

Are They Really Sick? A Report on Persons Who Are Electrosensitive and/or Injured by Dental Material in Sweden

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Abstract

People who attribute their symptoms to electromagnetic fields and/or dental materials typically present many symptoms simultaneously. These symptoms reportedly decrease or disappear among the Electro-sensitive when they relocate to low radiation environments, and 44% experience improved health after removal of harmful dental materials (e.g. amalgam, gold). Among Dental Material Injured, health improves for 59% when their fillings are replaced and one in five also reports significant improvement from electrohypersensitivity (EHS).

However, reduction of electromagnetic fields/radiation and removal of harmful dental materials are not enough. Nutritional supplements could also be of importance; 60% used supplements daily, mainly selenium, essential fatty acids, vitamins B and C.

This survey addresses members of FEB¹ (The Swedish Association for the Electro-sensitive) and Tf² (The Swedish Association of Dental Mercury Patients) and is financed by The Swedish Inheritance Fund.

Key Words

Dental materials, Mercury, Amalgam, Electrohypersensitivity, Electromagnetic Fields, Nutritional Therapy, Supplements

Introduction

The significant number of Swedes, who relate their symptoms to harmful electromagnetic fields (EMF) and/or dental materials, experience that they often receive either indifference or rebuttal by their health care providers during medical examinations. They frequently

report that their health care providers deem them as psychiatric cases and feel treated as though their symptoms are imagined. This may be because neither an official description of symptomatology exists nor the types of treatments known to improve health.

FEB (The Swedish Association for the Electrosensitive) and Tf (The Swedish Association of Dental Mercury Patients) are registered as disability organizations under the federal umbrella of HSO³ (The Swedish Disability Federation). In 2005 FEB and Tf received funding from the Swedish Inheritance Fund for an in-depth report of their members' experienced symptomatology and the level of care they had received from various health professionals.

The HET-Project (acronym for "health problems experienced by the Electrosensitive and the Dental Materials Injured") publicized its final report in March 2008 (www.hetprojektet.info). The outcome reveals notable severity of chronic illness from harmful sources of electromagnetic fields (EMF) and specific dental materials, but also suggest initiatives of lifestyle improvements and suitable treatment options.

Methods

A detailed study of the two membership groups were completed in the following sequences:

a) Members were invited to eight seminars in various regions of Sweden. The participants completed symptom questionnaires and took part in group discussions, at which time they clarified what type of treatments and health care

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they preferred. More than 300 members participated in these seminars.

b) Ten members contributed to in-depth interviews. Each of them had been chronically ill over a number of years. However, after the removal of injurious dental materials all of them improved, and some even fully recovered from their symptoms.

c) FEB members, who could not take part in the seminars due to their functional impairment, were encouraged to contribute by regular mail. As a result over 15 extensive personal recounts were received with detailed description of symptoms, causes or triggers and the types of treatments they viewed as improvements to their health status.

d) In addition, it was considered essential to get the professional point of view. Eight physicians and two dentists, known to effectively treat this specific group of patients, were interviewed in detail.

e) Questionnaires were distributed to members of the two organizations for quantitative analysis. The questions were designed based on the information received in previous HET surveys. Subsequently the questionnaires were mailed to one thousand members of each organization, a total of 2,000 surveys. The Electrosensitive responded with 83% and the Dental Materials Injured with 68%.

f) The result of all surveys in the entire HET-Project are included in the final report; "Are they Really Sick? A Report on the Electrosensitive and the Dental Materials Injured in Sweden."

All surveys have been publicized in separate reports on the HET-Project webpage: www.hetprojektet.info. The summary of the final report is translated here into English; the rest of the reports are written in Swedish only.

No control group was used for this study, and the survey results only disclose the experiences and insights of the Tf and

FEB members. An analysis in relation to the general population in Sweden will require further research.

Results

This research reveals that the members of both FEB (The Association for the Electrosensitive) and Tf (The Association of the Dental Mercury Patients) suffer from many symptoms simultaneously, i.e. incessant fatigue, memory and concentration difficulties, stomach and intestinal problems, chronic pain, skin irritations, anxiety and depression. Common diagnoses are fibromyalgia, psychiatric illnesses, chronic fatigue syndrome and burnout.

Symptomatology

Even though the symptoms in the two groups are similar, the accumulated data reveals notable differences between the symptoms of the Tf and the FEB members.

The Electrosensitive often experience skin and eye irritations as well as heat sensations in the brain tissue when exposed to harmful EMF and/or radiation. The Dental Materials Injured, however, characteristically experience anxiety, depression and a metallic taste in their mouths. Some are sensitized by both EMF and dental materials, and therefore the symptoms of these patient group's experiences occasionally overlap. Among the members of Tf (The Association of Dental Mercury Patients) 56% are or have been sensitive to electromagnetic fields, however this is the reality for practically all (95%) the members of FEB (The Swedish Association for the Electrosensitive). See **Table 1**, p.155)

Reduction of Harmful Sources Vital to Improved Health

Symptoms decreased in 77% of the FEB members when exposure to EMF abated, and 44% reported improved

Table 1. Most common symptoms (have or have had) in the order of frequency by FEB and Tf members.

FEB -The Swedish Association for the ElectroSensitive	Tf The Swedish Association of Dental Mercury Patients
1. Concentration difficulties 71 %	1. Excessive fatigue, exhaustion 82 %
2. Excessive fatigue, exhaustion 69 %	2. Concentration difficulties 76 %
3. Burning sensation in the skin 62 %	3. Aches & pain in shoulders, neck & thoracic region 72 %
4. Memory problems 62 %	4. Sleeping difficulties 68 %
5. Aches & pain in shoulders, neck & thoracic region 61 %	5. Muscle weakness 67 %
6. Light sensitivity 57 %	6 Depression 66 %
7. Sleeping difficulties 57 %	7. Memory problems 65 %
8. Disjointed thinking patterns 56 %	8 Recurrent irritation in the stomach & intestines 65 %
9. Muscle weakness 54 %	9. Pain in lumbar region, hips and ischias 64 %
10. Recurrent irritation in the stomach & intestines 53 %	10 Metallic taste 64 %
11. Dizziness 53 %	11. Mental stress 63 %
12. Tinnitus 53 %	12. Anxiety 62 %
13. Redness in skin 52 %	13. Pain in hands, elbows, legs and knees 61 %
14. Pain in lumbar region, hips and ischias 52 %	14. Dizziness 61 %)
15. Mental stress 52 %	15. General malaise 59 %
16. Prickling and numbing sensations in the skin 52 %	16. Pain in jaws and sinuses 55 %
17. Heart palpitations 50 %	17. Heart palpitations 55 %
18. Pain in hands, elbows, legs and knees 50 %	18. Tinnitus 54 %
19. Heat sensations in the brain tissue 48 %	19. Disjointed thinking patterns 54 %
20. Dry skin 47 %	20. Regular headaches/migraines 52 %
21. Tense muscles 46 %	21. Pain in the heart region and chest 51 %
22. Dry and 'sandy' eyes 46 %	22. Tense muscles 51 %
23. Irritation/prickling sensation in the eyes 44 %	23. Prickling and numbing sensations in the skin 51 %
24. General malaise 44 %	24. Recurrent infections 50 %
25. Pain in jaws and sinuses 43 %	25. Dry and 'sandy' eyes 50 %
26. Pain in the heart region and chest 43 %	26. Runny or congested nose 48 %
27. Regular headaches/migraines 42 %	27. Dry skin 48 %
28. A sense of physical unease 42 %	28. Allergies 48 %
29. Depression 41 %	29. High or low blood-pressure 47 %
30. Runny or congested nose 41 %	30. Light flashes in the eyes 46 %

health after having their amalgam removed. The Tf members reported 59% improvement after having injurious dental materials replaced, and one in five reported a decreased sensitivity to electromagnetic fields after the same procedure. There are therefore clear connections between these two groups. (See **Figure 1**, p.157)

Practically every member of the two associations have or have had mercury amalgam fillings and 72% respectively 82% of members in FEB and Tf have removed their amalgam fillings. This dental procedure is exceedingly common among Tf and FEB members in comparison to the general population with a small percent have replaced their amalgam fillings.⁴

Nutritional Therapy is Vital

The health status of the survey participants improved further by using nutritional therapy; 60% took nutritional supplements daily. Several reported that their health deteriorated when they discontinued this treatment regimen, but that their health improved when they reintroduced supplements to their diet again.

Among the FEB members, the most commonly used supplements are omega 3 and 6 fatty acids, vitamin C and magnesium. Among the Tf members selenium, omega 3 and 6 fatty acids and vitamin B₁₂ dominated. Moreover, 71% of the Tf members concluded that vitamins and minerals have contributed considerably to their recovery, while only 38% of the FEB members were of the same opinion. (See **Figure 2**, p.157)

An Undesirable Delay in Treatment

This survey also shows that a disproportionate number of participants had to wait many years before understanding the causes or triggers of their problems. They conceded that it was quite difficult finding a physician who could understand their symptoms. The FEB members had been sick for about two years before they were able to make connections between harmful sources and symptoms. Conversely, the Tf members suffered on an average of 12 years, while as many as 25% endured more than 20 years before suitable treatment options were presented to them. (See **Figure 3**, p.158)

About 10% of the FEB members reported that their physician suspected electromagnetic fields as the cause or trigger to their symptoms. Most discovered these sources by themselves, while some were helped by caring friends and family or found information in media exposés. The Tf members voiced similar experiences; and 8% replied that their physician had been cognizant of the causes to their symptoms.

Delays in Recuperation Time

For the Dental Materials Injured (Tf) there were considerable delays between removal of harmful dental materials and lasting improvements. Only 6% of Tf members reported immediate health recuperation after the removal procedure; and almost 40% endured more than four years before they achieved lasting improvements. (See **Figure 4**, p.158)

Abating Symptoms after Removal of Injurious Dental Materials

Among Tf members certain symptoms disappeared after the removal of injurious dental materials. The same symptoms are typical of chronic mercury poisoning, i.e. metallic taste, decreased appetite, suicide ruminations, the shivers or fever, nosebleeds, sensitive and bleeding gums, burning sensations on the tongue, panic attacks, tunnel vision, blurred vision and involuntary muscle tics.

Triggering Factors of Electrohypersensitivity

The FEB members reported symptoms mainly from computer screens (92%), fluorescent tubes and compact fluorescent lights (90%), cell phones (84%), cordless phones (82%), cellphone antennas and base stations (67%) and high voltage power lines (66%).

The most common triggers were believed to be computer and video screens (68%), amalgam (49%) and fluorescent tubes and the new compact fluorescent lights (46%).

Mitigation of EMF/radiation at home and at the workplace improved health for many, resulting in better odds of remaining in the workforce. Restful sleep was deemed vital by the participants, and therefore 8% of the FEB members had resorted to using a canopy around their beds with special EMF repellent material to prevent harmful exposure to electromagnetic fields. However, many had been forced to relocate to

Figure 1. Preferred treatments.

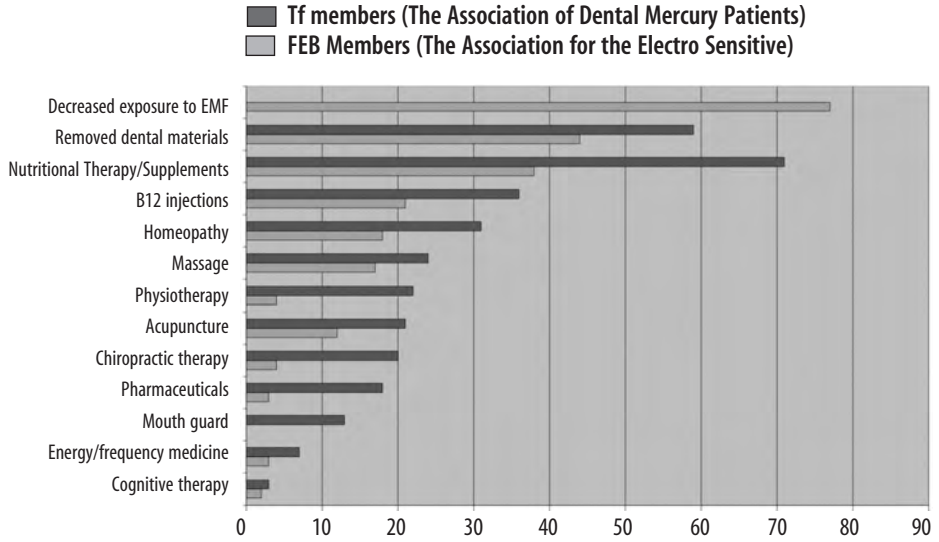


Figure 2. FEB and Tf members' use of nutritional supplements.

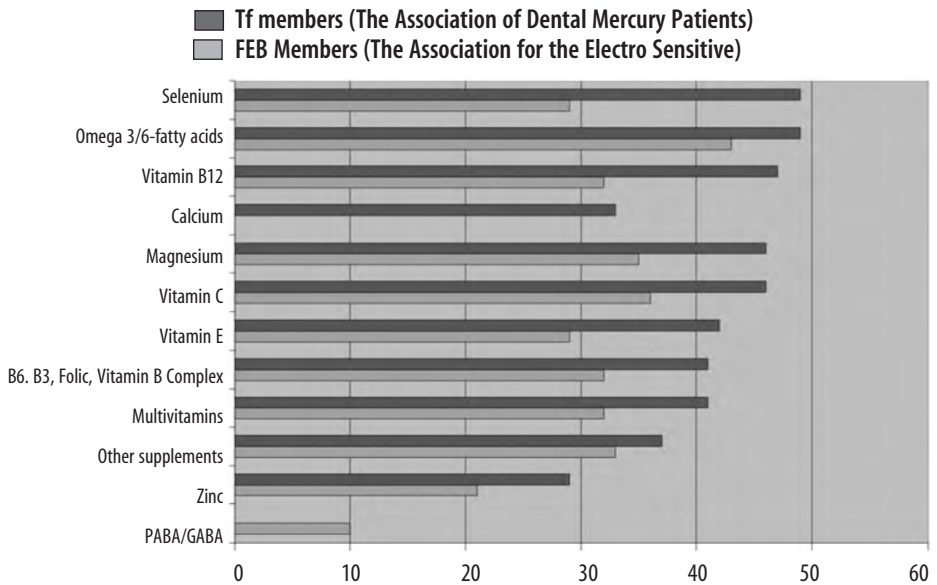


Figure 3. Number of years until the members understood the causes/triggers of their symptoms.

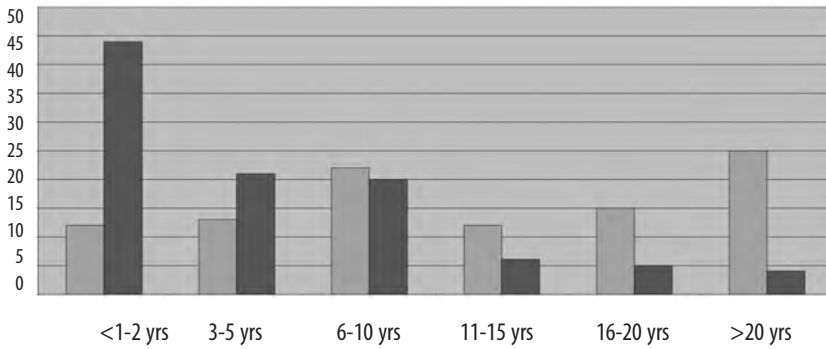
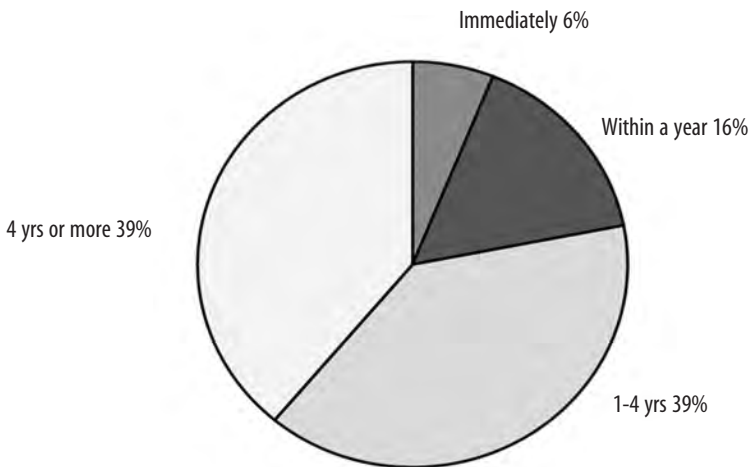


Figure 4. Time span before experienced lasting improvements after amalgam removal.



a low radiation area in the countryside to reduce their symptoms.

Discussion

Both the Electrosensitive and the Dental Materials Injured experienced many symptoms simultaneously. Certain

differences were notable in the symptomatology of the two groups, although overlaps were also apparent. The Electrosensitive complained of skin and eye symptoms, a distinct heat sensation in the brain tissue, while the Dental Materials Injured mostly reported psychiatric symp-

toms, i.e. anxiety and depression as well as a metallic taste in their mouths.

Remarkable health improvements were reported by the participants after thorough EMF mitigation, the removal of harmful dental materials and by taking vitamin and mineral supplement. However, clinically developed research projects are needed to build an evidence-based model for future health care practices.

Removal of Amalgam

Most of the members in both organizations experienced improved health after the removal of injurious dental materials, especially amalgam fillings. However, the improvement potential was not as high among the Tf members (59%) as among the participants in scientifically controlled studies; where a reported 70-80% of the patients improved health after amalgam removal.^{5,6,7}

The reason for this disparity may be due to inferior amalgam removal procedures used in Swedish practices. As many as 30% of the Tf members reported that they had to change their dental fillings two or more times due to sensitivity to the new material, amalgam remaining under the new fillings, or other ways in which the replacement was unsatisfactorily performed.

Nutritional Balance

Many questionnaire responses and individual comments revealed that a change in diet combined with vitamin and mineral supplements improved the participants' health considerably. Some avoided gluten and sugar, while others felt better after increasing their intake of B₁₂, selenium and vitamin C. This indicates that the particular health problems of the Electrosensitive and the Dental Materials Injured are complex and in need of additional treatments. Merely decreasing electromagnetic fields or removing harmful dental materials may not be enough.

Continued Research Needed

A research project with the focus on genetic differences in Electrosensitive participants and/or hypersensitivity to dental materials may be worth further investigation considering the staggering costs of chronic disease. It is now recognized that the uptake of B₁₂ and B₆ can be genetically determined just like the ability to detoxify.⁸ The genetic variant of apolipoprotein E (apo-e4) is present to a considerable degree in people with dental amalgam toxicity.⁹ Moreover, the HET-Project questionnaire responses confirm that B₁₂ injections in particular improved the participants' health status. This disclosure may indicate a genetically determined impediment in absorbing and processing vitamin B₁₂.

Detoxification

The delayed time between removal of fillings and improved health may indicate a problem with the body's ability to detoxify. This hypothesis is strengthened by some members' account of successful chelation therapies, although this form of therapy is not legal in Sweden and only a few members have actually tried it. A recent study details improved health from dental materials removal if patients also subject themselves simultaneously to chelation therapy.¹⁰

Conclusion

The Electrosensitive and the Dental Material Injured are a significant group of the chronically ill in Sweden who add to the cost in health care, insurance payments and in lost productivity. It is estimated that 3-9% of the Swedish inhabitants are Electrosensitive^{11,12} and 1-5% suffer from Amalgam Injury, which means that between 300,000 and 800,000 Swedes have such health problems. A suitable comparison would be with diabetics, estimated at 300,000 in the country. However with the availability of relevant

treatments and health care, the majority of this neglected group can recover, and sometimes completely.

The participants of this study report that most improvements occur with a decrease in harmful EMF exposures, the removal of bio-incompatible dental materials and the correction of nutritional imbalances boosting the vital organ functions with vitamin and mineral supplements. Also, there appears to be a link to genetic factors as a cause of hypersensitivity to electromagnetic fields and/or injurious dental materials.

It is therefore a socioeconomic and a financially sound solution to support further research and thereby continue the development of evidence-based EMF mitigation practices, advance dental materials removal protocols and develop beneficial nutritional therapy regimens.

Acknowledgements

We wish to sincerely thank the members of the HET-Project Advisory Board; Ann-Christine Arvidsson (FEB), Lena Ekström (FEB), Eivy Kronholm (FEB), Margaretha Molius (Tf) and Jan Rennerfelt (Tf), and also thank all Tf and FEB members, physicians and dentists, who actively participated in this project and shared their exceptional experiences and knowledge with us.

Likewise, a warm thank you to The Swedish Inheritance Fund; without their financial contribution this voluminous project could not have been completed.

Our gratitude also goes to Agneta Jonsson for her invaluable assistance with the translation and proofreading of this article.

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