De drinkwaterfluoridering : tandartsen, staat en volksgezondheid in Nederland, 1946-1976

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In this dissertation the different stages of the implementation of the water fluoridation in The Netherlands are described in three periods: 1946-1960, 1960-1968 and 1968-1976. The research was focused around the central question: How it has been possible that the scientific world had concluded with certainty that a collective prevention tool like the water fluoridation was safe and effective, but nevertheless was exposed to violent social criticism, lost interest of the community and eventually inglorious disappeared? Before making up the balance of these thirty years we will describe the case.

During the period 1946-1960, as a result of the shortage of dentists and the large number of caries under the Dutch population, the need of dental care was enormous. But there was a solution. It was common known that fluoride could be an effective prevention tool in dental care. When – from the United States – the knowledge concerning the possibilities of applying fluoride to drinking water entered The Netherlands in 1946 by means of the ‘Ivory Cross Expedition’, the opinion of ‘Fluoride Commission of the Health Council’ was willing to investigate the possibilities of applying fluoride in the tradition of the collective organization of Public Health, rather than the individual use of Dobbelman’s fluoride toothpaste. Under auspices of the new established health organization of TNO, the ‘Cariëswerkgroep’ started a fifteen-year-long research in 1953 to study the impact on caries as a result of adding fluoride in the drinking water. During this experiment the drinking water of Tiel was fluoridated and Culemborg acted as a control municipality. With an embargo on any publication, it remained silent around the Tiel-Culemborg research. In 1955, as a result of the commercial produced fluoride tablets the pressure on the embargo increased, but the fluoride tablets endangered the Tiel-Culemborg project. The period 1946 up to 1960 learned that the dentistry and government domains where active and mainly interacting with each other.

In the period 1960-1968 the powerful coalition of dentistry, government and politicians tried to implement water fluoridation decentralized at municipal level to reduce the high level of caries in the Netherlands. By advice of the Health Council, supported by the NMT, the ministry decided by means of a license system under the water control law to permit water fluoridation in (municipal) care areas. Besides optimism concerning the successful implementation at Goeree-Overflakkee also worries were detected at the authorities concerning the experienced resistance from the ‘Genootschap voor den Rechtstaat’
and the ‘Vereniging tot bescherming van het drinkwater’ Although mainly legal objections raised at these communities – which were mainly parried by the ‘Central Council for the Public Health’ – the legal workgroup of the Central Council insisted at the government on a official law to anchor the water fluoridation. When the embargo of publication was no longer effective, the public debate broadened itself to newspapers, professional and illustrated magazines. In 1968 some small clouds where detected in the blue sky called “water fluoridation” but optimism still dominated. The number of people who consumed fluoridated water increased up to two and a half millions in this period and initially it seemed like the growth was endless. Dentistry, government and politicians had been united in a powerful coalition.

During the last period, 1968 – 1976, the jurisprudence was directive for the debate concerning the water fluoridation and the public domain had a primacy on this. The powerful coalition between the dentistry, government and politicians had been disturbed. The movement ‘Waakzaamheid Drinkwater’ and the pressure group from Amsterdam, ‘A.F.D.A.’, started legal cases at the Council of State and the Supreme Court concerning the water fluoridation successfully. As a result of the legal cases the fluoridation judgment of the Supreme Court in 1973 was born which led to the involvement of particularly the politics and the parliament, after decades of absence in this process. The file of the water fluoridation meanwhile had become loaded. In the end of the ‘sixties’ the Dutch population fought against collective arrangements enforced by the government. The reasons for this mentality can be found in a strongly developed individualism and the wish to have input in decisions. The debate was no longer conducted by only rational and scientific arguments. Emotions became dominant in the debate, especially when in 1975, opponents of the group around the physician Moolenburgh indicated the possibility of getting cancer as a result of the water fluoridation. Moreover the argument of ‘enforced use’ gained popularity, also among the members of Parliament who eventually in majority did not accepted the bill that was supposed to support the legitimization of the water fluoridation. As a consequence the bill was withdrawn by the Den Uyl administration.

To conclude. When we finally try to answer the main question of the research, we cannot give a simple answer. However, it’s clear that the implementation of the initially successful tool for collective and preventive dentistry was suspended and finally failed due to the complexity of facts and events like:
• No legal base in the water control law;
• the local implementation of the drinking water fluoridation gave an image of a country which was constantly debating over the implementation of this health measurement;
• the loss of scientific independence of Tiel-Culemborg researchers;
• the ignorance by ‘Commission Muntendam’ and the responsible ministers of public health to (legal) recommendations of persons in favor and opponents;
• the assertive role of the media, especially since 1968;
• the powerful influence of associations and protesting citizens who - based on emotional events - not only confused the objective scientific arguments but also spread rumours that the arguments are based on nonsense;
• the passive attitude of the government that became involved too late in the process to make any difference in the outcome of the debate;
• a historical transition of a society that became more individual orientated.

All these facts led towards the rejection and eventually suspension of a preventive health tool - which, since 1960 according to the Health Council, still proved to be effective for oral health and according to the WHO harmless for human health - and became worthless as a collective arrangement for public health and eventually inglorious disappeared.