying such variation, including individual behaviours and the individual, school/work and community circumstances that ultimately determine oral health.

Effectiveness of population oral health interventions

Previous research on water fluoridation and the prevention of dental caries and dental fluorosis continues, with additional emphasis on effectiveness in adult and older adult age groups. Findings of research on the determinants of oral disease will be tested in demonstration interventions; for example, support for carers of functionally dependent older adults. Research will continue on the effectiveness of office-based distance education of dental care providers in reorienting dental service provision towards preventive services.

Oral health services and labour force research

Access to high-quality dental care is fundamental to oral health-related quality of life and improved oral well-being. Too little research has been conducted on what works and why in the effective and efficient delivery of dental services. The particular focus in this research is on public dental care program evaluation, private dental insurance and dental provider behaviour. The dental labour force necessary to provide dental services is an area of increasing attention, given concerns over health labour force supply and distribution.

Oral health policy analysis

Research in population oral health has concentrated on documentation of problems and analysis of their distribution and influences. There is great need for an extension of this research into the area of policy analysis, related especially to the provision of public dental care. Such analysis is directed into cost analysis of public dental care programs under a range of assumptions and with differing approaches to the management of demand and patient flows.

These five research areas encompass an extensive range of potential projects. Research agenda setting meetings of the ARCPOH participants (Expert Advisory Committee) are held, together with other consultations, to determine the best means of pursuing the research, and thus arrive at an operational research program (work programs) for the immediate future and provisional plans for the medium to longer term.

Oral health promotion data warehouse and information clearinghouse

In addition to the five research areas, ARCPOH functions as a data warehouse and an information clearinghouse.
Framework for the research program and work programs within ARCPOH

- Distribution and determinants of oral health
- Burden and impact of oral disease
- Effectiveness of population oral health interventions
- Oral health services and labour force research
- Oral health policy analysis
- Oral health promotion data warehouse and information clearinghouse

Work program:
- AIHW DSRU: Dental health statistics
- DPERU: Dental labour force statistics
- National Oral Health Promotion Clearinghouse
The environment

The environment in which ARCPOH operated across 2010 was shaped by a number of key events:

• There was an ongoing interest in policy on oral health and dental services. This was readily apparent in the roll out of the National Hospital and Health Reform Commission package and the 2010 Federal Election. The Australian Labour Party entered an agreement with the Australian Greens recognising that ‘proposals for improving the nation’s investments in dental care should be considered in the context of the 2011 Budget’. Some Independents also expressed concerns over dental services. As a result, there has been continued interest in information to inform policy and ARCPOH is well positioned to respond to the need for such information.

• The competitive research grant and award environment has become increasingly important to ARCPOH, but success rates in a number of key grant (NHMRC Project Grants) and award (NHMRC Career Development Awards) lines are modest and have slightly decreased. This increases the vulnerability of the research program to grant success. As a consequence, there is a need to consider strategies for maintaining or growing research grant and award income.

• ARCPOH’s core surveillance activities in the area of the dental labour force and history of value adding research like the Longitudinal Study of Dentists’ Practice Activity (LSDPA) will transition to new arrangements under national health practitioner registration through the Australian Health Practitioner Regulation Agency (AHPRA) and new stakeholders like Health Workforce Australia (HWA). For a time there will need to be a coordinated effort to promote dental labour force surveillance and research activity and ARCPOH’s role in this area.

• ARCPOH collaborated with state and territory dental authorities in the collection of data (Child Dental Health Survey, Adult Dental Programs Survey) and reporting and interpretation of dental statistics in general. There were conflicting issues in the context surrounding these data collections: constrained state/territory budgets, yet a strong interest among many for up-to-date, improved quality data. This resulted in a varied responsiveness of states/territories to a range of proposals to maintain existing activities or initiate new activities. Ultimately, this could impact on the coverage and quality of information.

• The nature of the work and processes undertaken by the Australian Institute of Health and Welfare (AIHW) in bringing surveillance work to publication have changed in recent years and that is having an impact on the work in ARCPOH under the AIHW banner.

• The advent of the Excellence in Research for Australia metrics for universities requires that ARCPOH is mindful of where it publishes and the citation of its research as well as the need to inform Australian policy through domestic journals with lower impact factors. These issues can be in conflict and need careful consideration.

• All primary data that could potentially be required to validate research is now required to be retained and stored in an appropriate fashion. This is a major issue for ARCPOH with its many large data sets. A beginning has been made but the issue will require more action in the future.

• These events impact upon the nature and scope of the surveillance work of ARCPOH through the AIHW DSRU and the investigator-driven research studies particularly of early- and mid-career researchers.
Highlights
In 2010, there were some notable highlights:

• In January 2010, ARCPOH appointed Dr Loc Do as a Senior Research Fellow and in March welcomed back Dr Gloria Mejia as a Research Fellow, both in Oral Epidemiology. This brings to a close the ‘replacement’ of Professor Gary Slade who was the Professor of Oral Epidemiology.

• The return of researchers with previous experience at ARCPOH: Dr Gloria Mejia’s return in March was followed by the return in June of Dr Peter Arrow as a Senior Research Fellow. Peter was with ARCPOH at the beginning of the 2000 decade. Mr Serge Chrisopoulos also returned to work with ARCPOH in November 2010. It is tremendous that researchers like these have gained experience elsewhere and been willing to return to ARCPOH once more.

• Dr Lisa Jamieson proposed and organised a symposium on Indigenous oral health at the IADR 2010 in Barcelona, Spain. Not only was the symposium well attended and wrapped up with a lively panel discussion, the papers behind the presentations have been published as a supplement to the International Dental Journal 2010;60(Suppl. 2).

• Success with an NHMRC International Collaborative Indigenous Health Research Partnership grant (ICIHRP) led by Lisa Jamieson with Kaye Roberts-Thomson and John Spencer as two further CIs from ARCPOH. The project title is ‘Reducing disease burden and health inequalities arising from chronic dental disease among Indigenous children: an early childhood caries intervention’.

• ARCPOH enjoyed reasonable success in NHMRC grants with two project grants being successful. One project grant led by Jane Harford, Liana Luzzi and Haiping Tan will repeat the former South Australian Dental Longitudinal Study (SADLS) on a new generation of older adults and the second will be a randomised clinical trial of a non-invasive treatment of caries in deciduous teeth of Aboriginal children.

• ARCPOH staff led six 2011 NHMRC Project Grant applications and were involved in a further two applications and an Australian Research Council (ARC) Project Grant. A 2011 Career Development Award (CDA) application has also been lodged.

• ARCPOH received funding support to enhance the 2010 National Dental Telephone Interview Survey (NDTIS) (additional questions, additional 5–17 year old proxy interviews and new 1–4 year old proxy interviews) and to initiate the Dental Expenditure Panel Survey (DEPS).

• ARCPOH staff (Spencer, Do, Roberts-Thomson, Ellershaw and Beckwith) were active in assisting Queensland Health in the implementation of the Queensland Child Oral Health Survey. This project is now covered by a formal grant agreement and is acting as the forerunner of the planned National Child Oral Health Survey.

• Dr Lisa Jamieson was a finalist in the 2010 SA Science Awards, Excellence in Research for Public Good.

• Late in 2010, a funding proposal for the National Oral Health Promotion Clearinghouse (NOHPC) was approved by the Monitoring Group, a meeting of representatives of all jurisdictions and the Australian Dental Association (ADA). At that meeting, funding for the work that ARCPOH undertakes in reporting on the key performance indicators on the implementation of the National Oral Health Plan for Australia for the Monitoring Group was also confirmed in principle.

Changes

Professor John Spencer stepped down as Director of ARCPOH at the end of 2010 after an outstanding career in that role. His contribution to the establishment of AIHW DSRU, and later ARCPOH, and his leadership of those bodies, as well as his mentorship through supervision of postgraduate students and staff throughout his time in Adelaide, have resulted in an internationally renowned centre.

In August 2010 Associate Professor David Brennan relinquished the role of Director of DSRU in order to concentrate on the research program under his NHMRC CDA.

In August 2010 Drs Jane Harford and Liana Luzzi accepted the role of Co-Directors of DSRU through to the end of 2011. This shared role will enable them to contribute their complementary skills while both gaining the experience of managing an important part of ARCPOH’s activities.

Lowlights

• The peer review process for grant applications continued to throw up its mix of reviews that are highly competent and insightful through to some that are, at best, bizarre. While it is easy to recommend attention be given to the panel of assessors and/or the assignment of assessors to specific grant applications as the solutions to this concern, the immediate future still seems to be governed by chance and idiosyncratic behaviour.

• Proposals to actively participate in the monitoring of the Council of Australian Governance (COAG) performance indicators on waiting time and access to dental services among Indigenous Australians have largely been by-passed.

• Late in 2010, the Australian Electoral Commission (AEC) contacted staff from ARCPOH on the possible breach of a Safeguard Agreement on the use of AEC data for the NDTIS 2007. The issue was a misunderstanding by ARCPOH as to what an AEC approval for use of ‘protected information’ had covered in terms of the involvement of subcontractors. The involvement of subcontractors (to provide matched phone numbers) had been noted by the AEC in an AIHW publication on the ‘Electoral roll matching project’. The AEC recognised that the breach was the result of a misunderstanding and has not pursued the issue. ARCPOH has clarified what needs to be done if subcontractors are to be involved in the use of protected information.

• Staff have worked hard to address the publication backlog and adjust to changes in processes for publications through AIHW. This has resulted in considerable pressure and stress for some staff.
Work program

Overall

- After a period of overly demanding work programs with AIHW and AGDHA, the new work plans have a more realistic set of deliverables and achievable timelines. However, there is a considerable number of AIHW publications in the production queue.

Distribution and determinants of oral health

- The CDHS 2005–06 and 2007 reports are close to finalising. A series of difficulties in non-availability or limited availability of data, and subsequent weighting issues, have slowed progress.

- The NHMRC project on ‘Associations between periodontal disease and cardiovascular surrogate end points in an Indigenous population’ (Jamieson et al.) has found recruitment of suitable participants difficult and is looking at broadening the scope for recruitment.

- The fieldwork for two NHMRC Project Grants involving oral epidemiological examinations in South Australia is underway (Caries Initiation and Natural History of Fluorosis). As both involve examinations outside of Adelaide, these are demanding on time and resources to complete.

- ARCPOH staff are maintaining an active involvement in advice, provision of training and quality control through ‘gold standard’ examinations as part of the Queensland Child Oral Health Survey (QCOHS) grant agreement.

Burden and impact of oral disease

- A developing focus of recent analyses has been social gradients in oral health. This has involved caries and periodontal disease in adults using the NSAOH data set and caries in children using the Child Fluoride Study Mark 2 data set. Factors associated with the social gradient have been explored.

Effectiveness of population oral health interventions

- ARCPOH staff (Dr H Tan, Ms K Jones and Professor AJ Spencer) have contributed to an evaluation of the Northern Aged Care Dental Project with SADS. Scientific publications will now be prepared.

- Several presentations and publications have appeared out of the Strong Teeth Study and Strong Teeth for Little Kids Study in the Northern Territory.

- The analysis of the long-term follow-up of the ‘Cavity free children study’ has found mixed results on efficacy of this anticipatory guidance/parental support program in preventing caries at age 6–7 years old. Interpretation of the results has been made more complex by the finding that all participants (test and control groups from pregnancy to 20 months of age) have better outcomes at age 6–7 years than a comparison group of SDS enrolled children.

Oral health services and labour force research

- As a complementary activity to the 2010 NDTIS, a Dental Expenditure Panel Survey (DEPS), has been planned and gained ethical approval from The University of Adelaide. DEPS will commence at the start of November. A smaller number of the 2010 NDTIS interviewees will be asked to complete a Financial Impact of Dental Services (FIDS) questionnaire.

- A report on projections of supply and demand for Oral and Maxillofacial Surgeons was drafted and delivered to the Australian and New Zealand Association of Oral and Maxillofacial Surgeons (ANZAOMS) in May 2010. A monograph and subsequent ADJ Data Watch article have been completed on the supply and demand for Oral and Maxillofacial Surgeons (OMFS), and ‘Services and projections (2006–2025) for oral health practitioners and specialist dentists’ is well underway.

- The first meeting of the research team for the NHMRC ‘Willingness to pay’ project, together with the international consultant Professor Cam Donaldson, occurred in Melbourne in mid-September.

Oral health policy analysis

- Professor Spencer produced a short 6-point-plan to promote discussion of policy directions on dental services to be pursued by the Federal Government.

Oral health promotion data warehouse and information clearinghouse

- A ‘state of the state’ report on SA oral health and dental services in 2008 was published through the new University of Adelaide Press:


- The Data Watch series in the Australian Dental Journal has continued with four published papers in 2010:


Teaching

- ARCPOH staff have been active at both planning and implementation of the new BDS curriculum (Dr J Harford) and delivery of the material (many staff).

- A number of ARCPOH staff have completed courses in Teaching @ University (Dr H Tan) or HDR candidate supervision courses (Dr P Arrow, Dr G Mejia). Up to four researchers will soon undertake the Principal Supervisor Course, enabling a better distribution of HDR supervision roles within ARCPOH.
ARCPOH project summary

Distribution and Determinants of Oral Health

- Child Dental Health Survey
- Adult Dental Programs Survey
- Indigenous Oral Health
- Aboriginal Birth Cohort Study – Wave 3 (NHMRC)
- A community-owned Indigenous oral health promotion initiative (AIATSIS)
- A cognitive theory of the etiology of fear
- Child Fluoride Study Mark II (NHMRC)
- Determinants of oral health of adults entering the fourth decade of life (NHMRC)
- National Survey of Adult Oral Health (NHMRC, AIHW, ADA, CDC, Colgate, states/territories)
- A life-course epidemiological approach to understanding oral health inequalities (NHMRC)
- Dentine sensitivity in Australia
- Social gradients in child oral health status and access to services
- Factors contributing to socioeconomic gradients in children’s oral health between 1993 and 2003 (NHMRC)
- Diabetes and periodontal health (NHMRC)
- Home for Oral Health (ADRF)
- Factors associated with water fluoridation support in Australia (ADRF)
- National Dental Anxiety and Fear Survey (ADRF)
- Oral health literacy among carers of people with disabilities
- Risk indicators for periodontal disease in an urban Aboriginal population (NHMRC)
- NSW Teen Survey
- Caries initiation from childhood to adulthood (NHMRC)
- Natural history of fluorosis (NHMRC)
- Queensland Child Oral Health Survey (QCOHS)
- Explaining social inequality in population oral health using a multilevel approach (NHMRC)
- Associations between periodontal disease and cardiovascular surrogate endpoints in an adult Indigenous population (NHMRC)
- An oral health literacy intervention among carers of people with disabilities
- Risk indicators for periodontal disease in an urban Aboriginal population (NHMRC)

Burden and Impact of Oral Disease

- Nutritional intake and dentition status (ADRF)
- The impact of dental services on quality of life (APA scholarship)
- Food choice and tooth loss among the elderly (ADRF)
- Monitoring population periodontal disease in health interview surveys
- Validation of a Vietnamese version of the OHIP (ADRF)

Effectiveness of Population Oral Health Interventions

- A best-practice oral health model for Australian residential care (NHMRC)
- Better Oral Health in Residential Care
- Northern Aged Care Dental Project
- Strong teeth for little kids (Menzies)
- Health Promotion and Early Childhood Caries (ADRF; Channel 7 Children’s Research Foundation)
- The Dental Practice Education Research Unit
- Strong teeth project (NHMRC) – Fluoridation of water supplies in remote Indigenous communities in the NT
- Population Oral Health Project
- Early childhood oral health promotion project (WA)
- Centre for Clinical Research Excellence (CCRE)

Oral Health Services and Labour Force Research

- National Dental Telephone Interview Survey and associated activities
- National Dental Labour Force Data Collections
- The Longitudinal Study of Dentists’ Practice Activity
- Development of treatment choice factors over time/Study of Dental Services (ADRF)
- Evaluating profile changes in first-year BDS students, Adelaide Dental School, over 10-year period
- Study of private subsidisation of dental care in Australia (ADRF)
- Acquisition of treatment choice knowledge among dental undergraduates (ADRF)
- Impact of insurance on use of dental services and oral health (NHMRC)
- The impact of declining tooth loss on oral health status and dental care utilisation (NHMRC)
- Public dental service utilisation in South Australia (NHMRC Postgraduate Scholarship)
- Private health insurance and use of dental services (ADRF)

Oral Health Policy Analysis

- Impact of changes in public policy on access to dental care
- Impact of ageing on dental costs
- Willingness to pay for public dental services
- Reasons for having/not having insurance
- Contribution to National Health and Hospitals Reform Commission
- Policy analysis

Oral Health Promotion Data Warehouse and Information Clearinghouse

- National Oral Health Promotion Clearinghouse
- ARCPOH web site
## Staff list

<table>
<thead>
<tr>
<th>Professor</th>
<th>Professor A John Spencer, Professor of Social and Preventive Dentistry (Director, ARCPOH)</th>
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<tr>
<td>Adjunct Professor</td>
<td>Professor Gary D Slade (University of North Carolina)</td>
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| Associate Professors / Principal Research Fellows | Assoc. Prof. Kaye F Roberts-Thomson (Deputy Director, ARCPOH; Director, DPERU; Director, NOHPC)  
Assoc. Prof. David S Brennan (Director, AIHW DSRU, until August) |
| Senior Research Fellows | Dr Jason Armfield (overseas fellowship)  
Dr Loc Do  
Dr Lisa Jamieson (maternity leave until August) |
| Research Fellows | Dr Peter Arrow (from June)  
Mr Serge Chrisopolous (from November)  
Dr Jane Harford (Co-Director, AIHW DSRU, from August)  
Dr Liana Luzzi (Co-Director, AIHW DSRU, from August)  
Dr Gloria Mejia (from March)  
Dr Kiran Singh |
| Lecturer | Dr Haiping Tan |
| Research Associates | Dr Najith Amarasena  
Dr Wendy Cheung  
Dr Diep Ha  
Ms Kelly Jones  
Dr Pingzhou Liu  
Dr Kamila Plutzer  
Dr Archana Pradhan |
| Academic Staff from the School of Dentistry | Ms Sue Gardner  
Ms Jenny Miller  
Ms Katrina Plastow  
Mr Clinton Kempster  
Dr Eleanor Parker |
| Research Officers | Mr Madhan Balasubramanian  
Ms Katie Beckwith  
Ms Anne Ellershaw  
Ms Xiangqun Ju  
Ms Kirsten Kennington (from August)  
Mrs Judy Stewart  
Ms Dana Teusner  
Dr Alexis Zander |
| Administrative Staff | Mr David Harley  
Mrs Leonie Jeffery  
Mrs Lorna Lucas  
Mrs Silvana Marveggio  
Ms Alison McLean  
Ms Thanh Nguyen (maternity leave until May)  
Ms Teresa Phung |
| Casual Administrative Staff | Mrs Beverly Ellis  
Mrs Sharon Miller |
Staffing changes

Staffing at ARCPOH became more settled after a period of recruitment and the securing of new contracts. Drs Gloria Mejia (March 2010) and Peter Arrow (June 2010) were recruited and are now well settled in their roles in ARCPOH. Drs Haiping Tan and Jane Harford have received new contracts, both with a continued component of School of Dentistry support.

Ms Kirsten Kennington commenced with ARCPOH in August 2010, working on Indigenous oral health projects. Mr Serge Chrisopolous began work with ARCPOH in November 2010.

Additional staff (several) will be recruited to also work on the new ICIHRP grant which focuses on prevention of early childhood caries.

There have been some adjustments to the scope of work of existing staff. Mostly this is associated with a continuation of assistance to research projects but with a new focus and funding source for salaries.

Securing key research staff in ARCPOH

After a considerable period of uncertainty about the security with many early- and mid-career staff positions in ARCPOH, a good working agreement was reached with the School of Dentistry (and Faculty of Health Sciences). Two further Research Fellow contracts were renewed (Dr Jane Harford and Dr Haiping Tan). Further, the general principle with regard to ARCPOH’s support from the School of Dentistry being regarded as a ‘one line budget’ and salary savings being retained by ARCPOH has been agreed. A second principle which has been discussed is that of a limited safety net under positions largely externally-funded. This would see some short-term support for retaining research staff who face reductions or loss of external support for a short period of time, for example, a year. While this has been negotiated on two recent occasions (2008 and 2009) it has not had to be put into effect.

Accommodation and facilities

There has been no change to ARCPOH’s accommodation. Some internal movements have occurred to prepare the 2nd Floor space for soon to be recruited staff and PhD students. However, all remaining space is occupied and ARCPOH faces difficulty in accommodating additional staff involved in Indigenous oral health projects and any successful new grants.

ARCPOH has been approached to enter into discussion about some reorganisation of space occupied at 122 Frome Street. This could involve relocating some/all of the 2nd Floor activities to the Ground or 3rd Floors.

Awards

- Associate Professor David Brennan was awarded a four-year NHMRC Career Development Award (CDA) (Level B) beginning January 2010.
- Dr Diep Ha was awarded the 2010 International Association for Dental Research (IADR) Lion Dental Research Award for Junior Investigators at the IADR Barcelona, Spain in July 2010.

Visiting researchers

- Dr Najith Amarasena, Department of Community Dental Health, Faculty of Dental Sciences, University of Peradeniya, Sri Lanka, July 2008–June 2010.
- Dr Ngo Dong Kahn, Vice-Director, National Hospital of Odontostomatology, Ho Chi Minh City, Vietnam, 20–21 April 2010.
- Professor Trinh Dinh Hai, Director, National Institute of Odontostomatology and Vice-Dean, University of Odontostomatology, Hanoi, Vietnam, 20–21 April 2010.
- Professor Tony Harris and Mr Ben Levett, Monash University, Centre for Health Economics, 17 September 2010.
- Dr Keith Watkins, Chair of Clinical Examinations for the Australian Dental Council, 11 October 2010.
- Professor Helen Whelton, Director of the Oral Health Services Research Centre at University Dental School and Hospital, University College Cork, Ireland, 16–18 November 2010.
- Mr Fearnley Szuster, Data Development Specialist, Health Workforce Australia, presented a seminar on his study of the Careers of South Australian health professional graduates, 26 November 2010.
- Dr Emily Wesley, Health Department of Papua New Guinea Government, 8–17 December 2010.

Visiting researchers from Vietnam:
Dr Ngo Dong Kahn and Professor Trinh Dinh Hai with Assoc. Prof. Kaye Roberts-Thomson and Professor John Spencer [Image supplied by P Liu, ARCPOH]

Professor Trinh and Dr Ngo visited Adelaide in April to discuss further collaboration with ARCPOH in research training and research projects. Specifically, a new collaboration to conduct the third national oral health survey in Vietnam was discussed.
Finances

ARCPOH receives its funding from a range of stakeholders. In 2010, under agreements, ARCPOH received $372,000 from AIHW as a collaborating health unit and for COAG activities. COAG funding of $21,000 is considerably lower than 2009–10 when it was $148,000. In 2010 ARCPOH received continuing funding of $309,000 and an additional $217,000 from AGDHA to enhance NDTIS 2010 and implement a Dental Expenditure Panel Survey. ARCPOH received $78,000 from the SADH via SADS, $144,000 from SADS and $175,000 from Colgate Oral Care.

In addition, ARCPOH received substantial research support, $1,921,000, via competitive research grants and $301,000 from competitive awards. The amount of Category 1 National Competitive Research funding greatly increased from 2009. A further $126,000 came from research contracts/consulting services. Scholarships income was ~$44,000, while an additional $68,000 was received from RIBG and $38,000 from SRE funds. Some $70,000 was received from the Deputy Vice-Chancellor (Research) (DVC-R) and the Faculty of Health Sciences (FHS) for Oral Epidemiology as well as an additional $456,000 in support from the School of Dentistry for academic staff in ARCPOH.

Agreements, grants and contracts, 2010

Total funding $4,319K

† Includes AJ Spencer (1.0), S Marveggio (0.8), L Do (0.66), G Mejia (0.6), H Tan (0.5)

Competitive personal awards from NHMRC was reduced as the NHMRC Capacity Building Grant was finished (there was some carry forward in 2010). Most research fellows under the CBG have been either appointed under different funding sources e.g. NHMRC CDA and CCRE, Research Unit in Oral Epidemiology. Only one research fellow is being supported by CBG carry forward but has a secure contract for 2011–13. AHMAC/APHDPC funding for the National Oral Health Promotion Clearinghouse ceased for 2010.
Financial status: Cash flow 1 January to 31 December 2010 ($)

<table>
<thead>
<tr>
<th></th>
<th>AIHW</th>
<th>AGDHA Acute Care Division(^1)</th>
<th>AGDHA Acute Care Division NDTIS(^2)</th>
<th>SADH(^3)</th>
<th>SADS</th>
<th>Competitive research grants</th>
<th>Scholarships/Fellowships(^2)</th>
<th>Colgate Oral Core</th>
<th>Clearing House(^4)</th>
<th>School of Dentistry ARCPOH/Slade etc.(^6)</th>
<th>CENTRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating revenue</td>
<td>492,750</td>
<td>252,888</td>
<td>57,000</td>
<td>276,696</td>
<td>72,000</td>
<td>1,910,160</td>
<td>160,541</td>
<td>561,348</td>
<td>175,878</td>
<td>34,682</td>
<td>160,541</td>
</tr>
<tr>
<td>Total expenses</td>
<td>384,082</td>
<td>293,472</td>
<td>188,549</td>
<td>206,322</td>
<td>150,968</td>
<td>1,309,726</td>
<td>269,620</td>
<td>448,142</td>
<td>131,348</td>
<td>18,621</td>
<td>104,960</td>
</tr>
<tr>
<td>Operating surplus (deficit)</td>
<td>108,668</td>
<td>(40,584)</td>
<td>(131,549)</td>
<td>70,373</td>
<td>(78,968)</td>
<td>600,434</td>
<td>(109,079)</td>
<td>113,206</td>
<td>44,530</td>
<td>16,061</td>
<td>11,128</td>
</tr>
<tr>
<td>Accumulated funds (deficit) at the beginning of reporting period</td>
<td>(78)</td>
<td>(21,993)</td>
<td>95,200</td>
<td>55,023</td>
<td>18,806</td>
<td>513,706</td>
<td>(14,121)</td>
<td>8,514</td>
<td>(15,924)</td>
<td>394</td>
<td>862,470</td>
</tr>
<tr>
<td>Accumulated funds (deficit) at end of reporting period</td>
<td>108,591</td>
<td>(62,577)</td>
<td>(36,349)</td>
<td>125,396</td>
<td>(60,162)</td>
<td>1,114,140</td>
<td>113,864</td>
<td>99,085</td>
<td>53,044</td>
<td>137</td>
<td>11,522</td>
</tr>
</tbody>
</table>

1. Funding from the Australian Government Department of Health and Ageing (AGDHA) to the National Dental Telephone Interview Survey (NDTIS) delayed for the second half of 2010.
2. Transfer of funds from AGDHA to NDTIS account delayed for 2010.
3. SADH account line receiving Deputy Vice-Chancellor (Research), Faculty of Health Sciences and School of Dentistry contributions to Research Unit in Oral Epidemiology.
4. Consulting figures include both the Adelaide Research and Innovation (ARI) consulting account and University consulting account. University consulting account deficit to be reduced with transfer out of expenses e.g. postage and printing to other research accounts.
5. Consulting funds were used as income for the Clearinghouse.
6. Includes Research Infrastructure Block Grants (RIBG) and Sustainable Research Excellence (SRE) funding returned to researchers.

The financial position revealed by the year-to-date financial report was concerning in the accumulation of uncommitted funds in several lines. Some caution in making short-term appointments across the year has led to salary fall-in.

Support

External support through agreements

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Agreement</th>
<th>Agreement Period</th>
<th>Funding Period</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Institute of Health and Welfare (AIHW)</td>
<td>AIHW Dental Statistics and Research Unit</td>
<td>2008–11</td>
<td>2008–09</td>
<td>$350,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2009–10</td>
<td>$350,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2009–10</td>
<td>$148,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010–11</td>
<td>$ 21,000</td>
</tr>
<tr>
<td>Australian Government Department of Health and Ageing (AGDHA) via AIHW under a Memorandum of Understanding (MoU)</td>
<td>Adult oral health and access to dental care</td>
<td>2008–11</td>
<td>2009–10</td>
<td>$309,888</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010–11</td>
<td>$309,888</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010–11</td>
<td>$216,672</td>
</tr>
<tr>
<td>SA Department of Health (SADH)</td>
<td>Research Unit in Oral Epidemiology</td>
<td>2010–14</td>
<td>2009–10</td>
<td>$78,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010–11</td>
<td>$78,000</td>
</tr>
<tr>
<td>Colgate Oral Care</td>
<td>Dental Practice Education Research Unit</td>
<td>Rollover of agreement</td>
<td>2010</td>
<td>$140,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>plus NZ $20,000 (~AS$18,610)</td>
</tr>
<tr>
<td>South Australian Dental Service (SADS)</td>
<td>Contract research</td>
<td>2010</td>
<td>2010</td>
<td>$144,000</td>
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</tbody>
</table>
Grant status

2010 Competitive grants – continuing

<table>
<thead>
<tr>
<th>Grant*</th>
<th>Grantees</th>
<th>Topic</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHMRC ID No. 519246</td>
<td>Roberts-Thomson KF, Bartold PM, Daniels J, Magarey A and Meihubers S</td>
<td>Risk indicators for periodontal disease in an urban Aboriginal and Torres Strait Islander population</td>
<td>2008–10 2008 $106,075 2009 $165,038 2010 $55,250</td>
</tr>
<tr>
<td>NHMRC ID No. 565321</td>
<td>Brennan DS and Teusner D</td>
<td>The impact of insurance on the use of dental services and oral health</td>
<td>2009–11 2009 $63,625 2010 $66,000 2011 $66,000</td>
</tr>
<tr>
<td>NHMRC ID No. 565379</td>
<td>Spencer AJ, Do L and Liu P</td>
<td>Caries initiation across childhood to adulthood by exposure to water fluoridation</td>
<td>2009–10 2009 $151,000 2010 $42,375</td>
</tr>
</tbody>
</table>

* CIHR – Canadian Institutes of Health Research; NHMRC – National Health and Medical Research Council; NZ HRC – Health Research Council of New Zealand.
## 2010 Competitive grants – new

<table>
<thead>
<tr>
<th>Grant*</th>
<th>Title</th>
<th>Investigators</th>
<th>Period</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM Gibson Scientific Research Fund</td>
<td>A pilot study on prevention of caries in older adults in residential aged care</td>
<td>CIA: Haiping Tan CIB: John Spencer CIC: Liana Luzzi</td>
<td>2010</td>
<td>Total: $5,000</td>
</tr>
</tbody>
</table>

## Consultancies / Contracted Research

<table>
<thead>
<tr>
<th>Grant*</th>
<th>Grantees</th>
<th>Topic</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ Ministry of Health</td>
<td>Roberts-Thomson KF</td>
<td>National Oral Health Survey of NZ</td>
<td>2010 A$7,200</td>
</tr>
<tr>
<td>Australian Government Department of Health and Ageing</td>
<td>Roberts-Thomson KF</td>
<td>Tender – Indigenous dental services</td>
<td>2010 $119,000</td>
</tr>
</tbody>
</table>
## Fellowships

<table>
<thead>
<tr>
<th>Grant*</th>
<th>Grantees</th>
<th>Topic</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHMRC Capacity Building Grant in Population Health</td>
<td>Slade GD, Spencer AJ, Roberts Thomson KF</td>
<td>Oral health research for the Australian population</td>
<td>2005–09 $498,638/year Carry forward 2010 $228,207</td>
</tr>
<tr>
<td>NHMRC Career Development Award</td>
<td>Jamieson LM</td>
<td>Indigenous oral health</td>
<td>2009–2012 $82,500</td>
</tr>
<tr>
<td>NHMRC Postgraduate Overseas Training Fellowship</td>
<td>Armfield JM</td>
<td>Understanding the role of psychological factors in the etiology, prevention and treatment of high dental fear</td>
<td>2009–11 $103,776 pa 2011–13 $71,250 pa</td>
</tr>
<tr>
<td>NHMRC Career Development Award ID 627637</td>
<td>Brennan DS</td>
<td>Use of dental services and oral health outcomes</td>
<td>2010–2013 $104,250</td>
</tr>
</tbody>
</table>

## Postgraduate students

<table>
<thead>
<tr>
<th>Student</th>
<th>Degree</th>
<th>Topic</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madhan Balasubramanian</td>
<td>PhD</td>
<td>Migration of international dental graduates</td>
<td>2010–2013</td>
</tr>
<tr>
<td>Meghashyam Bhat</td>
<td>PhD</td>
<td>Factors affecting oral health in rural India</td>
<td>2010–2013</td>
</tr>
<tr>
<td>Diep Ha</td>
<td>PhD</td>
<td>Factors influencing the accuracy of caries risk assessment</td>
<td>2003–2010</td>
</tr>
<tr>
<td>Jocelyn Ho</td>
<td>PhD</td>
<td>The burden of oral disease in Australia</td>
<td>2004-2006 intermittted</td>
</tr>
<tr>
<td>Kelly Jones</td>
<td>PhD</td>
<td>Relative needs index validation and testing</td>
<td>2003-2010</td>
</tr>
<tr>
<td>Kostas Kapellas</td>
<td>PhD</td>
<td>The effect of non-surgical periodontal therapy on arterial/arteriole blood flow</td>
<td>2010-2012</td>
</tr>
<tr>
<td>Jenny Miller</td>
<td>PhD</td>
<td>Social gradients in child oral health</td>
<td>2006-2010</td>
</tr>
<tr>
<td>Eyiptope Ogunbodede</td>
<td>PhD (remote candidature)</td>
<td>Study of the impact of oral health on the dietary habits and nutrition of Nigerian adults</td>
<td>2006-2008 commenced Semester 2 2006 candidature suspended</td>
</tr>
<tr>
<td>Eleanor Parker</td>
<td>PhD (half-time)</td>
<td>Indigenous oral health literacy</td>
<td>2009-2014</td>
</tr>
<tr>
<td>Anu Polster</td>
<td>PhD (external)</td>
<td>Risk assessment and oral health outcomes in child dental services</td>
<td>1999-2005 intermittted</td>
</tr>
<tr>
<td>Sutee Suksudaj</td>
<td>PhD</td>
<td>Effects of social capital on oral health of Thai rural villagers</td>
<td>2006-2010</td>
</tr>
<tr>
<td>Dana Teusner</td>
<td>PhD</td>
<td>Dental insurance and use of services</td>
<td>2008-2010</td>
</tr>
<tr>
<td>Archana Pradhan</td>
<td>D Clin Dent</td>
<td>Oral health literacy among carers of people with special needs</td>
<td>2008-2010</td>
</tr>
</tbody>
</table>
## Honours students

<table>
<thead>
<tr>
<th>Student</th>
<th>Degree</th>
<th>Topic</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kostas Kapellas</td>
<td>Hons</td>
<td>Diabetes and periodontal health (Slade, Do)</td>
<td>2007–2009 Completed</td>
</tr>
<tr>
<td>Clinton Kempster</td>
<td>Hons</td>
<td>Allied dental labour force (Luzzi, Roberts-Thomson)</td>
<td>2008–2009</td>
</tr>
<tr>
<td>Mathew Lim</td>
<td>Hons</td>
<td>Perceived and actual oral health status in Australian migrant populations (Do, Slade)</td>
<td>2008–2009 Completed</td>
</tr>
<tr>
<td>Katrina Plastow</td>
<td>Hons</td>
<td>Diet and dental caries (Spencer, Roberts-Thomson, Armfield)</td>
<td>2007–2009</td>
</tr>
</tbody>
</table>

## University of Adelaide Scholarships

<table>
<thead>
<tr>
<th>Student</th>
<th>Degree</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madhan Balasubramaniam</td>
<td>Adelaide International Scholarship</td>
<td>2010-2013</td>
</tr>
<tr>
<td>Meghashyam Bhat</td>
<td>Adelaide International Scholarship</td>
<td>2010-2013</td>
</tr>
</tbody>
</table>
Chile

I was invited to be a speaker at the IV Dental Statistics Meeting to be held in January 2011 at the University of Talca in Chile. (This was my second invitation to the University of Talca; the first had been in 2006).

The three-day Dental Statistics Meeting will be held concurrently with the XI National Biostatistics Meeting and the IX Chilean Seminar on Bayesian Statistics. Attendees will be researchers and academics in the fields of Biostatistics, Statistics and Dentistry (with a focus on research methods).

I was asked to give a research presentation and a short course on epidemiologic methods in dental research. My presentations will be focused on the use of conceptual models to support epidemiologic analyses of social determinants and on new trends in epidemiologic studies and measures including intergenerational and life course methodologies.

During the same visit, I will also lead an information session on higher degree research training in the Faculty of Health Sciences at the University of Adelaide.

China

I was invited to present at the 2nd China-ASEAN forum on Dentistry, held in Nanning, China, 28–31 October 2010. The College of Stomatology, Guangxi Medical University was the organiser of the event under the sponsorship of the Ministry of Health, PR. China and the People’s Government of Guangxi Zhuang Autonomous Region, PR. China.

The scientific presentation was entitled ‘Priorities for Oral Health: individuals or populations, gaps or gradients?’

During the conference I had the opportunity to network with the Ministers of Health or their representatives, Dental Directors and other policy makers from Asian countries. As a result, I was later asked to form part of the consulting team that was to lead the National Survey of Oral Health in Brunei. Eventually, the Brunei Ministry of Health invited ARCPOH to be the lead consulting organisation.

Peter Arrow

ARCPOH Reflections

I commenced with ARCPOH in June 2010, second time around after my first visit in 2000/01. The opportunity to return to ARCPOH was most welcome because ARCPOH has a justified reputation as a pre-eminent centre of research excellence in population oral health in Australasia and its research and researchers, under the leadership of Professor John Spencer, are highly regarded nationally and internationally. The centre has continued to produce valuable research that stimulates and leads the debate on oral health and assists in the development of policy options for the nation’s oral health. The information provided by the centre through its publications is used by various agencies, both private and public throughout Australia, to highlight issues of relevance for their local constituency or to canvass the issues affecting the oral health of the nation.

As a public health dentist with an interest in community oral health research the opportunity to return to work at ARCPOH and gain further experience in oral health research has been of immeasurable benefit to me personally. I believe that such exchange is also of value to the profession and to the practice of dental public health and that such opportunities should be further developed and nurtured for the future generation of dental public health practitioners in Australia. ARCPOH is well placed to lead and develop such initiatives. There is a clear need for an interface between research and practice, and the peak health research funding agency, the NHMRC, clearly value the establishment of such an interface. This is of fundamental importance, especially in population oral health, and I believe public health practice in the process is further enriched.

There are also opportunities to extend and further develop the association between dental public health practitioners and researchers through collaboration in the seeking of competitively funded scholarships, such as NHMRC Practitioner Fellowships, and making positions available for those scholarships to be tenable at ARCPOH. The development of such linkage calls for ARCPOH to actively seek out such opportunities for engagement, which should extend throughout Australia.

I have benefitted greatly from the opportunity to come and work at ARCPOH and I hope that the benefits have been mutual. I encourage ARCPOH to further develop and extend such opportunities.
Lisa Jamieson
Indigenous oral health grants

Lisa Jamieson has been successful in obtaining competitive National Health and Medical Research Council grant funding for three oral health initiatives among Australia’s Indigenous population. A brief overview of these projects is presented below. The projects follow on the back of other Indigenous oral health investigations conducted by ARCPOH researchers, including, but not limited to, testing the feasibility of water fluoridation in remote Indigenous communities, a primary health model to address early childhood caries among Aboriginal children in the Northern Territory and various oral health promotion initiatives among Indigenous groups.

Reducing disease burden and health inequalities arising from chronic dental disease among Indigenous children: an early childhood caries intervention ($1.4 million over 5 years)

There is evidence of four ways in which Early Childhood Caries (ECC) can be successfully prevented: provision of dental care to mother during pregnancy; fluoride varnish application to teeth of children; anticipatory guidance and motivational interviewing. Anticipatory guidance is a developmentally-based counselling technique that focuses on the needs of a child at a particular life stage, while motivational interviewing focuses on strategies to move carers from inaction to action. Funded through an International Collaborative Indigenous Health Research Partnership grant, with collaborators in New Zealand and Canada, the goal of this study is to determine if implementation of a culturally-appropriate ECC intervention, that employs a tailored approach and draws on a range of Indigenous-relevant contexts including oral health knowledge, oral self-care, dental service utilisation, oral health-related self-efficacy and oral health literacy, reduces dental disease burden and oral health inequalities among pre-school Indigenous children in South Australia; (2) the proposed intervention combines participation and partnership with Indigenous communities with a high quality, rigorous research methodology that will give the best possibility of valid, relevant and immediately applicable outcomes; (3) the benefits of this approach and any positive outcomes of the intervention are likely to extend beyond oral health and; (4) if successful, this would be the first high quality oral health intervention research to be done across all three nations. An added strength is that a tailored schema will be adopted, meaning specific intervention components are personalised to match the needs of each mother and her family.

Associations between periodontal disease and cardiovascular surrogate endpoints among Indigenous adults in Darwin and Alice Springs ($1.3 million over 3 years)

The relationship between periodontal disease and cardiovascular surrogate endpoints, both of which are high among the Indigenous Australian population, is established. This study seeks to explore the prevalence of cardiovascular surrogate endpoints among this population with periodontal disease, and to determine if implementation of a periodontal intervention leads to improved cardiovascular risk outcomes. There may be benefit in applying this model to other areas of Indigenous health research. Considering that, at the very least, periodontal therapy would improve oral health, that periodontal therapy becomes an integral component of preventive cardiology treatment is worthy of further study.

This will be a delayed intervention study, with all participants receiving the periodontal intervention benefits. The study is important in three main ways: (1) it will be the first investigation examining the effectiveness of periodontal therapy in changing cardiovascular surrogate endpoint levels in an Indigenous Australian population; (2) it will be the first investigation to monitor changes in cardiovascular surrogate endpoints following periodontal intervention at both 6 and 12 months and; (3) the findings could be used to develop a generalisable oral health policy/practice protocol for Indigenous community members with poor cardiovascular health.

An Oral Health Literacy Intervention among Port Augusta Aboriginal adults to better improve the knowledge and use of dental services ($550,000 over 3 years)

ARCPOH researchers are proud of their close working relationship with Indigenous community members of Port Augusta, established in 2004. Our background work demonstrated that those with poorer oral health literacy engage in more harmful oral health literacy-related knowledge and behaviours and that, after adjusting for confounding, poor oral health literacy-related outcomes are risk indicators for poor self-rated oral health. The goal of this study is to determine if implementation of a functional, context-specific oral health literacy intervention improves oral health literacy-related outcomes, as measured by oral health knowledge, oral health self-care, utilisation of dental services and oral health-related self-efficacy, among Aboriginal adults residing in Port Augusta and surrounds.

The study employs a delayed intervention design, with all participants receiving the oral health literacy intervention benefits. If evaluation of the project shows that an intense, interactive oral health literacy intervention improves oral health literacy-related outcomes, it will be tangible evidence of the benefit in having Aboriginal health workers employed in an oral health promotion/literacy capacity in Aboriginal medical centres. Outcomes of the initiative could also be useful for Aboriginal medical centres when negotiating with funding bodies such as the South Australian Dental Service in regards to oral health program continuation.

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The National Dental Telephone Survey 2010 (NDTIS 2010) is the eighth NDTIS in a series that commenced in 1994. As part of the Australian Government Department of Health and Ageing information requirements, a National Dental Telephone Interview Survey (NDTIS) of a general population sample (i.e. a random sample of Australian residents in all states and territories) is conducted every two and a half years to obtain up-to-date data on access to dental care, self-assessed oral health status, present oral health treatment needs, use of dental services and preventive behaviours, cost of dental care and oral health related quality of life.

The 2010 National Dental Telephone Interview Survey (NDTIS) began in mid-June 2010, and will be completed in early 2011. In total, during 2010 interviews were conducted with 6,765 adults and 2,541 children.

The target sample size for the 2010 NDTIS was:

- 6,600 adults aged 18 years or older
- 400 children aged 2–4 years and
- 3,000 children aged 5–17 years.

Adult interviews and interviews for children aged 2–4 years were completed in December 2010, with some 850 interviews for children aged 5–17 outstanding to be completed in 2011.

Interviews were conducted using computer-assisted telephone interviewing (CATI) across all states and territories of Australia. Approximately one week prior to contacting the household, a primary approach letter explaining the purpose of the survey and encouraging participation was mailed to each sampled household.

When a sampled household was called each attempt was automatically recorded by the WINCATI program. Calls were scheduled during the weekday, weeknights and Saturdays to maximise the likelihood of making contact with a household. Each sampled household was initially called up to six times before it was designated as a non-contact. An adult was selected at random from households included in the survey, and where household occupants included children an additional interview was carried out for a randomly-selected child aged 2–17 years.

ARCPOH research staff members made modifications to the CATI questionnaire, such as the inclusion of questions on chronic disease (adult interview) and the Teen Dental Plan (child interviews for participants aged 12+ years). Pilot testing of new questions in the CATI questionnaire was carried out, followed by recruiting and training the team of interviewers.

In 2010, the NDTIS included the following enhancements which have been funded by the Australian Government Department of Health and Ageing: a follow-up panel survey on dental services and dental expenditure with a target of 3,200 completed questionnaires (Dental Expenditure Panel Survey (DEPS) and a Financial Impact of Dental Care Study (FIDS)).
Dental Expenditure Panel Survey (DEPS)

This survey is a follow-up survey sent to 5,400 people who participated in the National Dental Telephone Interview Survey (NDTIS). It seeks to collect detailed expenditure information on individual and household expenditure on dental care over a 12-month period. It is a longitudinal panel study involving the follow-up of subjects twice in a 12-month period through collection of client-held records. These records collect information on the use of dental services and the related costs (both charges and payments) on all sampled persons for each dental event they experience in the year, including the amount from each payment source. The study is based on the US Medical Expenditure Panel Survey. The detailed service use and expenditure data will add a layer of detail to documenting and analysing access to dental services and to costing analyses and economic modelling to simulate policy proposals.

Financial Impact of Dental Care Study (FIDS)

This study is a follow-up questionnaire sent to 1,600 people who participated in the National Dental Telephone Interview Survey (NDTIS). Approximately 30% of NDTIS participants report that cost prevented them from obtaining recommended treatment. This study seeks to ascertain details on delayed dental visiting and altered treatment choices made by individuals and families due to cost barriers. Other items of interest are the indirect costs of seeking dental care such as time off work, travel and childcare. The impact of dental costs and decisions about dental visiting and treatment choices on other purchasing decisions and family life will also be investigated.

Computer Assisted Telephone Interview staff at work [Images supplied by P Liu, ARCPOH]
Publications

**AIHW DSRU Research Reports**


**ARCPOH Population Oral Health Series**

ARCPOH published papers

WORKING PAPER:

DATA WATCH:

JOURNAL ARTICLES:


LETTER:


ARCPOH Books

BOOK CHAPTERS:


Accepted for publication


Armfield JM. Australian population norms for the Index of Dental Anxiety and Fear (IDAF-4C). Aust Dent J.

Armfield JM and Akers HF. Community water fluoridation support and opposition in Australia. Community Dent Health.

Balasubramanian M and Short SD. Is the concept of ethics misplaced in the migration of Indian trained dentists to Australia? The need for better international cooperation in dentistry. Indian J Dent Res.


Brennan DS and Singh KA. Grocery purchasing among older adults by chewing ability, dietary knowledge and socio-economic status. Pub Health Nutr.


Singh KA and Brennan DS. Chewing disability in older adults attributable to tooth loss and other oral conditions. Gerodontology.


Submitted for publication


Presentations

Vietnam-Australian Oral Health Collaborative Initiatives: What has been achieved and where to from here?, 23 April 2010, Melbourne Dental School, Royal Dental Hospital, Carlton, Victoria, Australia


International Federation on Ageing, 10th Global Conference, 3–6 May 2010, Melbourne, Victoria, Australia

Oral health assessment by registered nurses in residential aged care facilities. Tan H.

88th General Session and Exhibition of the International Association for Dental Research (IADR), 14–17 July 2010, Barcelona, Spain

Impact of a triage system for prioritizing urgent dental care. Jones K*, Slade GD, Spencer AJ.

Assessment of the Index of Dental Anxiety and Fear (IDAF-4C+). Armfield JM.


Impact of oral health care on elders in residential care. Tan H*, Spencer AJ.

An introduction to oral health inequalities among Indigenous and non-Indigenous populations. Parker E.


Caries risk assessment in South Australian School Dental Services. Ha D*, Slade GD, Spencer AJ.


Social inequality in the distribution of periodontitis. Spencer AJ*, Ellershaw A, Do L.


International Union of Health Promotion and Education Conference, 11–16 July 2010, Geneva, Switzerland

Self-reported oral health among an Australian metropolitan homeless population: comparisons with population-level data. Parker EJ*, Jamieson LM, Steffens MA, Cathro PR, Logan RM.

* Presenter
The 57th Annual European Organisation for Caries Research (ORCA) Congress, 7–10 July 2010, Montpellier, France

Individual fluoride exposure history better explain effect of water fluoridation than area-level fluoridation status. Do LG*, Spencer AJ, Roberts-Thomson KF, Armfield JM.


Australian Dental Association Victorian Branch (ADAVB), Dentistry 2010 Convention, 30–31 July 2010, Melbourne, Victoria, Australia

Dentine hypersensitivity: its presentation and management strategy in Australian dental practice. Spencer AJ.

School of Dentistry Research Day, 27 August 2010, The University of Adelaide, South Australia

Caries risk assessment in South Australian School Dental Service. Ha DH.

Comparison of individual, school and area SES measures for targeting dental services. Miller J.

International Association for Dental Research (IADR), Australian and New Zealand Division, Golden Jubilee Meeting, 27–29 September 2010, Kiama, New South Wales, Australia

Soft drink consumption and moderating risk factors for dental caries. Armfield JM*, Spencer AJ, Roberts Thomson KF.

Influences of change in oral health-related quality of life. Crocombe LA*, Brennan DS, Slade GD.

Comparison of SES measures for targeting dental services. Miller J*, Spencer AJ, Roberts-Thomson KF, Blinkhorn AS.

Eleven-year trend in the impacts of oral conditions among elders. Tan H*, Spencer AJ.

Dental insurance status, attitudes to dental care and dental visiting. Teusner DN*, Brennan DS, Spencer AJ.

Public Health Association of Australia (PHAA) 40th Annual Conference, 27–29 September 2010, Adelaide, South Australia

Dental service provision and change in oral health. Brennan DS.

Prevention of dental caries in remote Indigenous pre-school children. Roberts-Thomson KF.

Relative change in clinical oral health outcomes – capital city vs. non-capital-city Australians. Stewart JF.

Australasian Epidemiological Association Annual Conference, 30 September – 1 October 2010, Sydney, New South Wales, Australia

Dental caries in Australian school children: 30 years of surveillance. Mejia GC*, Spencer AJ, Roberts Thomson KF, Brennan DS.

Age-specific smoking-related individual risk and population attributable fraction for periodontal disease in the Australian adult population. Do LG*, Spencer AJ, Roberts-Thomson KF.

2nd China ASEAN Forum on Dentistry, 28–31 October 2010, Nanning, The People’s Republic of China

Priorities for oral health: individuals or populations, gaps or gradients? Mejia GC.

Images supplied by P Barnard