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The Psychological Impact of Dental Fluorosis

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DENTAL FLUOROSIS: Smile, please - but don't say 'Cheese'

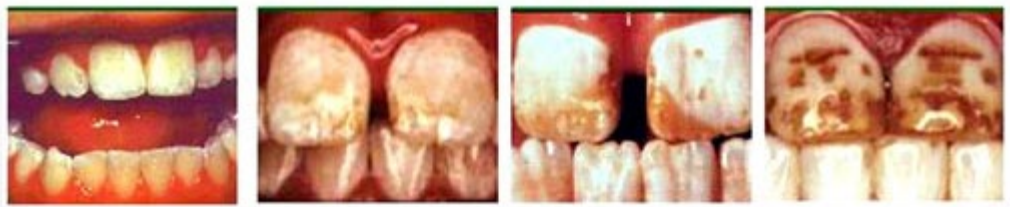
ABSTRACT

At least THREE MILLION people in England suffer from dental fluorosis. The Government's York Review on water fluoridation showed that about THREE QUARTERS OF A MILLION people have dental fluorosis which is "of concern". No studies have ever been done on the psychological damage caused by fluorosed (stained) teeth. A 1998 survey showed that people with defective teeth are more likely to experience social and employment discrimination.

Half of the respondents saw unattractive teeth as a sign of poor personal hygiene. International scientists concur that dental fluorosis is a FORESEEABLE event from fluoridating drinking water, and the victims are at increased risk for psychological and behavioural problems and difficulties. This can be the subject of litigation against those who promote and implement water fluoridation.

Those involved in the promotion and implementation of water fluoridation are vulnerable to significant legal liability.

Reparations for the foreseeable consequence of dental disfigurement are likely to be further compounded by punitive damages which can be awarded for subsequent psychological pain and suffering experienced by the Plaintiff. (1)



"After a handshake, a friendly smile is one of the most important elements in creating a good first impression. However, it's hard to smile if you're self-conscious about teeth that are yellow or stained."

School of Dental Medicine, University of New York

"After a handshake, a friendly smile is one of the most important elements in creating a good first impression. However, it's hard to smile if you're self-conscious about teeth that are yellow or stained."
- School of Dental Medicine at the University of New York (2)

A 1998 survey by the American Academy of Cosmetic Dentistry showed that:

- ◆ More than 92% of adults agree that an attractive smile is an important social asset;
- ◆ 85% believe that an unattractive smile makes a person less appealing to the opposite sex;
- ◆ 75% believe that an unattractive smile can be detrimental to a person's chances of career success; and
- ◆ Half of the respondents see unattractive teeth as a sign of poor personal hygiene.

Overall, the survey found that people with unattractive smiles are more likely to experience social and employment discrimination.

According to the UK Government's systematic scientific review on water fluoridation, carried out at York University, about forty eight per cent of people living in fluoridated areas are affected by dental fluorosis.

In England, this translates to nearly *three million individuals* who have fluorosed teeth to some degree. For *three quarters of a million people*, dental fluorosis is of the "moderate to severe" degree. The condition is characterised by white chalky spots or brown staining and pitting of their teeth. (3)

In 1985, following a review commissioned by the United States Environmental Protection Agency, an independent panel of behavioural scientists found that people with moderate to severe fluorosis are at increased risk of experiencing psychological and behavioural problems. (4) (5)

People afflicted with dental fluorosis are more likely to experience discrimination from an early age. Teachers often prejudice a child's intellect and personality based on appearance alone. These children are more often likely to be considered as troublemakers or non-scholars. Such biased views reinforce a negative stereotype, with self-fulfilling results. (6)

Thousands of official documents confirm that artificial fluoridation of drinking water can, and does produce the "aesthetically objectionable" effect of moderate to severe dental fluorosis. The psychological damage suffered by millions of victims of dental fluorosis is given little attention.

Moreover, in the persistent drive to extend fluoridation schemes across the country, dental and public health officials dismiss this distressing condition as an acceptable public health trade-off, insisting that "the benefits outweigh the risks."

The Department of Health asserts that water fluoridation is the most cost-effective means of reducing tooth decay. However, the Department turns a blind eye to the huge financial burden on individual patients who require remedial treatment for unsightly fluorosed teeth.

Cosmetic veneers provide an extremely lucrative spin-off for the privatised dental profession. In England, charges range from £150 to £450 per tooth and repeat treatments are required every five or six years throughout the victim's life. People who cannot afford cosmetic veneers, professional bleaching or micro-abrasive treatment have no option but to live with their fluoride-damaged teeth and the attendant social stigma and psychological trauma.

While the York Review panel of experts acknowledged that dental fluorosis affects up to 48% of the British population, they signally failed to address the economic, social and psychological impact on the victims.

However, more perceptive scientists and dentists are sensitive to the social stigma of dental fluorosis.

- ◆ **Irish** dental surgeon, Donal McAuley, wrote in the British Medical Journal: "Fifty per cent of our population has dental fluorosis. I see patients daily in my surgery who are damaged by fluoride. They do not smile, they are teased at school, and they are traumatised by having 'rotten' teeth." Drinking water in Ireland is artificially fluoridated. (7)
- ◆ In 1994, a **Kenyan** survey noted that between 60 and 84% of respondents viewed dental fluorosis as an important problem because of its unfavourable effects on an individual's

personality." (8)

- ◆ A later **Canadian** study examined the influence of fluoride exposures on the widespread "aesthetic problems" caused by dental fluorosis. It acknowledged that forty six percent (nearly half) of the participants had dental fluorosis. The effect on personal appearance, as defined by the participants themselves, was more prevalent in the over-11 age group. (9)
- ◆ The trauma experienced by young people with dental fluorosis is depressingly apparent in a **South African** study conducted by the NW Province Department of Health: "The psychological effect in terms of the unsightly, brown-stained teeth, has induced the adolescents with fluorosed teeth to demand that these teeth be extracted and replaced with dentures." (10)
- ◆ **American** and **English** researchers noted "The prevalence of dental fluorosis appears to be on the increase. Although in its mild form the condition is not considered to be of cosmetic significance, the more severe forms can cause great psychological distress to the affected individual." (11) (12)
- ◆ An **Australian** Health Department analysed society's perceptions of dental fluorosis, based on over 3,000 responses. Lay and professional observers recognised that higher degrees of fluorosis increasingly embarrass the child. All observers, except the dentists, felt that the more severe fluorosis indicated neglect on the part of the child . (13)
- ◆ **Egyptian** researchers observed that friends and relatives ridicule the patient by inferring that these stains are associated with smoking and/or poor oral hygiene. They noted that such personal remarks lead an individual into severe psychological depression. (14)

Dental fluorosis is extensively described by toxicologists as the first *visible sign of chronic fluoride poisoning*. (15) The result of over-exposure to fluoride was well understood by the dental profession until the early 1950s.

Parents, too, commonly experience feelings of anguish and guilt over their children's fluorosed teeth. For thirty years, until she discovered the scientific literature, Anita Knight endured a private agony over her son's lack of self esteem and emotional problems.

"I was outraged," she said. "It was immediately obvious to me that so-called scientists and public health officials had arrogantly and callously written off my son as a laboratory rat in their inhuman experiment."

Some prominent researchers have pointed out that dentists who knowingly promote treatment which leads to dental fluorosis place themselves at risk of litigation. (16) All researchers and government agencies acknowledge that dental fluorosis is a *foreseeable*, "objectionable cosmetic effect" that can and does occur following artificial fluoridation.

Despite anti-discrimination laws, the unattractive appearance of people with dental fluorosis can severely limit their academic performance, employment choices and future prospects. Teeth which appear "dirty" can seriously affect an individual's ability to interact and form relationships with members of the opposite sex, leading to exclusion, loneliness and long-term depression. Such conditions can precipitate feelings of frustration and anger which could, in turn, lead to criminal behaviour.

Promoters of water fluoridation are aware of, but do not warn the public about the foreseeable adverse effect of dental fluorosis or the foreseeable psychological damage which can and does occur to subsections of the population. When a plaintiff suffers harm, whether physical or psychological, it is only necessary for him to show the court that the injury was reasonably foreseeable. (1)

Meanwhile, three million English cases of dental fluorosis are officially ignored and three quarters of a million people have been severely, and foreseeably damaged.

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