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Oral health in NSW

Improved oral health information for NSW

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Oral health services are an integral part of the New South Wales (NSW) health care system.¹ A population approach to the prevention of dental decay through water fluoridation and a systematic prioritisation of access to public dental health services on the basis of need have been the foundations of policy and provision of oral health services in NSW for more than half a century.

Oral health information collected on a population basis is used for a variety of planning purposes: monitoring trends and patterns in oral health and disease; assessing treatment needs across populations; identifying and prioritising implementation programs; and evaluating the outcomes of programs and approaches. Planning information is collected in various ways: randomised monitoring surveys either of the clinical status of populations or their use and perceptions of oral health and oral health services; aggregate routine data collected from service users; service-mix profiling from either questionnaire surveys or routine data collection analyses; special ad hoc surveys which investigate specific population groups or geographical areas; and longitudinal evaluation of specific programs and intervention regimens.² No single method provides the full picture of a population's needs, expectations or priorities, but each approach contributes significantly to providing more comprehensive evidence to underpin public policies and decision-making.

Policy changes and implementation of innovative approaches to prevention and provision of oral health services must make best use of limited resources and be based on sound evidence and research evaluation. Changes are occurring in the directions for prevention and service delivery in NSW,

led largely by national and state strategic planning and funding opportunities. These developments must be evaluated against best practice and best investment opportunities in public oral health provision.^{3–5}

This special issue of the *Bulletin* provides the most recent objective oral health information on the people of NSW. It builds upon the previous *National Oral Health Survey of Adults of 1987–88*, data collections from School Dental Service compilations dating back to the 1970s and the recent collaborative research with the Australian Research Centre for Population Oral Health.^{6–8}

Between 1996 and 2000, NSW adopted a screening approach to reporting the prevalence and severity of dental decay in children. The Save Our Kids Smiles (SOKS) program systematically under-reported the extent of dental caries in NSW children.⁹ Further, the introduction of a more targeted school dental service program in 2001 only collected information from school children at designated schools within disadvantaged populations, and only reported oral health data on those children who required dental treatment. Consequently, since 2001, with the lack of representative clinical data, oral health information on NSW children has not been included in national datasets by the Australian Institute of Health and Welfare.¹⁰ The randomised selection of schools and children for the current child dental survey is thus a milestone in NSW and Australia. Rather than relying on routine data collection from an increasingly biased sample of public service users, this current survey provides a more representative sample on which to base sound future goals and targets. The child dental survey described by Phelan et al. in this issue of the *Bulletin*

also provides adequate numbers of children in the key age groups, 5–6 years and 11–12 years, for area health service level monitoring and planning. This too is the first time such information has been available for rational local planning purposes.

There are gaps still in the objective randomised oral health data available. For example, the age ranges in the child dental survey do not include preschool children, some adolescent groups and populations with special needs. However, the data now available for NSW children 5–12 years of age are of sufficient dimension and robustness to provide area health services and the NSW Department of Health with strong markers for child oral health status. Changes can be measured against such markers as decay experience and enamel fluorosis as both population-based and specific preventive programs and different service modalities are implemented.

The Child Dental Health Survey also confirms the need for policy and planning directions to focus on reducing inequalities in oral health. A more complete picture is emerging on who and where the most advantaged children are with respect to oral health gains. This complete overview raises the question of what oral health services can do to address the determinants of this inequality and what they can do to provide a better framework for intervention programs.

Sivaneswaran's analysis of the adult oral health survey findings in NSW show that NSW data are consistent with trends across Australia.⁸ In many aspects, the NSW population has achieved a higher level of oral health gain (for example, lower than average rates of total tooth loss) since the previous adult oral health survey than Australia overall. Again, however, it is the inequity in both access to dental services and the oral health outcomes that are the striking findings. The question the findings pose is how can we reduce the higher burden of oral diseases carried by those on low-incomes, those living in rural and remote NSW, and those without private dental health insurance.

The paper by Skinner et al., also published in this issue of the *Bulletin*, provides an insight into the oral health workforce in rural NSW and current initiatives that aim to meet the challenges of access, especially for rural and low-income communities.

Unlike the child dental survey, the NSW section of the adult oral health survey does not provide a sufficiently large sample to break down the oral examination information by area health service. There is therefore an ongoing need to both complement the data already gained with additional ad hoc surveys and establish a cycle of repeat randomised oral epidemiological surveys. However, the representative nature of the data collected at the state level, and their use in a sound and exploratory fashion, provide

one of the first opportunities in NSW to evaluate exactly how well the NSW oral health system has been moving toward its stated strategic goals and objectives: for example, assessing the levels of oral health gain; setting reasonable targets for the next decade; identifying equity issues that have been disclosed to permit policy changes to reshape investment; recognising which efforts are required to reduce inequalities in access to dental services and oral health outcomes; and determining which public-private partnerships could be considered to find better geographical distributions to access problems.

Clinical oral health data collected through randomised surveys do not exist in a vacuum. Highly valuable information collected through the NSW Population Health Survey Program can be viewed in parallel with the present data to provide a more complete picture of the links between oral health activities and population perceptions of oral health. For example, the *2005–2006 Report on Child Health*, the *1997–2007 Report on Young Adults* and the *1997–2007 Report on Older People* supplement information from the oral health clinical data sets to permit more robust analyses of changing patterns and dental service usage in relationship to what is being measured at the clinical level.^{11–13}

About 50% of 5–12-year-old children are reported to be caries free in the present survey, while the *2005–2006 Report on Child Health* found that 66.3% of 5–15-year-old children did not report any oral health problem within the previous 12 months. The perception of oral health need at a population level is therefore lower than suggested by the objective (clinical) data. In the younger aged population therefore, health planners should be vigilant to ensure that the overall trend toward improved oral health in children and adolescents does not lead to a lessening of advocacy for population prevention of dental disease or early childhood interventions.

Similarly, the somewhat static proportion of those aged over 65 who have visited a dental professional within the previous 12 months between 2002 and 2007 should be weighed against the objective evidence of the massive decline in the rates of edentulism (total tooth loss) and increased retention of more natural teeth in older people than was previously the case in 1987–1988.¹³

With one clear exception, what is evident in both sets of clinical data, and what runs through the NSW Population Health Survey Reports, is the low impact that our current clinical and preventive practices are having on reducing inequalities in oral health outcomes. The exception relates to water fluoridation.

While Blinkhorn, reassures us that the oral health of children and adults in NSW is 'as good as and in some cases better than' comparative populations from the United

States and the United Kingdom, both the current reports on NSW oral health information give us no reason for complacency.

The question that should therefore be at the forefront of our minds from the information presented in the following papers is whether we have the right preventive and early intervention systems in place, and the right assessment tools for tackling the major issue of inequalities in oral health. Wealth, ethnicity, access to private insurance and geography are key modifiers in the prevalence and distribution of dental disease and in access to dental services. Programs and methods to reduce inequities and inequalities should be the focus of intensive evaluation and investment. This approach should be accompanied by the development of an oral health equity assessment process to ensure that both initiatives and traditional dental practices are appropriately evaluated for inequity reductions as well as overall oral health gains for the NSW community.

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