31 October 2017

Dr Jane Doolan
Productivity
Commissioner
National Water Reform Inquiry
GPO Box 1428
Canberra City ACT 2601

Dear Commissioner Jane Doolan,

Re: National Water Reform - Draft Report - September 2017

Dental Health Services Victoria (DHSV) welcomes the opportunity to comment on the Productivity Commission's draft inquiry report on the National Water Reform. It is very encouraging to see the Productivity Commission acknowledge the gains that have been made in relation to water reforms, conservation, allocation and environmental sustainability.

As part of the successful community population health and wellbeing initiative, several water agencies through various campaigns promote the benefits of drinking tap water over bottled water and sugar sweetened beverages enabling communities to enjoy good oral health. The water sector's commitment to these important public health initiatives is commendable.

The provision of safe drinking water underpins the oral and general health and wellbeing of our communities. In line with DHSV's vision statement "Oral Health for Better Health" DHSV would like to take this opportunity to respond to the Productivity Commission's findings from a public dental service perspective.

DHSV would like to thank the Productivity Commission for granting DHSV an extension until the 31st of October 2017.

Yours sincerely

Acting CEO
Mark Sullivan
Dental Health Services Victoria
Dental Health Services Victoria - Submission to Productivity Commission's draft inquiry report on the National Water Reform

Dental Health Services Victoria (DHSV) is the leading public oral health agency in Victoria with the aim to improve the oral health of all Victorians, particularly vulnerable groups and those most in need. DHSV provides oral health services through The Royal Dental Hospital of Melbourne and in partnership with over 50 community dental agencies throughout the state. DHSV implements state-wide oral health promotion programs, invests in oral health research, advises the government on oral health policy and supports the education of future oral health professionals. DHSV will contribute to the delivery of the key strategies of Australia’s National Oral Health Plan 2015-2024, the Victorian Health and Wellbeing Plan 2015-2019 and the Victorian Action Plan for Oral Health Promotion 2013-2017.

Water Fluoridation and Dental Caries

Despite being largely preventable, dental caries (tooth decay) is the most prevalent health problem in Australia (1). An overwhelming scientific evidence from more than 20 countries support community water fluoridation as a cost-effective, socially equitable and safe public health intervention that prevents dental caries and reduces the rates of preventable dental related admissions to hospitals for treatment (2-5). Studies in Victoria have shown that young children living in areas without water fluoridation have 59 per cent higher rates of admissions to hospital for dental treatment compared with children living in fluoridated areas, when controlling for access to dental health professionals and socioeconomic status (6).

Water fluoridation is given high priority by public health authorities across the globe and is supported by many international organisations, including the World Health Organization, the World Health Assembly and the World Dental Federation. Australia’s National Oral Health Plan supports all states and territories fluoridate water as part of their management of safe and clean drinking water (1).

DHSV continues to support water fluoridation as part of its mission to implement value-based health care in Victoria, to achieve the best outcomes at the lowest cost, with a focus on evidence-based prevention and health promotion to reduce the number of preventable dental related hospital admissions.

Water is a ‘tooth friendly’ drink and contains no tooth decay causing sugar

Consumption of Sugar Sweetened Beverages (SSBs) is a major risk factor for dental caries. Promoting tap water over other beverages is critical to combat and counter the adverse health outcomes of SSB consumption. Our environment in this era is saturated with the production,
consumption and access to a wide variety of SSB at home, school and social settings altering children’s water consumption pattern. The nutritional profiles of SSB differ, with minimal or no potential nutritional benefits when consumed, however they are fast replacing water as the drink of choice. (7, 8).

Findings from systematic reviews have demonstrated links between frequent SSB intake with unhealthy weight, increased risk of other adverse health effects such as tooth decay, metabolic syndromes, high blood pressure, type 2 diabetes and cardiovascular disease in children and adults (7, 8). The Victorian Population Health Survey 2014 reported that a total of 11.2 per cent of adult Victorians drank SSBs daily (9). For children aged two to 18 years, over one-third (35 per cent) drank SSBs in the 24 hours preceding the survey (10). Children aged 2 to 10 years with a predominantly high SSB consumption were found to be 1.8 times more likely to experience dental caries in the primary dentition than children with a predominantly high water consumption pattern (11). Compared to children with predominantly high water consumption patterns, children with predominantly high consumption of SSBs are more likely to experience tooth decay and more primary tooth extractions (12). Increased exposure to fluoridated public water will aid to ameliorate the association between SSB consumption and dental caries (12).

**Consuming tap/public water is an important oral health behaviour**

Since the mid-1990s, the rate of tooth decay among children has increased in some states and territories (13). The factors implicated in this increase include increased consumption of SSBs and the increased consumption of non-fluoridated bottled water (14). There has been concern in recent years that the growing popularity of un-fluoridated bottled water may displace consumption of fluoridated water and contribute to a stalling or reversal in gains in child oral health (15). The results from the recent National Child Oral Health Survey showed significant variations in children’s tap and mains water consumption patterns across Australia. Children living outside of Major city areas were less likely to consume tap or mains water, as were Indigenous children, children whose parents had school-only education, those from lower income households and children who made their last dental visit for a dental problem. These children were also more likely to consume bottled water (15). These patterns of water consumption may contribute to a widening of social inequalities in child oral health (15).

**Community level factors have long been recognised to have an impact on water consumption**

Water agencies play an important role in improving public oral health. Water characteristics may be the main reason that most communities prefer other forms of water to reticulated
supplies (16). For example, poor aesthetic characteristics of drinking water undermine the confidence of consumers and could lead to the use of water from alternative sources that are less safe (16). The provision of drinking water that is not only safe but also aesthetically acceptable influences community perceptions of risk and quality of water. Physical characteristics of drinking water such as the appearance, taste, odour, and ‘feel’ of water determine what consumers experience when they drink or use water and how they rate its quality (2).

**Water initiatives that DHSV supports**

DHSV as part of its range of health promotion and prevention programs strongly advocates consumption of water with an aim to help establish healthier habits, with water becoming the main choice of beverage in the long-term. Through DHSV’s state-wide oral health promotion initiatives such as, *Smiles 4 Miles* and *Healthy Families, Healthy Smiles*, water is widely promoted in a range of community settings as the drink of choice.

DHSV is in discussion with Victorian Water Industry Association and a number of other water boards to promote water fluoridation and create awareness of the importance of water to oral health. In addition DHSV supports campaigns such as VicHealth’s H30 Challenge, which asks people to make a simple 30-day pledge to replace SSBs with water and the Rethink Sugary Drink, a national social marketing campaign which aims to reduce consumption of SSBs and encourages Australians to choose water.

This year on the World Environment Day (5 June), DHSV pledged its support to Leadership and water, two of the 10 interconnected goals of the Global Green and Healthy Hospitals framework, a global agenda developed by Health Care Without Harm to promote greater sustainability and environmental health.

**Conclusion**

Water agencies enable the prevention of oral diseases by providing access to safe drinking water and contribute to improved oral health outcomes by supplying fluoridated drinking water. Public trust is at the core of promoting tap water and is a shared responsibility by communities, water agencies, health services, the Department, the Essential Services Commission and the Department of Environment, Land, Water and Planning (17). To protect and enhance public health and wellbeing, we must all continually work to ensure tap water is safe, pleasant, reliable and accessible, so that it is the drink of choice. Understanding of the community perceptions about water quality, concerns and self-identified needs will better enable the design and implementation of effective public health programs across population.
References


