Address to Whakatane Stakeholders on retention of fluoridation.
By Dr D M A Haszard ED BDS FNZDA
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As the Oral Health Advisor and Approving Dental Officer to the Midland Group of District Health Boards (which includes Bay of Plenty) I have a particular interest in, and responsibility for, the oral health of Whakatane residents, particularly the children and adolescents.

The Ministry of Health will provide ample scientific data to show the efficacy and safety of fluoridation. In this submission I intend to give you a personal insight gathered from my observations and experience. In particular I wish to answer those who say that the effectiveness of fluoridation is not proven. I also will comment on the need for the section of the community who by their age or circumstances are not able to exercise the freedom of choice.

I have worked in dentistry for more than 45 years, 39 of which have been in New Plymouth. For some of this time I also operated branch practices in Stratford and Inglewood. Before moving to Taranaki I worked in Dunedin, Porirua, Wellington, Waihi, Melbourne and London. During the last five years I have been the Oral Health Advisor and Approving Dental Officer for the Midland Group of District Health Boards of Waikato, Bay of Plenty, Lakes, Tairawhiti and Taranaki.

This range of experience has given me a unique insight into the variations in oral health, both nationally and internationally. More importantly I have witnessed the huge improvements that

followed the introduction of fluoridation in the late 1960's and early 1970's.

When I started practice in NP and Stratford in 1974 (a short time after the introduction of fluoridation of the NP and Stratford water supplies) my regular workload included **removing all of the teeth, from an average of five patients, every week.**. 3rSlide Many of these procedures required general anaesthetics in hospital. Most of the patients were aged in their 20's and 30's but even more disturbing some were still teenagers.

By the 1980's and 1990's due to the decision to fluoridate the water in the New Plymouth and Stratford , there was a marked improvement in dental health: The need for this sort of work diminished to such an extent that for the combined years 2007 and 2008**,** in my practice, **only one patient required a full dental clearance.**

To move to another age group: In the early 1970's most dentists had a regular list of pre-school children referred to them for the treatment of what was known as rampant caries. The most serious required multiple extractions, while the less serious ones, multiple fillings. Terribly difficult and distressing work for the operator, and even worse for the unfortunate child.

Again, as the effects of fluoridation took effect in New Plymouth and Stratford, this work began to diminish significantly. However, for the non-fluoridated areas of Waitara and Inglewood no such change could be observed and children with rampant caries continued to be referred for treatment at the same disturbing rates. (Waitara was not fluoridated until the 1990's)

During the time that socialised dentistry was funded and managed by the Department of Health rather than, as now, by the individual DHB's, a manual system of maintaining records and making payments was operated for Taranaki by an office in NP: It was a relatively simple procedure for the Principal Dental Officer to access and collate treatment rates by the individual dentists who had the 12-16 year old age group on their patient rolls, and to supply to the dentists that information for their records and their interest.

In my three practices in 1978 because of the rapid rate of decay I generally needed to **see patients every six months**. **Xrays were taken twice a year** and on average each adolescent patient required **6.25 fillings per year.** It is important to recognise that the 13 year olds of 1978 had missed out on fluoridated water for the first 5 years of life and as a sample did not reflect the full advantage of fluoridation as did the cohorts from 1983 onwards.

Over the next 14 years the rate of fillings per year reduced continuously. By 1992 the rate in my New Plymouth practice

was down to **0.24 fillings per child per year**. Most of these fillings were for repair of tiny formation defects. Furthermore one annual appointment had become the norm and **xrays were being taken only every two years**. Similar figures were reflected in the Stratford practice. To put this in a 2013 cost perspective

the **1978 costs per child per year were $746.00** as against **1992 where the cost was $101.00** (most of which was the examination fee). Just under one seventh of the earlier cost.

However the **Inglewood practice** showed **3.4 fillings per child, per year**.

These rates had lowered a little which can be explained by the motivated families using fluoride tablets and toothpastes. Furthermore, many Inglewood adolescents spent school and leisure time in New Plymouth thereby being exposed to fluoridated water.

In my current role as the Approving Dental Officer for the five DHB's of the Midland Area, I receive and consider for approval, the treatment plans from contracting dentists for non-schedule and extensive repair work. These requests and the amount of work needed point clearly to more work being required for those who live in non-fluoridated towns of the region.

It is interesting to note for the Midland catchment , of some 50,000 children, that of over 7000 requests that I have processed during the last five years only four have been for the treatment of **alleged** fluorosis. I examined these patients

individually and on current diagnostic pointers I doubt that they were actually a result of fluorosis, but more likely developmental defects. I discussed the possible treatment options, two felt the need to actually do something about the discolouration. One patient was from Hamilton (fluoridated) and the other was

from a small farming community in the west of the Waikato with its own water supply. .

Fluoridation has been in use in Hastings for nearly sixty years and in other regions slightly less. So far no one has been able to truly demonstrate valid conclusions of any detrimental effect from this adjustment to 0.7 ppm of the fluoride ion in the public water supply.

The benefit is that dental decay has been beaten from something that affected over 99% of our population significantly, to something where in the school age population of fluoridated areas, we find less than half have experienced any decay and most of those only to a minor extent.

From a District Health Board perspective it is worrying to find that in this age of the rights of the individual, less than 70% of our adolescent population take advantage of the 'Free Dental Service' offered. Of the more than 30% that do not access dental care. Many do not know about or do not care about practising good oral hygiene procedures and often these families do not see the importance of, or do not wish to seek, professional dental care. Further to that, as we know, many are inflicting a diet on themselves that is dangerous to their health and well-being and more specifically potentially disastrous for their teeth. In the fluoridated areas they get away with it more or less. But not so in the unfluoridated areas.

As a society we cannot overlook the responsibility that attaches to making decisions for a community.

To those who consider there might be a risk from fluoride, I ask you to weigh that view against the very definite and known risks of high rates of dental disease and treatment: Treatments often requiring general anaesthetics which involve significant costs and some degree of risk. Oral health is inextricably connected to good general health. Dental caries and gum disease are now well recognised as bacterial infections influenced by all the fermentable carbohydrates (starches and sugars.) that we eat. In areas where adequate levels of fluoride are available the rate of progress of these diseases is hugely diminished.

Consider the disadvantage of starting adult life with numerous fillings or no teeth, compared with the opportunity to have strong enamel and dentine, free of decay. Whether in terms of health, self- confidence, or future expense, the advantages cannot be denied

To those who say it is an individual's right to choose, and who think those who wish to can use fluoridated toothpaste and take tablets, the question to ask is what about those 30% or more of vulnerable children who cannot rely on the adults around them to know about, to care about, to manage, or even afford the use of fluoride toothpaste or tablets?

You as Stakeholders in the Community have the opportunity and indeed the obligation to make the right choice to provide the greatest benefit for the greatest number of your people. I

urge you to continue your policy of making the safe, and beneficial **adjustment** of the fluoride levels, to 0.7 parts per million, to your public water supply.