Innhold

Appendix I  Health complaints attributed to dental amalgam:
A retrospective survey exploring perceived health changes related to amalgam removal

Appendix II  IMCR- studien – et helseprogram med egeninnsats Håndbok for gruppeledere.

Appendix III  Use of complementary and alternative medicine in patients with health complaints attributed to former dental amalgam fillings

Appendix IV  Operationalizing the use of patient experiences for the selection of treatment options in a clinical trial: The “USB” (Use – Safety - Benefit) principle and the Integrated Medical Care Rehabilitation trial for patients with amalgam attributed health complaints

Appendix V  «Everyone with a chronic disease should be offered this program» - participants experience with an Integrative Medicine group program. “Jeder mit einer chronischen Erkrankung sollte an diesem Program teilnehmen” – Teilnehmererfahrungen mit einem integrativmedizinischem Gruppenprogramm.

Appendix VI  Tenner & helse Medlemsblad for forbundet Tenner og helse 20. Årgang – nr. 2 juni 2014

Appendix VII  Tenner & helse Medlemsblad for forbundet Tenner og helse 22. Årgang – nr.3 september 2016
Health complaints attributed to dental amalgam: A retrospective survey exploring perceived health changes related to amalgam removal

Short title: Health complaints attributed to amalgam

AGNETE EGILSDATTER KRISTOFFERSEN1*, TERJE ALRÆK1, TRINE STUB1, HARALD JOHAN HAMRE2, LARS BJÖRKMAN3 AND FRAUKE MUSIAL1

1The National Research Center in Complementary and Alternative Medicine (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway

2Institute for Applied Epistemology and Medical Methodology at the University of Witten-Herdecke, Freiburg, Germany

3Dental Biomaterials Adverse Reaction Unit, Uni Research Health, Bergen, Norway

* Corresponding author

Manuscript under review in The open dentistry Journal.
Health complaints attributed to dental amalgam: A retrospective survey exploring perceived health changes related to amalgam removal

Short title: Health complaints attributed to amalgam

AGNETE EGILSDATTER KRISTOFFERSEN¹*, TERJE ALRÆK¹, TRINE STUB¹, HARALD JOHAN HAMRE², LARS BJÖRKMAN³ AND FRAUKE MUSIAL¹

¹The National Research Center in Complementary and Alternative Medicine (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway
²Institute for Applied Epistemology and Medical Methodology at the University of Witten-Herdecke, Freiburg, Germany
³Dental Biomaterials Adverse Reaction Unit, Uni Research Health, Bergen, Norway

* Corresponding author

E-mail addresses:
Agnete Egilsdatter Kristoffersen: agnete.kristoffersen@uit.no
Terje Alræk: terje.alrak@uit.no
Trine Stub: trine.stub@uit.no
Harald Johan Hamre: harald.hamre@ifaemm.de
Lars Björkman: lars.bjorkman@uib.no
Frauke Musial: frauke.musial@uit.no

Correspondence:
Agnete E. Kristoffersen
National Research Center in Complementary and Alternative Medicine, NAFKAM,
Department of Community Medicine,
Faculty of Health Science,
UiT The Arctic University of Norway
9037 Tromsø, Norway

Tel. (+47) 77 64 61 47 (Agnete Kristoffersen)
Tel. (+47) 77 64 66 50 (NAFKAM)
Fax. (+47) 77 64 68 66
E-mail: agnete.kristoffersen@uit.no

The manuscript include 3 tables and 5 figures
Abstract

Objective: Many patients have complex health complaints they attribute to dental amalgam. There is some evidence of symptom relief after removal of amalgam. The aims of this study were to assess the total symptom load in patients with all their amalgam fillings removed and to investigate the self-reported improvement of health with regard to precautions taken under amalgam removal and time since removal. Material and methods: The survey was distributed to all members (n=999) of the Norwegian Dental patients association in 2011. The study participants returned the questionnaires anonymously by means of a pre-stamped envelope. The questionnaire asked for sociodemographic data, subjectively perceived health status, complaints persisting after amalgam removal and self-reported changes in symptoms after amalgam removal. Results: A total of 324 participants were included in the study. The majority of the participants reported improved health after amalgam removal, even though the mean degree of severity of complaints was still high. Exhaustion and musculoskeletal complaints were most severe, which reflects the fact that 38% of the participants reported poor to very poor current health. With regard to amalgam removal, associations between improved health, number of precautions applied, and time since removal were found. Conclusions: Most of the participants in this study reported improvement of health after amalgam removal even though they still suffered a high complaint load. Since absolute symptom load is a robust predictor for general health outcome and socioeconomic burden for society, a possible intervention, which enables patients to further improve their health status is desirable.

Key words: Dental amalgam; health complaints; restoration
Introduction

Many patients present to their General Practitioner (GP) with a high symptom load and considerable psychological distress. Often, the underlying pathophysiology remains unclear and sometimes these patients receive a diagnosis such as irritable bowel syndrome, chronic fatigue syndrome or fibromyalgia. Common to all these diagnoses is that their pathophysiology remains unclear and therefore often called “functional”. Patients do not die from these syndromes, but they suffer, and they often feel that they are stigmatized, and that their suffering is not accepted [1]. Moreover, the associated direct and indirect socioeconomic costs are substantial [2].

A number of different symptoms have been attributed to dental amalgam [3]. Although often transient, a sizeable proportion is persistent and associated with a considerable reduction in these patients’ quality of life. The most commonly reported complaints attributed to amalgam are neurological symptoms such as fatigue and dizziness, mental symptoms such as concentration and memory disturbance, anxiety, irritability, restlessness and depression. Moreover, pain in muscle joints and pain in neck, shoulder, teeth, jaws, face and headache as well as gastrointestinal symptoms such as constipation, diarrhoea, bloating, mouth blisters, metallic taste, as well as increased susceptibility to infections are also commonly reported [4-11]. Many patients who had their amalgam fillings removed experience less severe symptoms after removal [8, 12-15]. Best results (higher degree of symptom improvement, general improvement or recovery) were seen in patients who had all their amalgam fillings removed.

In Norway amalgam removal procedures in patients with health complaints attributed to dental amalgam are supposed to follow the recommendations from the Directorate of Health guidelines for assessment and treatment for suspected adverse effects from dental materials
These recommendations intend to minimise exposure to mercury and other heavy metals during the removal procedures. They consist of: a) removal of the whole amalgam filling in chunks without any pulverizing, b) application of water cooling during the procedure, c) use of a sharp drill, d) use of protective equipment including rubber dam, suction at the tooth and appropriate ventilation of the treatment room [16, 17].

In addition to these guidelines, The Norwegian Dental Patient Association (NDPA), (Forbundet tenner og helse (FTH) in Norwegian) claims, that it is important to combine the removal of amalgam fillings with additional preventive therapies [18]. NDPA recommends patients to take supplements such as selenium, zinc, vitamin C and E in order to improve immune system functioning before, during and after the removal of amalgam. Just before the removal, e.g. the intake of charcoal tablets and one unit of alcohol [17, 18] is expected to be protective. Moreover, several other additional therapies are recommended [19]. These recommendations are often based on extrapolations from laboratory experiments in animals (e.g. alcohol inhibits uptake of mercury vapour from the lung through inhibition of the catalase enzyme [20]) and anecdotal experiences. Systematic scientific evidence that these precautions are associated with improved health outcomes in humans is however, currently missing. One randomized trial found no difference in general health complaints in patients who replaced amalgam and used additional “detoxification therapy” compared to patients who removed amalgam and did not used such therapy [5].

The aims of the present study were therefor to 1) assess the total symptom load in patients who have had all their amalgam fillings removed and 2) investigate the self-reported improvement of health with regard to precautions taken under amalgam removal and time since removal.
Material and methods

Study population

This study was a part of a larger research program on potential negative health effects of amalgam commissioned by the Norwegian Directorate of Health to the National Research Center in Complementary and Alternative Medicine (NAFKAM). Patient participation was a cornerstone of this project and one of the questionnaires used in the present survey was developed in close cooperation with NDPA. The Norwegian Data Inspectorate (NSD) has been notified about the study and the Regional Committee for Medical and Health Research Ethics (REK) has considered the study (REK reference 2011/1281) and decided that no ethic approval was needed due to full anonymity of the participants.

The survey was distributed through NDPA to all their members in December 2011 with a reminder in February 2012. The study participants returned the questionnaires anonymously to NAFKAM by means of a pre-stamped envelope. The anonymous questionnaire asked for sociodemographic data, subjectively perceived health status, complaints persisting after amalgam removal (based on Norwegian version of the Giessen Subjective Complaints List (GBB-24)), self-reported changes in symptoms after amalgam removal, and experience with therapeutic interventions. It includes also questions with regard to the use of Complementary and Alternative Medicine (CAM), which are reported elsewhere [21]. The only criteria for inclusion were that the patients had previously amalgam fillings, which all were removed, in addition to membership in the patient association NDPA. No information on possible medical diagnoses was obtained.
Health complaints according to the GBB-24

The Giessen Subjective Complaints List (GBB-24) consists of 24 different health complaints. The severity of each complaint is rated according to a five point scale; 0 (not at all), 1 (slightly), 2 (somewhat), 3 (considerably) and 4 (very much) [22]. The complaints are grouped and summarized into four subscales with six complaints in each of the following groups: cardiovascular complaints, gastrointestinal complaints, musculoskeletal complaints and exhaustion. Furthermore, the scores of the 24 single complaints are summed up in a total score ("complaints load") ranging from 0-96 where 0 is no complaints at all while 96 represent all listed complaints at highest severity. In addition to the 24 items in the GBB-24 questionnaire, the participants were asked for severity of pain in the face and/or the jaw. This additional item was included because it reflects a symptom known to be relevant for the patient group in question (Table II).

Since the average score for each item includes also participants who answer 0 (not at all), it is difficult to estimate the severity of the health complaint in individuals suffering from the actual complaint. A low mean could reflect that many participants suffer this symptom, but not very intensely, or that only a few are affected, who report a high intensity. Therefore, a second item analysis was performed, which included only data from participants, who answered minimally 1 (slightly) or higher for a complaint. The reason for this was to explore the burden of each individual symptom among the individuals who reported it.

Self-reported changes in health following amalgam removal

In the survey, possible changes in self-reported health following the amalgam removal were addressed in two different questions:

For the main analyses, a general question with three response categories (+ don't know) was
used: “If you have replaced your amalgam fillings, do you consider your health to have changed as a consequence of this? 1. The health has improved, 2. The health has worsened, 3. The health is unchanged, 4. Don’t know.

In addition, another question addressed long-term changes with five response categories: "Have you experienced long-term (longer than 6 months) effects or changes following amalgam removal? 1. Worsening, 2. No change 3. Some improvement, 4. Major improvement 5. Total recovery / symptom free, 6. Don’t know. The breakdown into five categories made this question less suitable for subgroup analysis. However, these or similar response categories have been used in a number of other studies of amalgam removal, therefore the question is included in this paper.

Factors perceived as being related to amalgam removal

Data on possible precautions made before, during and after the amalgam removal were collected via the following item:

*If you have had dental fillings with amalgam removed, was there any precautions taken in connection with the replacement of fillings? (drugs / minerals / vitamins / protective equipment) Multiple answers possible. 1. Yes I had prophylactic treatment, 2. Yes, protective equipment was used during the dental treatment, 3. Yes, I had post treatment, 4. No, no precautions were made, 5. Don’t know.*

Since this item allowed multiple answers, the analysis was performed according to the number of precautions (out of the responses 1, 2, 3 or 4 above) the participants reported: 0 (no precautions), 1 (one precaution), 2 (two precautions), 3 (three precautions). Table III includes a detailed analysis of the various combinations.
Statistics

Between-group differences were analysed using chi-square tests for binary data analysing one variable at the time, one-way ANOVA test for continuous data and in SPSS for Windows (version 22.0, SPSS, Inc., Chicago, IL). Significance level was defined as p <0.05 without p-value adjustment for multiple comparisons.

Ethics

The Norwegian Data Inspectorate (NSD) has been notified about the study and the Regional Committee for Medical and Health Research Ethics (REK) has considered the study (REK reference 2011/1281) and decided that no ethic approval was needed due to full anonymity of the participants.

Results

Inclusion

A total of n=999 envelopes with questionnaires were sent out, of which 46 were returned unopened to sender. Overall, 953 members of NDPA received the questionnaire, 347 responded (36.4% response rate) and 324 fulfilled all eligibility criteria and were included in the study (Figure 1).
Figure 1. Flow chart demonstrating the selection process of the study population.

Basic characteristics of the participants

The majority of the participants were female (71.6%), mean age was 60 years and 43.7% of the participants were holding a university degree. The women were slightly older than the men (2.5 years, p=0.001) and men were more often still working (p=0.014). Most participants reported normal (neither good nor poor) to good current health (62.4%) and improved health after amalgam removal (75.2%). However, a substantial number of participants reported poor to very poor current health (37.6%). No significant gender differences were found with regard to education or self-reported current health. (Table I) In order to avoid low cell frequencies, gender differences were not included in the further analysis.
<table>
<thead>
<tr>
<th>Table I. Basic characteristics of the participants</th>
<th>Total (%(n))</th>
<th>Men (%(n))</th>
<th>Women (%(n))</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>71.6 (232)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>28.4 (92)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>60.0</td>
<td>58.8 (SD 11.12)</td>
<td>61.3 (SD 10.26)</td>
<td>0.001^</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>13.4 (42)</td>
<td>7.9 (7)</td>
<td>15.6 (35)</td>
<td>0.252*</td>
</tr>
<tr>
<td>Secondary School</td>
<td>27.4 (86)</td>
<td>32.6 (29)</td>
<td>25.3 (57)</td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>15.6 (49)</td>
<td>13.5 (12)</td>
<td>16.4 (37)</td>
<td></td>
</tr>
<tr>
<td>University, lower grade</td>
<td>22.0 (69)</td>
<td>25.8 (23)</td>
<td>20.4 (46)</td>
<td></td>
</tr>
<tr>
<td>University, higher grade</td>
<td>21.7 (68)</td>
<td>20.2 (18)</td>
<td>22.2 (50)</td>
<td></td>
</tr>
<tr>
<td><strong>Working</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>59.0 (128)</td>
<td>71.0 (49)</td>
<td>53.4 (79)</td>
<td>0.014*</td>
</tr>
<tr>
<td>No</td>
<td>41.0 (89)</td>
<td>29.0 (20)</td>
<td>46.6 (69)</td>
<td></td>
</tr>
<tr>
<td><strong>Self-reported current health</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.203*</td>
</tr>
<tr>
<td>Very good</td>
<td>9.7 (31)</td>
<td>15.4 (14)</td>
<td>7.5 (17)</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>25.4 (81)</td>
<td>26.4 (24)</td>
<td>25.0 (57)</td>
<td></td>
</tr>
<tr>
<td>Neither good nor poor</td>
<td>27.3 (87)</td>
<td>23.1 (21)</td>
<td>28.9 (66)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>28.5 (91)</td>
<td>28.6 (26)</td>
<td>28.5 (65)</td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>9.1 (29)</td>
<td>6.6 (6)</td>
<td>10.1 (23)</td>
<td></td>
</tr>
<tr>
<td><strong>Changes in health after amalgam removal</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.024*</td>
</tr>
<tr>
<td>Worsening of health</td>
<td>8.4 (26)</td>
<td>7.8 (7)</td>
<td>8.6 (19)</td>
<td></td>
</tr>
<tr>
<td>Unchanged health</td>
<td>9.4 (29)</td>
<td>4.4 (4)</td>
<td>11.4 (25)</td>
<td></td>
</tr>
<tr>
<td>Improved health</td>
<td>75.2 (233)</td>
<td>85.6 (77)</td>
<td>70.9 (156)</td>
<td></td>
</tr>
<tr>
<td>Don't know</td>
<td>7.1 (22)</td>
<td>2.2 (2)</td>
<td>9.1 (20)</td>
<td></td>
</tr>
</tbody>
</table>

^One-way ANOVA test  
* Pearson Chi-Square test
**Health complaints according to the GBB-24**

Mean severity score of the main 24 complaints in the GBB-24 (range 0-96) was 36.1, with 47.8 in the group with less than one year since removal of amalgam, 39.6 one to four years after removal and 35 and 36.5 five to nine years and more than ten years after removal, respectively. A total of 8.3% (n=27) had a sum score of 0 (no complaints reported) while one participant reported highest possible degree of complain load, 96. The most commonly reported single symptoms among the participants were *tendency of rapid exhaustion* (80.9%) followed by *tiredness* (79.6%), *concentration disturbances* (77.5%) and *pains in joints or limbs* (75.6%). These four complaints were also the complaints with highest mean severity in the total sample (2.42, 2.18, 2.12 and 2.14 respectively, 2 indicating “somewhat” and 3 “considerable”), with mean severity of the remaining complaints ranging from 0.42 (*vomiting*) to 2.00 (*pain in neck and shoulders*). When grouped into the following four subscales *exhaustion, musculoskeletal complaints, cardiovascular complaints* and *gastrointestinal complaints*, with six complaints in each groups (see Table II), we found that all symptom complexes were reported by more than 75% of the participants. When the intensity of the complaints were taken into consideration, *exhaustion* and *musculoskeletal complaints* were the most severe complaints with a mean severity score in the total sample of 12.46 and 10.65 respectively (Table II). A considerably lower mean severity score in the total sample was found for *cardiovascular* and *gastrointestinal complaints* (7.34 and 5.65 respectively). The additional symptom *Pain in the face or jaws* was reported by 58.3% of the participants with a mean severity score in the total sample of 1.53 and a mean severity score among the participants actually suffering from it of 2.62 (Table II). As shown in Figure 2 there was a linear correlation between symptom load and self-reported health in all groups of complaints, in particular for *exhaustion* and *musculoskeletal complaints.*
Table II. Results of the GBB. The severity of each item is rated to a five point scale: 0 (not at all), 1 (slightly), 2 (somewhat), 3 (considerably) and 4 (very much) [30] and summarized into four subscales (exhaustion, gastrointestinal complaints, musculoskeletal complaints and cardiovascular complaints) as well as a total sum score (complaints load).
<table>
<thead>
<tr>
<th>Symptom/GBB scale</th>
<th>% reporting</th>
<th>n</th>
<th>Mean severity in the total sample</th>
<th>Mean severity in participants reporting the symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL GBB-24 sum score</strong></td>
<td><strong>91.7</strong></td>
<td><strong>297</strong></td>
<td><strong>36.1</strong></td>
<td><strong>58.41</strong></td>
</tr>
<tr>
<td>Exhaustion</td>
<td><strong>88.6</strong></td>
<td><strong>287</strong></td>
<td><strong>12.46</strong></td>
<td><strong>16.57</strong></td>
</tr>
<tr>
<td>Tendency to rapid exhaustion</td>
<td>80.9</td>
<td>262</td>
<td>2.42</td>
<td>2.99</td>
</tr>
<tr>
<td>Tiredness</td>
<td>79.6</td>
<td>258</td>
<td>2.18</td>
<td>2.74</td>
</tr>
<tr>
<td>Excessive need for sleep</td>
<td>71.3</td>
<td>231</td>
<td>1.93</td>
<td>2.71</td>
</tr>
<tr>
<td>Weariness</td>
<td>71.3</td>
<td>231</td>
<td>1.91</td>
<td>2.68</td>
</tr>
<tr>
<td>Physical weakness</td>
<td>70.1</td>
<td>227</td>
<td>1.90</td>
<td>2.72</td>
</tr>
<tr>
<td>Concentration disturbance *</td>
<td>77.5</td>
<td>251</td>
<td>2.12</td>
<td>2.73</td>
</tr>
</tbody>
</table>

**Musculoskeletal complaints**

<table>
<thead>
<tr>
<th>Symptom/GBB scale</th>
<th>% reporting</th>
<th>n</th>
<th>Mean severity</th>
<th>Mean severity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>88.3</strong></td>
<td><strong>286</strong></td>
<td><strong>10.65</strong></td>
<td><strong>15.84</strong></td>
<td></td>
</tr>
<tr>
<td>Pains in joints and limbs</td>
<td>75.6</td>
<td>245</td>
<td>2.14</td>
<td>2.83</td>
</tr>
<tr>
<td>Backache</td>
<td>65.4</td>
<td>212</td>
<td>1.71</td>
<td>2.61</td>
</tr>
<tr>
<td>Headaches</td>
<td>62</td>
<td>201</td>
<td>1.56</td>
<td>2.51</td>
</tr>
<tr>
<td>Pains in neck and shoulders</td>
<td>70.4</td>
<td>228</td>
<td>2.00</td>
<td>2.84</td>
</tr>
<tr>
<td>Head pressure</td>
<td>62.7</td>
<td>203</td>
<td>1.63</td>
<td>2.60</td>
</tr>
<tr>
<td>Heaviness or tiredness in the legs</td>
<td>66.4</td>
<td>215</td>
<td>1.62</td>
<td>2.45</td>
</tr>
</tbody>
</table>

**Cardiovascular complaints**

<table>
<thead>
<tr>
<th>Symptom/GBB scale</th>
<th>% reporting</th>
<th>n</th>
<th>Mean severity</th>
<th>Mean severity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>82.4</strong></td>
<td><strong>267</strong></td>
<td><strong>7.34</strong></td>
<td><strong>13.33</strong></td>
<td></td>
</tr>
<tr>
<td>Dizziness</td>
<td>64.5</td>
<td>209</td>
<td>1.48</td>
<td>2.30</td>
</tr>
<tr>
<td>Heavy, rapid or irregular heart-throbbing</td>
<td>64.2</td>
<td>208</td>
<td>1.47</td>
<td>2.29</td>
</tr>
<tr>
<td>Sudden bouts of heart-trouble</td>
<td>48.5</td>
<td>157</td>
<td>1.03</td>
<td>2.13</td>
</tr>
<tr>
<td>Twinges, pains or aching in the chest</td>
<td>53.7</td>
<td>174</td>
<td>1.18</td>
<td>2.19</td>
</tr>
<tr>
<td>Attacks of breathlessness</td>
<td>48.8</td>
<td>158</td>
<td>1.06</td>
<td>2.16</td>
</tr>
<tr>
<td>Sensation of tightness, choking or lumpiness in the throat</td>
<td>49.7</td>
<td>161</td>
<td>1.12</td>
<td>2.26</td>
</tr>
</tbody>
</table>

**Gastrointestinal complaints**

<table>
<thead>
<tr>
<th>Symptom/GBB scale</th>
<th>% reporting</th>
<th>n</th>
<th>Mean severity</th>
<th>Mean severity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>76.5</strong></td>
<td><strong>248</strong></td>
<td><strong>5.65</strong></td>
<td><strong>12.67</strong></td>
<td></td>
</tr>
<tr>
<td>Stomach aches</td>
<td>60.2</td>
<td>195</td>
<td>1.31</td>
<td>2.18</td>
</tr>
<tr>
<td>Pressure or heaviness in the stomach</td>
<td>51.2</td>
<td>166</td>
<td>1.17</td>
<td>2.28</td>
</tr>
<tr>
<td>Heartburn</td>
<td>46.6</td>
<td>151</td>
<td>1.04</td>
<td>2.24</td>
</tr>
<tr>
<td>Nausea</td>
<td>44.1</td>
<td>143</td>
<td>0.88</td>
<td>2.00</td>
</tr>
<tr>
<td>Belching</td>
<td>38</td>
<td>123</td>
<td>0.82</td>
<td>2.17</td>
</tr>
<tr>
<td>Vomiting</td>
<td>23.5</td>
<td>76</td>
<td>0.42</td>
<td>1.80</td>
</tr>
</tbody>
</table>

**Other, added to the GBB-24 complaints**

<table>
<thead>
<tr>
<th>Symptom/GBB scale</th>
<th>% reporting</th>
<th>n</th>
<th>Mean severity</th>
<th>Mean severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in the face or jaws</td>
<td>58.3</td>
<td>189</td>
<td>1.53</td>
<td>2.62</td>
</tr>
</tbody>
</table>

* “Feeling numb or benumbed” in the standard English translation from German
Factors, perceived as being related to amalgam removal

Self-reported changes in health after amalgam removal

In response to the general question about changes in health after amalgam removal, most of the participants (75.2%, n=233) reported improvement of health, 8.4% (n=26) reported worsening of health while 9.4% (n=29) reported no change. Seven percent (n=22) could not say whether their health has changed or not (Table I). In a subgroup analysis according to current...
health, this was also the case in all subgroups except in the group reporting very poor health, in which more participants reported worsening of health (n=13) than improvement of health (n=11) after amalgam removal (Figure 3).

In response to the additional question about long-term changes after amalgam removal, 8.6% (n=24) reported to be recovered / symptom free, 59.3% (n=166) reported major improvement, 17.5% (n=49) some improvement, 2.5% (n=7) no change, 8.9% (n=25) worsening, and 3.2% (n=9) 'don't know'.

**Experienced changes in health after amalgam removal related to time since removal**

When the changes in health after amalgam removal (general question, see above) were analysed according to time since removal, we found that the highest number of participants reporting improved health after amalgam removal was found among the participants who have had their amalgam removed more than nine years ago (82.2%, n=129). The lowest report of improved self-reported health was found among the participants who had removed their amalgam within the last year (28.6%, n=2). Worsening of self-reported health after amalgam removal was highest (12.1%, n=19) in participants with more than 9 years since removal and lowest in the group who have had their amalgam removed within the last year (0.0%, n=0) (p<0.001, Fig. 4)
Figure 4. Changes in health after amalgam removal in subgroups according to time since amalgam removal.

Experienced changes in health after amalgam removal depending on the conditions related to the removal.

Among participants who had used no precautions neither before, during nor after the amalgam removal, 62.5% reported improved health, 6.3% reported no change and 18.8% reported worsening of health after amalgam removal. Among those who had used both prophylactic treatment, protective equipment and post-treatment, 90.4% reported improved health, 4.1% reported unchanged health, while 2.7% reported worsening of health after amalgam removal (p<0.001, Figure 5). The changes in health after amalgam removal for the different combination of precautions made are described in Table III.
Figure 5. Changes in health after amalgam removal in subgroups according to number of precautions made under amalgam removal.
Table I. Changes in health after amalgam removal in subgroups according to the number and combinations of precautions made under amalgam removal.

<table>
<thead>
<tr>
<th>Number of precautions</th>
<th>Combination of precautions</th>
<th>Improved health (n=233)</th>
<th>Unchanged health (n=29)</th>
<th>Worsening of health (n=26)</th>
<th>Don’t know (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>No precautions</td>
<td>40</td>
<td>60.6</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>1</td>
<td>Only prophylactic treatment</td>
<td>11</td>
<td>78.6</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Only protective equipment</td>
<td>62</td>
<td>65.3</td>
<td>17</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>Only post treatment</td>
<td>7</td>
<td>87.5</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>Prophylactic treatment and protective equipment</td>
<td>28</td>
<td>82.4</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Prophylactic treatment and post treatment</td>
<td>6</td>
<td>100</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Protective equipment and post treatment</td>
<td>13</td>
<td>81.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>Prophylactic treatment and protective equipment and post treatment</td>
<td>66</td>
<td>90.4</td>
<td>3</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Discussion

Main findings

This was a retrospective survey among members of a Norwegian dental patient association with health complaints, which they attributed to former dental amalgam fillings. Most of the participants reported some degree of health improvement after amalgam removal, but the mean degree of severity of symptoms was still high, with the subscales exhaustion and musculoskeletal complaints exhibiting the highest severity. This finding corresponds well with the fact that 37.6% of the participants reported poor to very poor current health. Improved health was more frequently reported among participants with the longest time interval since removal and with the highest number of precautions made in connection with amalgam removal.

Other studies

The most commonly reported single symptoms in this study were tendency to rapid exhaustion followed by tiredness, concentration disturbance, and pain in joints and limps. This finding is in line with other Scandinavian studies on similar populations [12, 13, 23]. Lygre et al. [12], found that the most reported complaints were local symptoms around the mouth, in addition to general complaints such as pain from muscles and joints, fatigue, and memory disturbance, a symptom pattern, which is confirmed in the present study. Moreover, half of the participants in our study reported pain in the face, a category, which included symptoms around the mouth as described in Lygre et al [12].

Our finding of improved self-reported health in 74.4% of the participants after removal of amalgam, with 67.9% indicating major improvement or total recovery, is also in accordance with findings in other studies [8, 12-15]. Hanson reported better or much better health after removal of amalgam fillings in 73% of all participants across 25 studies (n=5821) [24]. A Sum score of 35 on the GBB-24 complaint scale four to nine years after removal of amalgam is
somewhat higher than what was found in another Norwegian population 7 years after removal of amalgam, where a sum score of 28.9 was found [13]. The higher mean complaint score in the present study might be related to the membership in a patient organization [25, 26].

Our finding of worsening of health in 8.4% (n=26) of the participants after removal of amalgam is in accordance with other studies. Long-term health deterioration following amalgam removal has been reported in 9.5% of members of a Swedish patient organisation and in 13% of patients examined at two different referral institutions [8, 27]. The differences in worsening of health across these studies may be related to differences in clinical settings. Similar deterioration rates were found in the present study of NDPA members (8.3%) and the survey of members of the Swedish dental patient organisation (9.5%).

The reasons for worsening in self-reported health after amalgam removal are poorly understood. A study from a referral institution found that patients reported health deteriorations had altered mercury concentrations in erythrocytes and plasma, compared to patients who reported improvement of health status after amalgam removal [28]. Sjursen et al. [29] concluded in a qualitative study that: “The dental amalgam was certainly important to get rid of, but it is uncertain how important the removal was for the experienced changes in health complaints”. Also Nerdrum et al. [13], who reported improvement of health after amalgam removal, state that the amalgam might not have been the main cause of the patient’s subjective health complaints. These statements together with the fact that the majority of the participants in this study still report complaints after removal of amalgam (and some even worsening of existing symptoms), suggest that a multifactorial explanation for the complex symptom pattern experienced by the patients cannot be ruled out. We did not collect information about, nor adjusted for, other chronic medical disorders in the studied participants.

The reason for the increased frequency of self-reported improvement of health over time
is not obvious and is not in line with a study finding no difference in sum score on the GBB scale between 2 and 7 years after the removal [13]. As the main difference in the present study is found before and after one year since the removal of amalgam, one explanation may be that the body needs time to restore after the amalgam removal. Another explanation may be that the long recall time since removal in most of the groups could have led to inaccuracy in reported health before removal.

The increased self-reported health found in this study when precautions were taken during amalgam removal is interesting. This could be relevant for treatment procedures and for the recommendations from The National guidelines for assessment and treatment for suspected adverse effects from dental biomaterials [16] and the recommendations of NDPA [17]. It is, however not in line with a randomised controlled trial where no differences in health outcome were found between the groups where precautions (high doses of vitamins and trace elements, similar to our prophylactic treatment and post-treatment) were taken and the group where no precautions were taken [5]. This discrepancy can be related to different types and numbers of precautions, different settings and follow-up periods as well as differences in health status in the studied participants. Notably, in our study, health improvement increased with time since removal, suggesting that follow-up duration may be a relevant factor for assessed health change after amalgam removal.

Limitations

The main limitation of this study is the highly selected group of participants due to membership in a patient association and a rather low response rate. In order to identify patients with persistent health complaints attributed to former amalgam fillings (which was one aim of the survey commissioned by the Norwegian Directorate of Health), study participants were recruited from a specific patient association. The study population may therefore not be
representative for the total patient group. Moreover, the only criterion for inclusion was that the patients had removed all their amalgam fillings. No information about possible clinical diagnoses was obtained, hence is it not possible to distinguish study participants without a medical diagnosis from participants with a diagnosed medical condition.

The fact that no data were available on symptom load related to amalgam before removal of dental fillings, limits the results to symptoms remaining after amalgam removal. The majority of the participants had replaced their amalgam fillings more than nine years ago, so recall bias, meaning some inaccuracy reporting the experienced health changes cannot be excluded. Recall bias may therefore have influenced the reported differences in self-reported changes in health.

The low response rate (36.4%) may be a threat to the validity for the results of this study, because non-responders may differ significantly from those who responded. Our findings are, however in line with findings from other studies investigating symptoms and health changes in patients after removal of amalgam [24]. This might suggest that a potential non-response bias has not imposed a major threat to the validity of the results in the present study [30].

**Clinical and socio economic significance**

Turner and Turk [31] suggest an improvement of 30% on a visual analogue scale as a clinically meaningful outcome. Seventy-four percent of the participants in our study reported improvement of symptoms after amalgam removal on a 3 point categorical scale (improved-, unchanged-, or worsening of health), an outcome which is thus most likely clinically meaningful for the individual patients. The data show a linear connection between symptom load and perceived health status and are therefore in line with data from other patient groups with a similar symptom load. Since the absolute complaint load is a predictor of functional
outcome [32, 33], these results are socioeconomically highly relevant [1, 2]. Even though patients in the present study still report a substantial symptom load after removal, the reported changes in experienced healthiness are of importance in the light of a health economic perspective.

Possible interpretations

The experienced improvement of health was lowest within the first year after amalgam removal, it increased substantially after the first year, and was still continuously high several years later. It is not possible to conclude from a cross-sectional survey, which reflects just one point in time, the possible reasons for this, however some possible hypothesis may be discussed. The fact that the treatment is complicated and expensive increases the probability for an expectation dependent placebo effect, which likely plays a role in many medical interventions [34, 35]. The placebo effect is e.g. reportedly stronger for devices and invasive procedures [36, 37], which are similar procedures to the removal of dental amalgam. The fact that the experienced improvement of health is directly dependent on the number of precautions taken, could account for a strong expectation dependent placebo effect but could also be related to biological effects of the precaution measures.

However, more than 70% of participants reported improved health after amalgam removal at one to 4 years after removal, and the effect was still stable after more than ten years. Thus, it cannot be excluded that the placebo effect played a role in the evaluation of health status. However, considering the time course of the experienced health improvements, this effect would not be distinguishable from a biologically mediated effect.

Conclusions

Most of the participants in this study reported a substantial improvement of health after
amalgam removal. However, they still suffer a variety of complaints. Since absolute complaint load is a robust predictor for general outcome and socioeconomic burden for society, a possible intervention, which enables patients to further improve their health status is desirable.

The findings in this survey are in line with a multifactorial origin of persistent health complaints attributed to former dental amalgam fillings in members of dental patient associations: The experienced improvement of health increased over time after removal and was linearly dependent on the number of precautions taken. The latter effect is compatible with potential placebo effects as well as biological effects. At the same time, the time course seems to be less in accordance with a potential placebo effect.

**Declarations**

The authors declare that they have no competing interests.

**Acknowledgements**

We thank the leader and the administration of NDPA for posting the questionnaires to their members. Subsequently we are grateful to the members of NDPA who filled in and returned the questionnaires. The study was funded through a grant from the Norwegian Directorate of Health. A special thanks to Liljan Smith Aandahl, retired Senior Advisor at the Norwegian Directorate of Health, who was instrumental in setting up the project for people with suspected adverse effects from dental amalgam, which this study is part of.

**References**


IMCR –STUDIEN
- et helseprogram med egeninnsats

Håndbok for gruppeledere

_Pilotprosjekt gjennomført 2014_

Se vedlagt bok

Forfattere:
Christel von Scheidt, Stig Bruset, Andreas Michalsen, Terje Alræk, Brit Drageset, Frauke Musial.
IMCR-studien - et helseprogram med egeninnsats Håndbok for gruppeledere.
Use of complementary and alternative medicine in patients with health complaints attributed to former dental amalgam fillings

Agnete E. Kristoffersen¹, Frauke Musial¹, Harald J. Hamre², Lars Björkman³, Trine Stub¹, Anita Salamonsen¹ and Terje Alræk¹

Published in:
Use of complementary and alternative medicine in patients with health complaints attributed to former dental amalgam fillings

Agnete E. Kristoffersen1*, Frauke Musial1, Harald J. Hamre2, Lars Björkman3, Trine Stub1, Anita Salamonsen1 and Terje Alræk1

Abstract

Background: The dental filling material amalgam is generally well tolerated. However, a small proportion of dental patients experience health complaints which they attribute to amalgam. The symptom pattern is often similar to patients with medically unexplained physical symptoms (MUPS) and the health complaints may persist after amalgam removal. Among patients with MUPS, the use of complementary and alternative medicine (CAM) seems to be high. The aim of this survey was to describe the prevalence and range of CAM use among people with health complaints attributed to dental amalgam fillings in which the health problems persist after the removal of all amalgam fillings. Specific attention was paid to (1) self-reported effects of CAM, (2) differences in CAM use dependent on self-reported health, and (3) gender differences in self-reported CAM use.

Methods: A survey was distributed to all members of The Norwegian dental patient association (NDPA) (n = 999), the response rate was 36.4%. The anonymous questionnaire asked for socio-demographic data, health complaints related to former amalgam fillings, subjectively perceived health status, symptoms, and experience with therapeutic interventions, mostly from the spectrum of CAM. Only participants who had all their fillings removed, which was the vast majority, were analysed.

Results: A total of 88.9 % of included respondents had used at least one CAM modality, with a higher proportion of men (95.7 %) compared to women (86.2 %, p = 0.015). The most frequently used therapies were dietary supplements, vitamins and minerals recommended by a therapist (used by 66.7 %) followed by self-prescribed dietary supplements, vitamins and minerals (59.0 %), homeopathy (54.0 %), acupuncture (48.8 %) and special diets (47.5 %). Use of CAM was similar for participants reporting normal to good health compared to participants reporting poor health. For all but two CAM modalities, the self-reported treatment effect was better in the group reporting normal to good health compared to the group reporting poor health.

Conclusions: CAM was widely used by participants in our study, a finding similar to findings from studies of MUPS patients. To date, health problems associated with the use of dental amalgam is not an accepted diagnosis in the healthcare system. Consequently, people suffering from such complaints experience a lack of adequate treatment and support within conventional health care, which might have contributed to the high number of CAM users in this study.

* Correspondence: agnete.kristoffersen@uit.no
1The National Research Center in Complementary and Alternative Medicine, (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway
Full list of author information is available at the end of the article

© 2016 Kristoffersen et al. Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.
Background

Amalgam, an alloy of mercury and other metals, has been used as a dental filling material since the 19th century and is well tolerated by most people [1]. However, a proportion of people experience health complaints, which they attribute to amalgam [2–4]. Moreover, for some of these patients the health complaints persist even after removal of amalgam fillings. The question whether dental amalgam can cause general health complaints, apart from very rare cases of type-1 hypersensitivity, remains controversial [1]. Following removal of all dental amalgam fillings, an average of three-fourth of people with amalgam-attributed health complaints report improvement or recovery, while the remainder report no or little improvement or even deterioration [1] (deterioration rates are 0.5 %–2 % in population-based surveys [5, 6] and up to 15 % in selected samples [7–9]).

Health complaints persisting after amalgam removal are often similar to symptom patterns associated with medically unexplained symptoms (MUPS), such as fibromyalgia and myalgic encephalomyelitis (ME). Many of these patients use complementary and alternative medicine (CAM) [10–12]. A study of fibromyalgia patients in the U.S. found that 92.6 % of the participants (mostly women) reported to have used some kind of CAM [10]. CAM is also frequently used by patients with health complaints related to amalgam [9, 13–16]. In recent studies, the most commonly reported CAM modalities for this patient group were dietary supplements/vitamins (38–92 %) [9, 14, 15, 17], homeopathy (17–26 %) [9, 13, 14], acupuncture (13–28 %) [2, 9, 14, 16] and chiropractic (18–21 %) [14, 16]. In Norway the most commonly reported CAM modalities used for amalgam-related health complaints are dietary supplements, acupuncture and homoeopathy (65 %, 28 % and 26 % respectively) [9, 17]. The literature has revealed that the prevalence and associations for use of CAM differs between men and women with regard to several socio demographic variables [18–23] and underline the importance of gender-specific analyses [24].

The dental amalgam safety issue has been debated since the 19th century in the U.S [25], since the 1920s and 1930s in Germany [26, 27] and Denmark [28, 29], and since the 1970s internationally [30–35] with patient organizations active in a number of European countries, North America, Australia and New Zealand [25]. In Norway the debate started in the early 1980s [36, 37] and in 1990 The Norwegian dental patient association (NDPA, Forbundet Tenner og Helse in Norwegian) was founded. NDPA is a non-profit patient organization working for a non-toxic dentistry. The association also works to ensure that people, who experience themselves as being hurt/injured by dentistry, shall be entitled to rehabilitation and community support. The survey reported here was conducted in close cooperation with NDPA and is thus in accordance with the emphasis on patient involvement in recent health strategy documents from Norwegian health authorities.

In a representative survey of the adult Norwegian population from 2006, between 5 % and 8 % of the participants expressed the belief that their amalgam fillings had affected their health adversely. Further, a total of 43 % of adults with amalgam fillings had some or all amalgam fillings removed and in 8 % of these participants, the reasons for the removal of the fillings were exclusively due to general health concerns [5]. Moreover, knowledge about the use of CAM among Norwegians with health complaints attributed to amalgam, is limited to a few studies that describe a limited number of CAM modalities [9, 17].

This cross-sectional survey is part of a collaborative treatment project for people with suspected adverse effects from dental amalgam and serve as a basis for the development of a treatment program, especially designed for this group of patients. The overall aim of this study was to describe the prevalence and range of CAM use among people with health complaints attributed to amalgam fillings, in which these health complaints persist after the removal of all amalgam fillings. Specific attention was paid to (1) self-reported effects of CAM treatments on health complaints, (2) potential differences in CAM use between participants with self-reported good vs. poor health, and (3) possible gender differences in self-reported CAM use.

Since there is no well-established, general pathophysiological explanation for the experienced symptoms in this group, we will use the term “amalgam-attributed health complaints” throughout the manuscript to denote general symptoms or health complaints for which the people affected or other concerned persons suspect the cause to be amalgam fillings, regardless if such a causal association has been substantiated or not.

Methods

The survey was distributed to all members of NDPA in December 2011 with a reminder in February 2012. No inquiry about medical diagnoses was made, thus, no information on whether the amalgam-attributed health complaints of the participants could be explained by specific diseases or were medically unexplained (MUPS) was possible. Common to all participants was the attribution of their health complaints to former dental amalgam fillings.

The study participants returned the questionnaires anonymously to The National Research Center in Complementary and Alternative Medicine (NAFKAM) by means of a pre-stamped envelope. The anonymous questionnaire included socio demographic data, conditions related to the amalgam removal, subjectively perceived health status,
symptoms, and experience with therapeutic interventions, mostly from the spectrum of CAM. Participants with remaining amalgam fillings were not asked to complete the survey and were therefore excluded from the study.

In this study a participant was defined as a CAM user, according to his or her answer to the following question:

If you have removed all your amalgam fillings because of health complaints, which other treatment modalities (forms) have you specifically tried for those health complaints? (Tick (x) for every modality you have tried or not tried. Specify the name of the medication, diets and treatment institutions you have tried.

Dietary supplements, vitamins and minerals recommended by therapist (DSVMT), Dietary supplements, vitamins and minerals self-prescribed (DSVMS), Homeopathy, Acupuncture, Special diet, Reflexology, Massage, Herbs, Healing, Ear Acupuncture, Kinesiology, Magnetic field therapy, Naprapathy, Biopathy, Thought field therapy, Rehabilitation in a CAM institution, Craniosacral therapy, Lightening process.

Participants answering “I have tried” for at least one of the CAM modalities listed above were defined as users. Participants who answered “I have not tried” or had missing values in combination with no statement of effect for all listed CAM modalities were defined as non-users of CAM. The perceived effect of the treatment was indicated for each treatment as either “good effect”, “small/no effect” or “worsening”.

The CAM modalities were classified in accordance with the recommendation from The National Center for Complementary and Integrative Health (NCCIH) into the following five categories: 1) alternative medical systems, or complete systems of therapy and practice such as Traditional Chinese Medicine and homeopathy; 2) mind-body interventions, or techniques designed to facilitate the mind’s effect on bodily functions and symptoms such as meditation; 3) biologically-based systems, including herbalism; 4) manipulative and body-based methods, such as chiropractic and massage therapy and 5) energy therapies such as healing [2].

Between-group differences were analyzed using chi-square tests for binary data analyzing one variable at the time and one-way ANOVA test for continuous data in SPSS for Windows (version 22.0, SPSS, Inc., Chicago, IL). Significance level was defined as $p < 0.05$ without $p$-value adjustment for multiple comparisons.

The Norwegian Data Inspectorate has been notified about the study and the Regional Committee for Medical and Health Research Ethics (REK) has approved the study (REK reference 2011/1281).

**Results**

A total of 999 envelopes with questionnaires were sent out, of which 46 were returned unopened to sender. Overall, 953 members of NDPA received the questionnaire and a total of 347 responded (36.4 % response rate) (Fig. 1).

**Basic characteristics of the participants**

The majority of the participants were women (71.6 %) and most participants reported normal to good health (62.4 %). Half of the participants were holding a university degree and mean age was 60 years. The women were slightly older than the men ($p = 0.001$) and men were more often still working. No significant gender differences were found with regard to education nor self-reported health (Table 1).

**CAM use and perceived effect of CAM in the total population**

The mean number of different CAM therapy modalities used per participant was 5.7 with a median of 5 in both men and women, ranging from 0 to 15 modalities. The most commonly used CAM modalities were DSVMT (in 66.7 % of participants), DSVMS (59.0 %), homeopathy (54.0 %), acupuncture (48.8 %), reflexology (42.3 %), massage (40.1 %) and healing (33.6 %). The perceived effects of dietary supplements, vitamins and minerals (DSVMT/DSVMS) were mostly reported to be good (63.0–74.7 %). Roughly half of users reported good effect of homeopathy (57.4 %), reflexology (48.6 %) and massage (41.4 %). By contrast, only one third of users reported good effects of healing (33.8 %) and acupuncture.
Of the studied population, 12.3% \((n = 40)\) reported worsening of symptoms that they related to their use of one or more CAM modalities. In seven out of 18 treatment modalities worsening of symptoms were reported by 5% or more. Lightning process and thought field therapy were the only treatment modalities with no worsening of symptoms reported (Table 2).

Gender specific CAM use and perceived effect of CAM Overall CAM use was more frequently reported by men (95.7%) than women (86.2%) \((p = 0.015)\). Among men, the most commonly used CAM modalities were DSVMT (72.8%) followed by DSVMs (71.7%), homeopathy (56.5%) and special diet (55.4%). Among women, DSVMT was most commonly used (64.2%), followed by DSVMs (53.9%), homeopathy (53.0%) and acupuncture (48.7%).

Comparing the use of individual CAM modalities between women and men, women were significantly more likely to use DSVMs (71.7% vs. 53.9%, \(p = 0.003\)) and less likely to use naprapathy (6.5% vs. 15.9%, \(p = 0.024\)). No significant gender differences were found in regard to CAM categories, though with a trend towards more frequent use of biological-based systems by men \((p = 0.064)\).

No significant gender differences were found with regard to self-reported effect of the received CAM treatment (Table 3).

CAM use and perceived effect of CAM: subgroup analysis according to self-reported health When men and women were divided into groups of self-reported health, no gender differences were found in the group reporting normal to good health. In the poor health group, on the other hand, the gender differences reported above remained, with the addition of another therapy, magnetic-field therapy, which was significantly more often used among women than men.

There were no significant differences in overall CAM use between the groups reporting normal to good health and poor health. However, the CAM category “alternative medical systems” was more commonly used among participants who reported poor health compared to participants who reported normal to good health \((p = 0.032)\). With regard to individual CAM modalities, the poor health group was more likely to use special diets, spiritual healing, biopathy and Lightning Process than the group reporting normal to good health. The self-reported effects of the CAM therapy modalities were reported to be better in the normal to good health group than in the poor health group (Table 3).

Discussion In this cross-sectional survey of members of NDPA with persistent health complaints attributed to former amalgam fillings, 89% had used CAM for their health complaints. DSVMT was the most commonly used CAM modality followed by DSVMs, homeopathy, acupuncture and special diet. Similar use was found in participants reporting normal to good health and participants reporting poor health. The self-reported effect of different CAM modalities was highest in the group with normal to good health. More men than women reported use of CAM in this study. Thus, similar to patients with MUPS, patients with amalgam attributed health complaints are frequent users of CAM.

Health care providers often find patients with medically unexplained symptoms difficult to handle, and misunderstandings between health care providers and patients seem to be common [38]. Since adverse effects from dental amalgam is not an accepted diagnosis in the healthcare system, the reasons why people with amalgam attributed health complaints turn to CAM modalities, as reported in our study, may be similar.

Our findings of high use of CAM in general and dietary supplements and vitamins/minerals in particular are in accordance with findings in other studies of patients with amalgam-attributes health complaints [9, 13–15, 17]. This high use might be partly caused by the fact that patient associations and some doctors and therapists recommend vitamins and minerals in conjunction with amalgam removal [39–41]. Our finding of rather frequent use of homeopathy was also reported in another Norwegian

### Table 1 Basic characteristics of the participants

<table>
<thead>
<tr>
<th></th>
<th>Total % (n)</th>
<th>Men % (n)</th>
<th>Women % (n)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>71.6 (232)</td>
<td></td>
<td>71.6</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>28.4 (92)</td>
<td></td>
<td>28.4</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>60.0</td>
<td>58.8 (SD 11.12)</td>
<td>61.3 (SD 10.26)</td>
<td>0.001*</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>13.4 (42)</td>
<td>7.9 (7)</td>
<td>15.6</td>
<td></td>
</tr>
<tr>
<td>Secondary school</td>
<td>27.4 (86)</td>
<td>32.6 (29)</td>
<td>25.3 (57)</td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>15.6 (49)</td>
<td>13.5 (12)</td>
<td>16.4 (37)</td>
<td></td>
</tr>
<tr>
<td>University, lower grade</td>
<td>22.0 (69)</td>
<td>25.8 (23)</td>
<td>20.4 (46)</td>
<td></td>
</tr>
<tr>
<td>University, higher grade</td>
<td>27.1 (68)</td>
<td>20.2 (18)</td>
<td>22.2 (50)</td>
<td>0.252**</td>
</tr>
<tr>
<td>Self-reported health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal to good</td>
<td>62.4 (199)</td>
<td>64.8 (59)</td>
<td>61.4 (140)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>37.6 (32)</td>
<td>35.2 (32)</td>
<td>38.6 (88)</td>
<td>0.568**</td>
</tr>
<tr>
<td>Working</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>59.0 (128)</td>
<td>71.0 (49)</td>
<td>53.4 (79)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>41.0 (89)</td>
<td>29.0 (20)</td>
<td>46.6 (69)</td>
<td>0.014**</td>
</tr>
</tbody>
</table>

*One-way ANOVA test
**Pearson Chi-Square test
study of patients with amalgam-attributed health complaints [9]. The possible lack of adequate conventional treatment available for these health problems might be the reason for the high number of CAM users in this study. Also the fact that the period for CAM use in this study was “since onset of the health complaints” (instead of commonly “in the past year” or similar), might have contributed to the high frequency of CAM use.

The higher use of CAM among men than women in our study is not in accordance with findings in previous studies of other patient groups [18 – 22]. The reason for this might be the highly selected group of male participants due to membership in a patient association and removal of their amalgam filling at their own expense. The fact that more men than women were still working might have given more of the men the financially abilities to finance CAM use, since CAM is mainly paid out-of-pocket in Norway. The lower use of CAM among men than women in most other studies is often attributed to a presumption that men’s health care needs are better met within conventional health care [42], while we here see CAM use in a population that do not find their health care needs met within conventional health care [10]. Educational level and self-reported health were similar in men and women and these factors can therefore not explain the differences in CAM use.

The better self-reported effect of the CAM treatment among the participants with normal to good health compared to those with poor health is an interesting finding and not easy to explain. Generally, since this is a cross-sectional survey, it is impossible to make causal interpretations. Possibly, differential effects of CAM therapy could lead to different degrees of health improvement in participants with similar health status before therapy.

Worsening of symptoms following CAM treatment was reported by 12.3 % of the participants in our study. For homeopathy, worsening was reported by 2.8 % of users, which is much lower than in another Norwegian

### Table 2 CAM use and perceived effect in the total population (n = 324)

<table>
<thead>
<tr>
<th>CAM use and perceived effect</th>
<th>Reported use % (n)</th>
<th>Good effect % (n*)</th>
<th>No effect % (n*)</th>
<th>Worsening % (n*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over all CAM use</td>
<td>88.9 (288)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative medical systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeopathy</td>
<td>54.0 (175)</td>
<td>57.4 (81)</td>
<td>39.7 (56)</td>
<td>2.8 (4)</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>48.8 (158)</td>
<td>38.8 (52)</td>
<td>58.2 (78)</td>
<td>3.0 (4)</td>
</tr>
<tr>
<td>Ear acupuncture</td>
<td>32.7 (106)</td>
<td>38.8 (33)</td>
<td>58.8 (50)</td>
<td>2.4 (2)</td>
</tr>
<tr>
<td>Mind-body interventions</td>
<td>16.0 (52)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought field therapy</td>
<td>12.0 (39)</td>
<td>37.5 (12)</td>
<td>62.5 (20)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Lightning process</td>
<td>4.9 (16)</td>
<td>46.2 (6)</td>
<td>53.8 (7)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Biologically-based systems, including herbalism</td>
<td>84.3 (273)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSVMT</td>
<td>66.7 (216)</td>
<td>74.7 (139)</td>
<td>23.1 (43)</td>
<td>2.2 (4)</td>
</tr>
<tr>
<td>DSVMS</td>
<td>59.0 (191)</td>
<td>63.0 (92)</td>
<td>32.2 (47)</td>
<td>4.8 (7)</td>
</tr>
<tr>
<td>Special diet</td>
<td>47.5 (154)</td>
<td>74.4 (96)</td>
<td>23.3 (30)</td>
<td>2.3 (3)</td>
</tr>
<tr>
<td>Herbs</td>
<td>37.7 (122)</td>
<td>55.6 (50)</td>
<td>38.9 (35)</td>
<td>5.6 (5)</td>
</tr>
<tr>
<td>Biopathyb</td>
<td>13.3 (43)</td>
<td>40.6 (13)</td>
<td>56.3 (18)</td>
<td>3.1 (1)</td>
</tr>
<tr>
<td>Manipulative and body-based methods</td>
<td>61.4 (199)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflexology</td>
<td>42.3 (137)</td>
<td>48.6 (52)</td>
<td>45.8 (49)</td>
<td>5.6 (6)</td>
</tr>
<tr>
<td>Massage</td>
<td>40.1 (130)</td>
<td>41.4 (41)</td>
<td>43.4 (43)</td>
<td>15.2 (15)</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>29.3 (95)</td>
<td>43.3 (29)</td>
<td>50.7 (34)</td>
<td>6.0 (4)</td>
</tr>
<tr>
<td>Naprapathyc</td>
<td>13.3 (43)</td>
<td>46.4 (13)</td>
<td>46.4 (13)</td>
<td>7.1 (2)</td>
</tr>
<tr>
<td>Craniosacral therapy</td>
<td>8.6 (28)</td>
<td>42.9 (9)</td>
<td>47.6 (10)</td>
<td>9.5 (2)</td>
</tr>
<tr>
<td>Energy therapies</td>
<td>41.7 (135)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healing</td>
<td>33.6 (109)</td>
<td>33.8 (26)</td>
<td>63.6 (49)</td>
<td>2.6 (6)</td>
</tr>
<tr>
<td>Magnetic field therapy</td>
<td>19.1 (62)</td>
<td>29.5 (13)</td>
<td>61.4 (27)</td>
<td>9.1 (4)</td>
</tr>
<tr>
<td>Rehabilitation in a CAM institution</td>
<td>9.3 (30)</td>
<td>80.0 (20)</td>
<td>16.0 (4)</td>
<td>4.0 (1)</td>
</tr>
</tbody>
</table>

*a Due to missing responses to the question about effect, the n regarding effect might be lower than for use of the CAM modality.

*bBiopathy is a treatment system that encompasses several different alternative diagnostic tools and therapies such as homeopathy, herbs, reflexology.

*cNaprapathy is a system of specific examination, diagnostics, manual treatment and rehabilitation of pain and dysfunction in the neuro-musculoskeletal system.
<table>
<thead>
<tr>
<th>Use of CAM</th>
<th>Good effect of CAM</th>
<th>Use of CAM</th>
<th>Good effect of CAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use</td>
<td>Women</td>
<td>p-value</td>
</tr>
<tr>
<td><strong>Overall CAM use</strong></td>
<td>95.7 (88)</td>
<td>86.2 (200)</td>
<td>0.015</td>
</tr>
<tr>
<td><strong>Alternative medical systems</strong></td>
<td>68.5 (63)</td>
<td>68.5 (159)</td>
<td>0.992</td>
</tr>
<tr>
<td>Homeopathy</td>
<td>56.5 (52)</td>
<td>53.0 (123)</td>
<td>0.568</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>48.9 (45)</td>
<td>48.7 (113)</td>
<td>0.973</td>
</tr>
<tr>
<td>Ear acupuncture</td>
<td>31.5 (29)</td>
<td>33.2 (77)</td>
<td>0.851</td>
</tr>
<tr>
<td>Mind-body interventions</td>
<td>14.1 (13)</td>
<td>16.8 (39)</td>
<td>0.553</td>
</tr>
<tr>
<td>Thoughtfield therapy</td>
<td>10.9 (10)</td>
<td>12.5 (29)</td>
<td>0.684</td>
</tr>
<tr>
<td>Lightening process</td>
<td>4.3 (4)</td>
<td>5.2 (12)</td>
<td>0.757</td>
</tr>
<tr>
<td>Biologically-based systems, including herbalism</td>
<td>90.2 (83)</td>
<td>81.9 (190)</td>
<td>0.064</td>
</tr>
<tr>
<td>DSVMT</td>
<td>72.8 (67)</td>
<td>64.2 (149)</td>
<td>0.139</td>
</tr>
<tr>
<td>DSVMS</td>
<td>71.7 (66)</td>
<td>53.9 (125)</td>
<td>0.003</td>
</tr>
<tr>
<td>Special diet</td>
<td>55.4 (51)</td>
<td>44.4 (103)</td>
<td>0.073</td>
</tr>
<tr>
<td>Herbs</td>
<td>35.9 (33)</td>
<td>38.4 (89)</td>
<td>0.676</td>
</tr>
<tr>
<td>Biopathy</td>
<td>10.9 (10)</td>
<td>14.2 (33)</td>
<td>0.422</td>
</tr>
<tr>
<td>Manipulative and body-based methods</td>
<td>60.9 (56)</td>
<td>61.6 (143)</td>
<td>0.898</td>
</tr>
<tr>
<td>Reflexology</td>
<td>41.3 (38)</td>
<td>42.7 (99)</td>
<td>0.822</td>
</tr>
<tr>
<td>Massage</td>
<td>33.7 (31)</td>
<td>42.7 (99)</td>
<td>0.137</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>29.3 (27)</td>
<td>29.3 (68)</td>
<td>0.995</td>
</tr>
<tr>
<td>Naprapathy</td>
<td>6.5 (6)</td>
<td>15.9 (37)</td>
<td>0.024</td>
</tr>
<tr>
<td>Craniosacral therapy</td>
<td>5.4 (5)</td>
<td>9.9 (23)</td>
<td>0.196</td>
</tr>
<tr>
<td>Energy therapies</td>
<td>40.2 (37)</td>
<td>42.2 (98)</td>
<td>0.739</td>
</tr>
<tr>
<td>Healing</td>
<td>35.9 (33)</td>
<td>32.8 (76)</td>
<td>0.593</td>
</tr>
<tr>
<td>Magneticfield therapy</td>
<td>14.1 (13)</td>
<td>21.1 (49)</td>
<td>0.149</td>
</tr>
<tr>
<td>Rehabilitation in a CAM institution</td>
<td>7.6 (7)</td>
<td>9.9 (23)</td>
<td>0.519</td>
</tr>
</tbody>
</table>

*p-value
**Fisher's Exact test

Table 3 Gender- and health specific use and effect of CAM

---

*Pearson Chi-Square test

**Fisher's Exact test
study where 26% reported worsening after homeopathic treatment regardless of health complaints [43]. The deterioration rate following CAM therapy for amalgam-attributed health complaints in this study (12.3%) was similar to deterioration rates in three studies of amalgam removal for the same indication, also in highly selected patient groups (9.5% of members of a Swedish dental patient association [7]; 14.7% and 13% of patients referred to dental material adverse reaction units in Sweden [29] and Norway [30], respectively) [7–9]. Possibly, deterioration following CAM treatment in this study could be related to characteristics of the selected patient group and not just to features of the CAM interventions.

Limitations
The main limitation of this study is the highly selected target group: In order to identify and reach patients with persistent health complaints attributed to former amalgam fillings, subjects were recruited from a specific patient association and may therefore not be representative for the total patient group. A German study shows that members of fibromyalgia self-help groups use significantly more CAM than patients not affiliated with self-help groups [11] while in a Norwegian study of people with amalgam-attributed health complaints, those who had removed all their amalgam fillings were significantly more likely to use homeopathy and natural therapy than those who still had amalgam fillings [9]. The survey had a modest response rate (36.4%) which may influence the generalizability of the findings. This survey did not contain diagnoses of the health complaints; therefore, the prevalence of related conditions such as MUPS cannot be assessed. Since the CAM use was not limited in time, but related to the amalgam health complaints, regardless of when they started, the recall period concerning CAM use might have been long and resulted in inaccuracies with regard to the reported use of CAM therapies. Also, the reported subgroup differences with regard to CAM use and self-reported CAM effects should be treated with caution, because of multiple hypothesis testing and due to low sample sizes in some subgroups.

Interpretation
This is the first survey of CAM use among people with amalgam-attributed health complaints in Norway addressing a broad range of CAM modalities. To our knowledge, it is the first study of CAM use worldwide to focus on the subgroup of people with amalgam-attributed health complaints, in which the health complaints persist following complete amalgam removal, and is therefore a door opener to the field. The results from this study were used for the development of an Integrated Medical Care Rehabilitation program for this patient group, in which CAM is given as a part of the program.

Conclusion
Findings from this study suggest that CAM was widely used by people with health complaints attributed to dental amalgam fillings, and who had removed all amalgam fillings, and were member of a patient organization, NDPA. The reasons for the considerably high use of various CAM modalities may be related to the experienced lack of support and treatment offers within the conventional health care system.

Abbreviations
MUPS: Medically unexplained physical symptoms; ME: Myalgic encephalomyelitis; CAM: Complementary and Alternative Medicine; NAFKAM: National Research Center in Complementary and Alternative Medicine; OTC: Over the counter; NDPA: Norwegian Dental Patients Association (Forbundet tønder og helse i Norsvan); NCCIH: National Center for Complementary and Integrative Health; DSVMT: Dietary supplements, vitamins and minerals self-prescribed; REK: Regional Committee for Medical and Health Research Ethics.

Competing interests
The authors declare that they have no competing interests.

Authors’ contributions
TA conceived the study, TA; HJH and LB compiled the questionnaires, AEK and FM performed the initial and final analyses. All authors helped draft the manuscript and reviewed subsequent versions; and all authors read and approved the final manuscript.

Acknowledgements
We acknowledge the leader and the administration of NDPA with posting the questionnaires to the members of NDPA. Subsequently we are grateful to the members of NDPA who filled in and returned the questionnaires. The study was funded through a grant from the Norwegian Directorate of Health. Special thanks to Liljan Smith Aandahl, retired Senior Advisor at the Norwegian Directorate of Health, who was instrumental in setting up the project for people with suspected adverse effects from dental amalgam, which this study is part of.

Author details
1The National Research Center in Complementary and Alternative Medicine, (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway. 2Institute for Applied Epistemology and Medical Methodology at the University of Witten-Herdecke, Freiburg, Germany. 3Dental Biomaterials Adverse Reaction Unit, Uni Research Health, Bergen, Norway.

Received: 26 August 2015 Accepted: 12 January 2016
Published online: 22 January 2016

References


Mörnstad H, Teivens A, Wännman A. Sjukdomsbild och attityder till amalgam [Illness and attitudes to dental amalgam]. Tandläkartidningen. 1994;83:196–204.


Salmon P. Conflict, collusion or collaboration in consultations about medically unexplained symptoms; the need for a curriculum of medical explanation. Patient Educ Couns. 2007;67(3):246–54.


Operationalizing the use of patient experiences for the selection of treatment options in a clinical trial: The “USB” (Use – Safety - Benefit) principle and the Integrated Medical Care Rehabilitation trial for patients with amalgam attributed health complaints

Frauke Musial1*, Agnete Egilsdatter Kristoffersen1, Terje Alræk1, Harald Johan Hamre2, Trine 6 Stub1, Lars Björkman3 & Vinjar Fønnebø1

Under review in BMC Complementary and Alternative Medicine
Operationalizing the use of patient experiences for the selection of treatment options in a clinical trial: The “USB” (Use – Safety - Benefit) principle and the Integrated Medical Care Rehabilitation trial for patients with amalgam attributed health complaints

Frauke Musial1*, Agnete Egilsdatter Kristoffersen1, Terje Alræk1, Harald Johan Hamre2, Trine Stub1, Lars Björkman3 & Vinjar Fønnebø1

1The National Research Center in Complementary and Alternative Medicine (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway

2Institute for Applied Epistemology and Medical Methodology at the University of Witten-Herdecke, Freiburg, Germany

3Dental Biomaterials Adverse Reaction Unit, Uni Health, Uni Research, Bergen, Norway

* Corresponding author

E-mail adresses:
Frauke Musial: frauke.musial@uit.no
Agnete E. Kristoffersen: agnete.kristoffersen@uit.no
Terje Alræk: terje.alrak@uit.no
Harald J. Hamre: harald.hamre@ifaemm.de
Trine Stub: trine.stub@uit.no

Lars Björkman: lars.bjorkman@uib.no

Vinjar Fønnebø: vinjar.fonnebo@uit.no
Abstract

BACKGROUND:
The patients’ role has changed from being the object of healthcare interventions to an active decision maker. Consequently, more patient involvement in clinical research has become a demand in Norway, but reflects also a general trend. We suggest a rational strategy for a patient driven selection of treatments, framed by the numbers of users, safety, and benefit. The selected interventions were used as part of a rehabilitation program, the Integrated Medical Care Rehabilitation (IMCR) trial, for patients with amalgam-attributed health complaints.

METHODS:
An anonymous questionnaire asking for experience with therapeutic interventions was distributed to all members of The Norwegian dental patient association (NDPA) (n = 999; response rate: 36.4 %). The anonymous questionnaire. Step I: Therapies were ranked according to the number of users. Treatments where the confidence interval of a proportion would be up to ± 10% at a reported proportion of 20% were included. Step II: In order to minimize risk, the percentage of all participants reporting worsening was used as the criterion to rank the therapies according to risk. The threshold for exclusion was set at 2% or more of the total sample at risk. Step III: The remaining therapies were ranked according to benefit and a criterion of at least 20% reporting benefit was set for inclusion. Moreover, therapies were assessed for feasibility within the framework of the program. A quantitative methodology for the measurement of patients’ experiences and preferences of a patient population the “Patient Experience-based Benefit/Risk Index” (PEBRI) was developed in addition.
RESULTS:
The following therapies remained after the selection process: dietary supplements, vitamins and minerals recommended by therapist (DSVMT); special diet; herbs; reflexology; kinesiology; acupuncture; ear acupuncture; physiotherapy; healing; homeopathy and medications over the counter. With the exception of the last, these therapies were included in the IMCR trial.

CONCLUSIONS:
The conduct of a survey among the target group is a probate and feasible methodology in order to operationalize patient participation in clinical studies. In a situation where there is no scientific evidence for the risk/benefit profile of the preferred interventions available, the USB (use-safety-benefit) approach provides a helpful guide for decision making.

Keywords

Patient participation; safety; decision making; design clinical trial; Patient Experience-based; Benefit/Risk Index
Background

Over the last decade, the patients’ role in their treatment has changed dramatically. The availability of medical information, in particular through the Internet, has led to a situation where patients are increasingly taking over the role of decision makers. Patient empowerment and the role of an active patient is a relatively new concept, but the scarce evidence available suggests that patients can play a distinct role in promoting their own health and that this approach may even be cost effective in the long run [1].

Norway is currently in a process of implementing a higher degree of patient participation in health care. According to the “Coordination reform” patients shall participate in their own preventive, treatment, rehabilitation and care programs, and patient and user organizations shall be involved at the system level [2]. The principal understanding, which formed the basis for such a fundamental position is that "... Patients who participate in the planning and monitoring of their health care, are better able to mobilize their own resources. This can improve the prospects for good results" [3].

One of the consequences of this fundamental change is a growing demand for patient involvement in clinical research in Norway [4]. Patient participation on the individual and system level in all phases of planning and execution of clinical trials or health services research, is now mandatory.

The dental amalgam safety issue has been debated in Norway since the early 1980ies [5, 6] and in 1990 the Norwegian dental patient association (NDPA, Forbundet Tenner og Helse in Norwegian) was founded. NDPA is a non-profit patient organization working for a non-toxic dentistry. The association also works to ensure that people, who experience themselves as being hurt/injured by dentistry, shall be entitled to rehabilitation. Since the 1990ies the use of amalgam in Norway has declined substantially, and in 2008 the use of amalgam was...
prohibited in Norway for environmental reasons [7]. In 2011 the Norwegian Ministry of 
Environment proposed a global ban on the use of mercury [8].

In 2006, a population survey among 2000 adult Norwegians revealed that between 5% and 
8% of the respondents expressed the belief that their amalgam fillings had affected their 
health adversely. Nearly half of the adults with amalgam fillings had had some or all amalgam 
fillings removed. In 8% of those who had had their amalgam fillings removed, the given 
reason for the removal was exclusively “general health reasons” [9].

In 2009 the Norwegian Ministry of Health and Care Services asked the Norwegian 
Directorate of Health to initiate a collaborative treatment project for patients with suspected 
adverse effects from dental materials (“Samarbeidsprosjekt mellom tannhelsetjenesten og 
helsetjenesten om utprøvende behandling ved mistanke om bivirkninger av odontologiske 
biomaterialer”). The aim of the Collaborative Treatment Project was to achieve improved 
health and/or quality of life in patients with health complaints which they relate to dental 
materials. Part of this project was the development of a rehabilitation program for persons 
with persistent health complaints after amalgam removal, the so called integrated medical care 
rehabilitation trial (IMCR trial).

Even though the possible pathophysiology for amalgam related health complaints is to date 
not understood, some experience a high symptom-load and in some cases these symptoms 
persist even after the removal of the amalgam fillings. The symptoms can be severe, interfere 
with everyday activities, and can impose a major burden to the patients’ quality of life. 

Moreover, it is known from other conditions, that a high symptom load can represent a 
socioeconomic burden [10] and is associated with a poor functional prognosis [11, 12]. Thus, 
to develop an intervention that might ameliorate the high symptom load of these patients and 
that supports them with strategies in order to cope better with their everyday challenges, could 
be of high socioeconomic relevance.
No treatment studies directed specifically at this patient group have been performed [13], and there is therefore no established intervention available. As a consequence, we decided to develop a resource and lifestyle oriented intervention which should be based on available scientific evidence from patients with similar symptom patterns [14-23]. Moreover, the intervention would also be built on the experience and preferences of the target patient group. We planned this intervention program (the details of which will be published elsewhere) as a group program [24], focusing on lifestyle and the strengths of the participants (resource oriented/), combined with an element of optional symptom-focused individualized interventions.

In the symptom oriented, individualized part of the intervention, patients would be free to choose a selection of conventional- and Complementary and Alternative Medicine (CAM) therapies. The selected therapies should ideally be based on patient experience and preferences, and were derived from the results of a cross-sectional survey conducted among the members of NDPA who had had all their amalgam fillings removed, but were still experiencing a high symptom load. The survey was developed in close cooperation with NDPA, and is thus in accordance with the emphasis on patient involvement and the demand for patient participation in clinical research in Norway, as mentioned previously. The results of the survey confirmed and extended earlier findings [25-28] namely that patients with amalgam-attributed health complaints use CAM to a considerable degree [29].

It was clear at the time of the survey that not all of the 26 therapies listed in the questionnaire would be included in the intervention program. The goal was to select interventions in order to accommodate patient preferences to the largest extent possible, while at the same time ensuring patient safety as well as rigorous methodological standards and quality.

This paper describes the selection procedure for the therapies to be included in the IMCR trial based on the NDPA survey.
Methods

Survey of self-reported use, safety and benefit of treatments for amalgam-attributed health problems

The survey methodology has been described in detail previously [29]. Common to all participants was the attribution of their health complaints to former dental amalgam fillings. Information about the study was sent out together with the questionnaire. The study participants returned the questionnaires anonymously to The National Research Center in Complementary and Alternative Medicine (NAFKAM) by means of a pre-stamped envelope. No informed consent was required since the questionnaire was anonymous.

Briefly, a total of 999 letters were sent through NDPA to all their members, of which 46 were returned to sender. Overall, 953 members of NDPA received the questionnaire and a total of 347 responded (36.4%). Of these, n=23 were excluded due to remaining amalgam fillings. Figure 1 depicts the inclusion flow chart.
The survey included a section about use of various treatments for the persistent health complaints attributed to the previous amalgam fillings (26 interventions in total). Most of these therapies (n=18) were CAM interventions and the results of the survey regarding their utilization among the target patient group are presented elsewhere [29]. Others are not considered CAM (8 out of the 26) or standard treatment, but are in wide use among patients with amalgam attributed health complaints (most of these therapies will be known, with the exception of “chelators”. Chelators indicate off-label use of chelating agents, which are medications otherwise used for treatment of acute heavy metal poisoning). However, they are of relevance in this context, because patients have found them helpful, or have experienced worsening of their condition during these interventions.

**Figure 1**: Inclusion flow chart.
The question "If you have removed all your amalgam fillings because of health complaints, which other treatment modalities (forms) have you specifically tried for those health complaints?" was followed by the list of 26 therapies. The participants were asked, for each of these, whether they had used it or not. If they answered "yes", they were asked whether the therapy had "good effect", "no effect" or if it had caused a "worsening".

When selecting therapies to be included in the intervention trial, the consideration of the harm/benefit relation was most fundamental. We operationalized the selection procedure into a sequence of three steps, corresponding to a hierarchical set of three criteria based on use, safety and benefit (USB):

**Use:** Sufficient number of therapy users as basis for the selection

**Safety:** Minimize risk

**Benefit:** Maximize benefit

This principle and the rationale for the three criteria and their hierarchical order was to set a priori before selecting therapies to be included.

The principle of "safety first" or "safety [Step II] coming before benefit [Step III]" is fundamental in modern medicine [30] and implemented in health-related legislation in many countries and at the European level. However, in order to enable an adequate assessment of risks and benefit of a therapeutic intervention, a minimum amount of knowledge must be available. That is the rationale for evaluating whether the data set includes a sufficient number of users as in Step 1.
Criteria for sufficient number of users for judgment: (Step I)

Defining the minimum number of users needed is of course a matter of judgment. There needs to be a narrow enough confidence interval for both relevant groups, around the proportion reporting benefit, as well as around the proportion reporting worsening in response to the treatment. We chose to only include treatments where the confidence interval of this proportion would be up to ± 10% at a reported proportion of 20%.

\[
n = \frac{0.2 \times 0.8}{0.05^2}
\]

Standard sample size calculation [31] shows that this requires a minimum of 64 individuals reporting use of the therapy in question.

Criteria to minimize risk (Step II)

With regard to patient safety, the question whether participants felt worse after the intervention is most relevant, and was regarded as highly important information for the design of the intervention. However, it is relevant to keep in mind that the judgment “worse” in this questionnaire does not only relate to possible adverse effects induced by the therapy; “worsening” can also be a consequence of a non-helpful treatment during a progressive or fluctuating disease course [32]. Nonetheless, regarding the interpretation of the outcome of the survey, self-reported “worsening” is the variable which is most suitable for risk assessment.

The percentage of ALL users reporting “worsening” as a criterion was chosen with the rationale that risk should be assessed as conservatively as possible and risk assessment should have the highest priority with regard to the choice of therapies selected for inclusion in the IMCR trial.
Therefore, the standpoint was taken, that when a total of n=324 participants are asked about a group of interventions, that number of participants in the total sample is at risk, irrelevant of how many participants actually used the intervention. Therefore, the percentage of ALL participants reporting worsening was used as the criterion to rank the therapies according to risk. The choice of threshold is again a judgment. Our choice was to set this percentage at 2%. This corresponds to n=7 or more participants reporting worsening.

Criteria to maximize benefit (Step III)

The therapies were lastly ranked according to the percentage of users who experienced symptom relief (“good effect”) after utilization. Thus, if e.g. a high percentage of participants who used the therapy experienced benefit, then that therapy would rank high, even though the absolute number of participants who tried this therapy might be lower than for another intervention. Again, the choice of a criterion is a matter of judgement. We chose a proportion of at least 20% reporting good effects from the respective treatment to be sufficient for inclusion.

Feasibility assessment

Theoretically, all therapies remaining after step III of the selection process might be included into a trial. However, a trial usually has limitations such as e.g. the financial framework, or limitations due to practicability. Therefore, the final selection of which therapies to include in a trial will depend on how feasible that particular therapy is within the framework of the trial.
A criterion for adequate benefit?

Usually one can assume, that there is room for a certain number of therapeutic choices in a trial. Since Step I ensures a sufficient number of users, it is appropriate to include from the top of the list as many therapies as the framework of the trial allows.

However, a particular patient population may express particular preferences for or against interventions and most likely these are based on experience. These preferences may vary according to the symptom complex. A quantitative methodology for the measurement of patients’ experiences and preferences of a patient population could be the index of number of patients experiencing good effect divided by the number of patients experiencing worsening of symptoms. We call this the “Patient Experience-based Benefit/Risk Index” (PEBRI). Even though not applied in the IMCR trial, the PEBRI could have been used as a fourth selection criterion.

Results

Step I

The ranking of the therapies according to the percentage of participants using the therapy in the total sample (n=324) is presented in Figure 2. The percentages behind the bars relate to the total of n=324 while the numbers in brackets report the absolute numbers of participants using the therapy. Dietary supplements, vitamins and minerals recommended by therapist (DSVMT) was with 66.7 % (n=216) the most frequently used intervention, while Lightning process was used the least by only 4.9 % (n=16) of the participants.

According to our criteria, n=64 individuals are needed in order to secure sufficient sample size for judgment. This resulted in the inclusion of all therapies from Chelators upwards (cf Figure 2) into the following Step II.
Figure 2: The list of therapeutic interventions ranked according to frequency of use in percent from a total of n=324 participants. The numbers in brackets show the absolute numbers of participants, the numbers without brackets indicate percentages of the frequencies in relation to the total sample. (DSVMT = Dietary supplements, vitamins and minerals recommended by therapist, DSVMS = dietary supplements, vitamins and minerals, self-prescribed)

Step II

Participants, who answered “yes” with regard to utilization, were then asked, whether the therapy had “good effect”, “no effect” or if it had caused a “worsening” of the health complaints. Figure 3 shows the therapies included into Step II because they were used by a sufficient number of patients, ranked according to the percentage of the total number of all participants.
324 informants who experienced worsening of symptoms. Medicines prescribed by a doctor with 37 of the participants experiencing worsening was the most “risky” therapy, followed by chelators (n=21), massage (n=15) and DSVS (n=7).

Figure 3: The list of therapeutic interventions ranked according to the absolute numbers of participants who experienced worsening of the symptoms. (DSVMT = Dietary supplements, vitamins and minerals recommended by therapist, DSVS = dietary supplements, vitamins and minerals, self-prescribed).

According to the criterion for Step II, therapies were excluded for which n=7 or more participants reported worsening. As a consequence, the interventions Medicine prescribed by a
doctor, Chelators, Massage, and DSVMS were excluded, while the other interventions were included into the following Step III (Figure3).

Step III

Figure 4 shows the therapies ranked according to the percentage of users of the respective therapy who experienced symptom relief ("good effect") after utilization. Note that the percentages are related to the number of users of the therapy in question (not to the whole sample). The self-reported most beneficial therapeutic intervention was, Dietary supplements, vitamins and minerals recommended by therapist (DSVMT).

Figure 4: The list of therapeutic interventions ranked according to the percentage of participants who experienced symptom relief after utilization. The numbers in brackets show
the absolute numbers of participants, the numbers without brackets indicate the percentages related to the number of participants who stated having used the therapy in question.

Interventions related to nutrition, such as dietary supplements, vitamins and minerals recommended by therapist (DSVMT), special diet, and herbs were perceived as being very helpful with regard to symptom relief. Moreover, patients reported good experiences with homeopathy, reflexology, acupuncture, ear acupuncture, kinesiology, physiotherapy, medications over the counter and healing. All 11 therapies fulfilled the criterion of at least 20% of users reporting good effects, and were thus assessed for feasibility in the trial.

Feasibility

Of the 11 therapies assessed for feasibility, 10 could be included into the IMCR trial. Medications over the counter was not included for lack of feasibility within the trial conditions.

Adequate benefit

The PEBRI not only takes the experienced benefit within a particular patient population into account, it sets this benefit in relation to potential worsening. Figure 5 depicts the PEBRI for patients with amalgam attributed health complaints in this survey.
Figure 5: The “Patient Experience-based Benefit/Risk Index” (number of patients experiencing good effect divided by the number of patients experiencing worsening of symptoms) of the remaining therapies for this particular patient population.

The results show, that the PEBRI gives a slightly more differentiated picture of patients preferences, even though the general tendency conforms the ranking according to benefit. However, here e.g. healing ranks considerably higher (place 3) then if just the benefit was taken into account, where healing was ranked lowest.
Discussion

We developed a three-step algorithm for selection of treatments to include into a rehabilitation program. In the first step, 11 therapies of 26 were excluded because not enough patients had experience with them. In step II, safety, 4 of the remaining 15 therapies were excluded, because 2% or more of all respondents reported a worsening of symptoms. In step III, all remaining therapies were included because more than 20% of patients had reported benefit.

Moreover, we suggest a patient experience based index, PEBRI, potentially providing a quantitative methodology for the measurement of patients’ experiences of benefits and risks with therapies within a particular patient population. The PEBRI is basically independent from the USB principle of the selections process, but provides a patient centered risk/benefit profile of the population of therapies to be investigated.

As pointed out above, interventions related to nutrition, such as dietary supplements, vitamins and minerals recommended by a therapist (DSVMT), special diet, and herbs ranked high in the preference of the patients responding to the survey. Nutrition is known to have a substantial impact on health and is therefore generally a core part or “building block” in all illness coping and health behavior programs [33-35]. This was also the case in the group program developed for the intervention trial and accordingly, these interventions were not included in the individualized part of the treatment program, but the focus on nutrition in the group program was extended.
Even though there is no high-quality scientific efficacy/effectiveness documentation available for some of the remaining therapies, none of them are known to impose a particular risk upon patients, if they are applied correctly (http://www.nifab.no/). “Medications over the counter” was not considered to be an intervention which could be operationalized within the framework of the treatment program and was therefore excluded for lack of feasibility.

In the light of patient safety, a hierarchy of three criteria 1) Keep a sufficient number of therapy users as basis for the selection (Use), 2) Minimize risk (Safety), 3) Maximize benefit (Benefit), which we call the “USB-principle”, is in our view non-negotiable. However, we are aware, that some of the cut-off limits set can be debated. To our knowledge, this is the first attempt to apply this kind of design requiring such a selection strategy, and there are therefore no established rules and cut-off limits. We acknowledge that for interventions with other risk structures, our cut-off limits may have to be modified.

Conclusions

In conclusion, if patient participation and patient experiences are to be taken into account while developing a treatment program, the conduct of a survey among the target group is in our view a probate and feasible methodology in order to learn about their preferences and perceived benefits and risks. In a situation where there is no scientific evidence for the risk/benefit profile of the preferred interventions available, we found the USB-principle described above which may or may not be combined with the PEBRI which provides a quantifiable measure for patients experiences of benefits and risks, a helpful guide for selecting which treatment interventions to be included.
Declarations

Abbreviations

IMCR trial: Integrated medical care rehabilitation trial
USB: use-safety-benefit
NAFKAM: National Research Center in Complementary and Alternative Medicine;
NDPA: Norwegian Dental Patients Association (Forbundet tenner og helse in Norwegian);
CAM: Complementary and Alternative Medicine;
NSD: Norwegian center for research data, (Norsk senter for forskningsdata)
REK: Regional Committee for Medical and Health Research Ethics.
DSVMT: Dietary supplements, vitamins and minerals recommended by therapist;
DSVMS: Dietary supplements, vitamin and minerals self-prescribed;
P E B R I : Patient Experience-based Benefit/Risk Index

Ethics

The Regional Committee for Medical and Health Research Ethics (REK) has considered the study (REK reference 2011/1281) and decided that no ethic approval was needed due to full anonymity of the participants. Therefore, the study was registered at The Norwegian Data Inspectorate (NSD). No informed consent was required since the questionnaire was anonymous.
Availability of data and materials
The dataset on which the analyses were performed can be obtained from the corresponding author, while the raw dataset is not available due to Norwegian privacy regulations. Applicants must be prepared to conform to Norwegian privacy regulations.

Competing interests
The authors declare that they have no competing interests.

Funding
The study was funded through a grant from the Norwegian Directorate of Health.

Authors’ contributions
FM and TA conceived the IMCR trial; TA; HJH and LB compiled the questionnaires; FM and VF developed the selection strategy; FM; AEK and VF performed the analyses. FM, VF, TS, and AEK drafted the manuscript. All authors reviewed and developed subsequent versions; and all authors read and approved the final manuscript.

Acknowledgements
We acknowledge the leader and the administration of NDPA with posting the questionnaires to the members of NDPA. Subsequently we are grateful to the members of NDPA who filled in and returned the questionnaires. Special thanks to Liljan Smith Aandahl, retired Senior Advisor at the Norwegian Directorate of Health, who was
instrumental in setting up the project for people with suspected adverse effects from dental amalgam, which this study is part of.

References:


4. Forskningsmidler for 2016 lyses ut 18 juni


12. Ladwig KH, Marten-Mittag B, Lacruz ME, Henningsen P, Creed F: Screening for multiple...


«Everyone with a chronic disease should be offered this program» - participants experience with an Integrative Medicine group program.
“Jeder mit einer chronischen Erkrankung sollte an diesem Program teilnehmen” – Teilnehmererfahrungen mit einem integrativmedizinischem Gruppenprogramm.

Alræk, T. 1, Stub T. 1, Kristoffersen A. 1, von Scheidt C. 2, Bruset S. 3, Michalsen A. 4 & Musial F. 1*

Under review in Research in Complementary Medicine / Forschende Komplementärmedizin
“Everyone with a chronic disease should be offered this program” - participants experience with an Integrative Medicine group program.

“Jeder mit einer chronischen Erkrankung sollte an diesem Program teilnehmen” – Teilnehmererfahrungen mit einem integrativmedizinischem Gruppenprogramm.

Alræk, T.¹, Stub T.¹, Kristoffersen A.¹, von Scheidt C.², Bruset S.³, Michalsen A.⁴ & Musial F.¹*

¹The National Research Center in Complementary and Alternative Medicine (NAFKAM), Department of Community Medicine, Faculty of Health Sciences, UiT The Arctic University of Norway, Tromsø, Norway

²Mind Body Medicine, Immanuel Krankenhaus, Berlin, Germany

³Regnbuen helsesenter, Lierskogen, Norway

⁴Charité – Universitätsmedizin Berlin, Berlin, Germany

* Corresponding author

Frauke Musial, Ph.D.  
National Research Center in Complementary and Alternative Medicine, NAFKAM, Department of Community Medicine, Faculty of Health Science  
UiT, The Arctic University of Norway  
9037 Tromsø  
Norway  
Tel. (+47) 77 64 92 82 (Frauke Musial)  
Tel. (+47) 77 64 66 50 (NAFKAM)  
Fax. (+47) 77 64 68 66  
E-mail: frauke.musial@uit.no
Abstract

BACKGROUND:
The Integrated Medical Care Rehabilitation (IMCR) program was designed for patients with amalgam-attributed health complaints. Special emphasis was placed on patient participation and patient empowerment. The aim of this qualitative study was to describe personal feedback on mental, emotional, and bodily experiences with the program.

METHODS:
Qualitative data were drawn from the study participants (n=18) from the three intervention groups. Four open questions were asked as part of a anonymized questionnaire, which presented a possibility to describe personal experiences with the IMCR program. The questionnaires were sent back to the research team in sealed envelopes. Analysis method was systematic text condensation.

RESULTS:
Most participants were very satisfied with the program. They appreciated the resource oriented focus of the program. After completion of the training, many participants integrated relaxation and breathing exercises into their daily lives and reported calmness and a more positive view on life.

CONCLUSION:
Data from this qualitative study suggests that a program with several modalities such as lifestyle advices, complementary therapies, relaxation exercises and stress management tools is beneficial for chronically ill patients with amalgam attributed health complaints. Beyond that, we conclude that the IMCR program can be useful for chronically ill patients with a similar symptom profile.

Keywords
Integrative medicine, rehabilitation, qualitative research, Amalgam attributed health complaints, Mind-Body medicine, group intervention

Integrativmedizin, Rehabilitation, Qualitative Forschung, Amalgam attribuierte Beschwerden, Mind-Body medicine, Gruppenprogramm
Zusammenfassung

**Hintergrund:**

**METHODE:**
Qualitative Daten wurden von n = 18 Studienteilnehmern aus drei Interventionsgruppen erhoben. Im Rahmen eines anonymisierten Fragebogens wurden neben standardisierten Fragebogen auch vier offene Fragen gestellt, in denen die Studienteilnehmer ihre persönlichen Erfahrungen mit dem IMCR Programm beschreiben konnten. Die Fragebögen wurden in versiegelten Umschlägen an das Forschungsteam zurückgeschickt und mittels „systematic text condensation“ analysiert.

**Ergebnisse:**
Die meisten Teilnehmer waren sehr zufrieden mit dem Programm und schätzten die ressourcenorientierte orientierte Ausrichtung des Programms. Die Teilnehmer berichteten, dass sie Entspannungs- und Atemübungen in ihr tägliches Leben integrieren konnten und dass die Teilnahme an dem Programm zu mehr Ruhe und einer positiveren Sicht auf das Leben geführt habe.

**Schlussfolgerung:**
Introduction
In Norway, amalgam attributed health complaints have been an issue for many decades and as many as 5% to 8% of the participants of a representative survey of the adult Norwegian population (n=2000 participants) believed that they suffered from amalgam induced health problems. In 8% of the participants, who had removed their amalgam fillings (out of 43% in total) the motivation for removal was related to amalgam attributed health concerns [1]. Generally, amalgam is considered to be a safe dental material. However, amalgam was banned in Norway in 2008 due to a general concern about environmental effects from mercury. It is to date still controversial, if mercury exposure from dental amalgam is sufficient to lead to chronic health complaints. The fact that amalgam is not used in dentistry in Norway to date is not related to suspected negative health effects, but purely due to environmental concerns. The most common symptoms patients who suspect their health problems to be related to amalgam report, are: fatigue/exhaustion, dizziness, mental symptoms (concentration and memory disturbances, anxiety, irritability, restlessness, depression), pain (muscle, joint, neck and shoulder, teeth/jaws/facial pain; headache), functional gastrointestinal symptoms (e.g. constipation, diarrhoea, bloating), mouth blisters, metallic taste, and susceptibility to infections [2-11]. In 1990 a dental patient association was founded in Norway, whose aims among others, included the development of a treatment and rehabilitation program for patients suffering from harmful effects from dental treatment [12, 13]. As a consequence, the Norwegian Ministry of Health and Care Services initiated a collaborative treatment project for patients with suspected adverse effects from dental materials ("Samarbeidsprosjekt mellom tannhelsetjenesten og helsetjenesten om utprøvende behandling ved mistanke om bivirkninger av odontologiske biomaterialer") which was executed through the Norwegian Directorate of Health. The aim of the project was to support patients with health complaints attributed to amalgam, and to improve their health and quality of life.

Part of the collaborative treatment project was the design of a rehabilitation program for patients, who have had their amalgam fillings removed but still experienced
health complaints, the “integrated medical care rehabilitation” (IMCR) program for patients with continuing health complaints after amalgam removal.

Setting up such a treatment program for patients who have had their amalgam fillings removed, but still experience health complaints was a particular challenge for several reasons, mainly: i) there is to date no good pathophysiological explanation available for amalgam-related health complaints, and even though many patients experience symptom relief after amalgam removal, a substantial number of patients do not. ii) There is no causative treatment and as such no cure available, in particular for those patients who continue to experience symptoms after amalgam removal.

Many of these patients report good experience with therapies from the spectrum of complementary and alternative medicine (CAM) [14] therefore a choice of therapies out of the CAM spectrum, from which patients were free to choose, was operationalized as part of the rehabilitation program.

The most common complaints attributed to amalgam fillings, such as exhaustion and fatigue, pain from muscles and joints, gastrointestinal symptoms, taste disturbances and symptoms from ear/nose/throat [15] occur also in other chronic, debilitating diseases, such as chronic fatigue syndrome and fibromyalgia. Patient suffering from fibromyalgia typically show symptoms of widespread musculoskeletal pain, fatigue, insomnia, and impairment of physical and psychological quality of life [16, 17]. Furthermore, stress related or depressive symptoms are also common in these syndromes [18-21] and they seem to be relevant for the course of the disease [22, 23].

Due to frequent unsatisfying results of conventional treatment, the use of complementary and integrative approaches such as Mind-Body medicine, supplements, acupuncture, massage and various nutritional therapies among fibromyalgia patients is common. Moreover, the scientific evidence for these therapies has increased over the last decade. Consequently, evidence based guidelines recommend multimodal, multidisciplinary therapeutic approaches
involving medication, exercise, relaxation, stress management, patient education, and behavioral therapies [16, 17, 24].

Therefore, a treatment program was developed, which consisted of a structured group program of 12 modules, each covering a day [25] based in Mind-Body medicine approaches, and an individualized treatment part, where the participants received 12 vouchers they could use to choose from a selection of CAM therapies. This selection was derived from a survey conducted among the relevant patient group [14, 26]

Special emphasis was placed on patient participation and patient empowerment. The main therapists were trained in how to use the manual in a two-week training session. The education focused particularly on a non-directive, accepting, non-pedagogic approach. The main goal of the group intervention was to support patients in making experiences, regain competence and control, feel confident with their own decision, and rely on themselves as experts for their situation. Therapists were educated to not give instructions, but support patients in finding and developing solutions they themselves felt comfortable with. The non-directive approach was extended to the individualized part of the program in that patients were free to use their “budget” consisting of 12 therapy vouchers for the group of therapies available within the program. All patients received counselling from a medical doctor at the beginning and the end of the program (patients had been checked for exclusion criteria before entering the trial). This counselling was restricted to safety issues, as the doctors should not recommend therapies for their effect, but should check for potential particular risks related to the individual patient and instruct them accordingly.

The particular focus of the IMCR trial was grounded in Norwegian health strategic documents, such as the “Coordination reform”[27] which emphasizes patient participation. The principal understanding that formed the basis for the coordination
改革的一个特点是"患者,谁参与计划和监测他们的健康护理,能够更好地调动自己的资源。这可以改善结果的前景" [28]。

研究的目的是让参与者有机会给我们提供他们个人反馈参与IMCR项目。因为我们要求关于心理、情感和身体体验的信息,一个质性研究的设计被认为是最合适来探索这个的。因此,我们的问题反映了一种可能性,描述了他们的个人经验与IMCR项目。

**Design, Material and Method**

质性数据来自参与一个名为综合医学护理康复(IMCR)研究的参与者。该研究的临床目标是开发一个康复项目,为在 amalgam 移除后继续有健康问题的患者。详细资料和定量结果在其他地方发表(ref)。

IMCR项目结合了一个生活方式导向的小组项目和个性化CAM治疗。小组项目由12个会议组成,每周举行一次,持续一整天。最初的治疗阶段(3个月)结束后,再经历3个月的治疗阶段,随后是小组的最后一次会议。项目在三个不同的地点和三个不同的团体中进行。每个团体由一个主要治疗师领导,他/她在整个治疗阶段和所有其他活动期间都在场。专治疗师会进行特殊主题的课程,比如瑜伽或营养。因此,三个不同的地点也包括三个不同组别的治疗师。

The aim of this study was to give the participants a possibility to give us their personal feedback taking part in the IMCR program. Since we were asking for mental, emotional, and bodily experiences, a qualitative design was considered most adequate to explore this. Hence, our questions reflected a possibility to describe in their own words their personal experience with the IMCR program.

The IMCR program combined a lifestyle oriented group program with individualized CAM therapies. The group program consisted of 12 sessions, held once per week for a whole day. The end of the initial treatment phase (3 month) was followed by another 3-month period before the final meeting of the group. The program was conducted with three groups of patients in three different locations. The group sizes varied from n=7 to n=10. Every group was led by a main therapist, which was there the whole day and throughout all other activities. Specialized therapists conducted sessions with special topics, such as yoga or nutrition. Thus, the three different locations included also with three different groups of therapists.
Hence, our sample was drawn from participants in the aforementioned study. After completion of the final treatment session, the participants were asked to answer several questionnaires; four questions were related to the present qualitative study:

1. How did you experience the IMCR program? (Norwegian: Hvordan opplevde du programmet?)
2. Have you taken some parts of the program into your daily living? If yes please describe these. (Norwegian: Dersom du har tatt med noe fra programmet med inn i hverdagen, beskriv hva dette er.)
3. Has your everyday life changed in any way after you started this program? If yes, please describe (Norwegian: Har livet ditt (hverdagen din) forandret seg på noen måte etter at du startet med programmet? I så fall hvordan?)
4. How did you experience your body and your symptoms during and after the program? (Norwegian: Hvordan opplevde du kroppen din og symptomene dine under og etter programmet?)

Participants answered by using their own words. Hence our material consisted of pages of text vary from only a few sentences to two dens handwritten pages of information. The authors of the present study were not personally involved in the rehabilitation study, and participants in the qualitative study provided their answers anonymously. Questionnaires were distributed during the last group meeting sent back by mail in sealed envelopes. In this way, we could guarantee the participants anonymity.

Analysis was accomplished by systematic text condensation [29] (1) reading all the material to obtain an overall impression and bracketing previous preconceptions; (2) identifying units of meaning, representing different aspects of participant’s experiences (reflected from answering the four questions) associated with the rehabilitation program, and coding for these; (3) condensing and summarizing the contents of each of the coded groups; and (4), generalizing descriptions and concepts
concerning experiences associated with the rehabilitation program. All the authors were involved in the analysis, negotiating interpretations and categories along the process.

**Ethics**

The Regional Committee for Medical and Health Research Ethics (REK) has considered the study (REK reference 2012/2135) and decided that no ethic approval was needed because the project was not considered to be a medical and health related research project that complies with the Health Research Act. Therefore, it was not mandatory to submit an application.

Therefore, the study was registered with The Norwegian Data Inspectorate (NSD) (NSD reference 34974). Written informed consent was obtained from the study participants.
Results

Figure 1. Flow chart of the inclusion process

A total of n=25 of the potential participants screened qualified for the study and were included. Of these n=5 dropped out because of practical reasons. The main reason was that it was too complicated to reach one of the three study locations. After entering the program, n=2 participants dropped out. One participant was diagnosed with cancer, the other needed to travel for two hours to reach the study location and gave up. All participants were invited to take part in the qualitative study and n=18 responded. Of these were n=13 women (mean age 57.3 yrs) and n=5 men (mean age 40.4 yrs). Most of the participants were on disability pension (not working).
**Experiences with the rehabilitation program**

On a general level, most of the participants (83%) were satisfied with the program. N=10 were very satisfied, n=5 were satisfied, n=2 were neutral, n=1 was dissatisfied while no one was very dissatisfied (figure 2).

![Bar chart showing participant satisfaction](chart.png)

**Figure 2. Participant’s satisfaction with the IMCR program**

Many of the participants reported calmness throughout the program. They were very satisfied with the leaders of the different group therapies and their focus on strengthening the participants ‘inner life’ and that the illness/sickness part of everyone was not a part of the ‘talk of today’. Several of the participants also mentioned a good balance between the group based program and the individualized CAM treatments. According to the participants, there was a good mixture of practical things to do and sitting down listening to different meaningful theories about health and happiness.
Quotation 1:

_I experienced the program as very positive and inspiring - in all aspects. The program was varied and very well structured, and the tutor did a very good job. I also experienced good effects and benefits from the treatment I received._

**Experienced change in everyday life**

The majority of the participants were more than happy to bring aspects of relaxation exercise, including breathing exercises into their daily living. Added to this was also meditation, relaxation and other exercises related to physical movement. This experience also showed the participants the importance of scheduling the day, which allowed for systematically practicing different mind-body techniques also on ‘difficult’ days. A smaller group of the participants acknowledged the use of healthy foods in the program and likewise wanted to introduce this into their daily living.

Quotation 1:

_I had done much of this before. However, the program has increased my insight and motivation as to how important it is to give oneself room every day to do exercises, rest, mindfulness, and to be conscious of breathing and nutrition (12)._ 

Several persons were happy that they got information, teaching and tools on how to handle everyday life with a chronic illness. Others learned the importance of having friends and would continue to meet after the program had finished.

**Has your everyday life changed after you started with the program? If yes, how**

Many of the participants stated that they now had ‘a bright side of life’ attitude. They felt more capable in caring about what was important in their life – more at peace
within themselves, stress situations were now handled in better ways and they experienced a more optimistic attitude to life in general, due to having more resources and tools available after the program.

Quotation 1:

*Over time my progression is slow. All in all, that is including the treatments, my interest has increased. It brings great values/personal growth, regardless of the implementation of or need for medical care. This is a lesson for life that is useful for anyone regardless of their health situation.*

Others wrote that they now after the program paid more attention to dietary issues and exercise in daily life. The experiences of ‘being together’ brought on thoughts about the importance of sharing and being with people in daily life. Hence, and in line with this, some used more time being ‘on the go’ due to more energy both mentally and physically.

**How do you experience your body and your symptoms during and after the program?**

Although our question did not mentioned “mind” many of the participants included that in their answers, hence also included under this heading. Some of the participants mentioned here the specific CAM treatments they had received, e.g. acupuncture that helped against depression and tiredness. However, the majority of the participants referred to the IMCR treatment program in general. Many bodily symptoms were present before the start of the program, some of these lasted through the program. A few participants reported also a kind of stress and restlessness during the program. However, after completing the program, these feelings of unsettledness calmed down and i.e. bodily symptoms were gone. Several described the program as being tough to them, both physically and mentally, because they were taken out of their comfort zone. However they reported that afterwards, having
the sense of being able to cope better, and having a better understanding of oneself and experiencing an increased ability to participate in daily life – they felt it was worth it.

Others described bodily symptom changes related to being more energetic, having better digestion and better sleep; these were the three most reported symptoms. One participant reported that there was no change in the symptoms and the participant felt bored, angry and stressed.

Quotation 1

During the program I was very stressed and anxious. However, I managed to follow the program. After a while we learnt techniques that felt good. Breathing exercises have become a part of my daily routine. The inner peace is a good feeling. As we were talking, many things fell into place.

Quotation 2

My body functioned quite well, that is the pains did not get worse and several of the techniques functioned well so that the symptoms decreased during the program. After the program I continued to use these techniques and what I got from input corrections and the therapists. Yes, I feel better.

Discussion

Our results present a variety of perceived experiences from the IMCR program. Several of those were related to the program itself and the group leaders e.g. due to that leaders focused on strengthening the participants ‘inner life’ and that the illness/sickness part of everyone was not a part of the program. Other changes were related to the increased ability to attend and engage in activities of daily life after the program. This was reflected by the use of breathing exercise, meditation and different relaxation techniques, which they looked upon as important tools for handling and living with a chronic disease/illness. Views about health issues had
changed as well. The participants felt a more positive attitude and more strength in order to evaluate what was important in life. Reported changes of bodily symptoms were attributed to the individualized CAM treatments, the group based program, and/or to the program as a whole treatment package. Initially many of the participants experienced the program to be challenging and somewhat hard to them. However, those feelings disappeared as more energy, better sleep and improved digestion was reported as changes in bodily symptoms.

Many patients with diseases, whose pathophysiology remains to date unclear such as e.g. fibromyalgia utilize complementary and integrative approaches such as Mind-body medicine, supplements, acupuncture, massage and various nutritional. The reasons for this are often that these patients experience unsatisfying results of conventional treatment. Moreover, the scientific evidence for integrative therapeutic approaches has increased over the last decade. Consequently, evidence based guidelines recommend multimodal, multidisciplinary therapeutic approaches involving medication, exercise, relaxation, stress management, patient education, and behavioral therapies [16, 17, 30]. Patients with amalgam attributes health complains suffer some of the same experiences [31] and symptom patterns. Thus, it can be assumed that similar therapeutic approaches are likewise experienced to be helpful in this particular patient group.

Over the last years, techniques such as meditation or yoga exercise are increasingly utilized in multimodal treatment approaches in chronic diseases, which have a high symptom load, but little perspective of cure e.g. [32, 33]. These Mind/Body therapies are defined according to the American national institutes of health as “Mind and body practices focus on the interactions among the brain, mind, body, and behavior, with the intent to use the mind to affect physical functioning and promote health.”[34].
Mind-body therapies have been shown to have a good effect in many diseases, including fibromyalgia, but also for example, in cancer patients [32, 33, 35-37]. Moreover, many of these patients with amalgam related health complaints report good experiences with therapies from the spectrum of CAM [14]. Thus, in conclusion, the benefits reported by patients with amalgam attributed health complaints in this study, are in line with the scientific evidence from other patient groups.

**Strengths and limitations of the study design**
The reports albeit handwritten from our participants’ were found to be appropriate and stable to conclude that our questions had been adequately understood. Saturation was indicated by repeated statements about the same phenomena, although some detailed variation would still occur. Generally, positive experiences were reported from the participants in the IMCR program. However, our material included also a few negative statements. This allow us to conclude that answers presenting negative treatment effects indicate that participants did not feel obliged to report only beneficial experiences. Therefore, we anticipate that we received authentic stories that were not just designed to meet our expectations. The openhearted answers might be a reflection of that we could secure the participants anonymity throughout this qualitative study. Our sample was representing people with a considerable symptom burden. Even though our participants do believe that their problems are caused by amalgam, we think that our sample might be representative for patients with similar symptom burden in chronic diseases/illnesses, at least in Norway. Hence we think that the IMCR program can be worth studying in other patient groups with similar symptom profile.
**Acknowledgements**

Very special thanks go to the participants for sharing their stories with us. Furthermore, we acknowledge the leader and the administration of NDPA for supporting the IMCR trial and recruiting participants. Special thanks to Liljan Smith Aandahl, retired Senior Advisor at the Norwegian Directorate of Health, who was instrumental in setting up the project for people with suspected adverse effects from dental amalgam, which this study is part of.

**Conflicts of interests**

The authors declare that they have no conflicting interests.

**Funding**

The study was funded through a grant from the Norwegian Directorate of Health.
References


perceived health changes related to amalgam removal In. The open dentistry journal; 2016.


Tenner & helse

Medlemsblad for forbundet Tenner og helse 20. Årgang – nr. 2 juni 2014
**REDAKTØRENS HJØRNE**

Somer, sol og ferietid, fuglesang og summende insekter, - jeg håper alle kan få noen gode måneder med mulighet til å "lade batteriene" optimalt. Vi trenger det her oppe i nord.

FTH har avholdt årets landsmøte, denne gang i Bergen. En flott mulighet til samvær og fellesskap og til å lære. Årets landsmøte var konstruktivt på flere måter, og det valgte sentralstyret går i gang med en ny periode, med nytt pågangsmot for arbeidet som skal gjøres. Det er utvilsomt fremdeles mye som gjenstå. Et godt behandlingsstilbud til de som er skadet av amalgam er enda ikke på plass. Det er også behov for et fortsatt arbeid for informasjon og opplysning, både om de helsemessige skadevirkningene av amalgam og om hvordan man går fram for å sanere på en skånsom og trygg måte. Hva den enkelte bør gjøre for å bygge opp igjen egen helse er også et sentralt tema i denne sammenhengen.

IMCR-studien er godt i gang. I skrivende stund har det kurset jeg selv deltatt i kommet halvevis i programmet. Det har absolutt vært lærerikt, og min egen innstilling til dette prosjektet har gått fra skeptis til "líker". Jeg tror absolutt at dette har noe for seg, og jeg ser fram til å følge studien videre. Jeg er overbevist om at det denne studien fokuserer på kan bli til god hjelp for syke mennesker, ikke bare for amalgamskaaded, dersom dette resulterer i et tilbud som blir tatt mer permanent i bruk. Det handler om å trekke fram de resursene som hvert enkelt menneske besitter, uavhengig av sykdom og egen situasjon. Som en egen bonus kommer fellesskapet med de andre kursdeltagere. Det har vært en fin opplevelse.

Jeg ønsker dere alle en god og helsebringende sommer!

Redaktør

Toril Sonja Gravdal

---

**FORBUNDSLEDER HAR ORDET**

Vi kan ikke velge oss bort fra den usikkerheten, risikoen og emosjonelle blottstillelsen som ligger vevet inn i dagliglivet vårt. Livet er sårbart. Etikk herer dagliglivet til, hver dag er fylt av små og store etiske dilemmaer. Forutsetningene for å handle på en bra måte avhenger delvis av vår evne til å gjenkjenne et dilemma og delvis av det etiske verkty som står oss til rådighet. Lover, regler, prinsipper og normer gir oss veiledning, men ikke alle svarene.

Samvittigheten fungerer som et indre kompass og viser oss hva som er godt og hva som er ondt. Det er samvittigheten som får oss til å fatte mange riktige beslutninger og som hindrer oss i å begå handlinger vi innser vil få negative følger. Sympati går ut på å føle med et menneske, mens empati innebærer at vi lever oss inn i et menneskes situasjon.

Samarbeid er viktig. Det gir mulighet for dialog og konstruktivt samspill, uavhengig av hvorvidt man i utgangspunktet har svært ulikt ståsted og ulike oppfatninger. Dialog er fundamentalt om man ønsker å bringe utviklingen i den retningen man ser som fruktbar. Derfor er det ønsket om dialog som er bakgrunn for valget om å fortsette deltagelsen i "Samarbeidsprosjektet".

Delegatene på landsmøte var enstemmig for en slik fortsettelse, og gav derigjennom sentralstyret tillit til å videreføre dette arbeidet. Det er bare gjennom samarbeid at vi kan formidle vår kunnskap og ha et håp om påvirkning, noe som er helt avgjørende for FTHs videre arbeid.


På vegne av sentralstyret og meg selv ønsker jeg dere alle en riktig GOD SOMMER!

Vennlig hilsen
Dag Einar Liland,
leder FTH
Rapport fra landsmøtet i Bergen

FTH avholdt årets landsmøte på Scandic Bergen Airport Hotel helgen 24.-25. mai.
Fem fylkeslag hadde meldt på sine delegater.
I tillegg deltak centralstyret med vararepresentanter samt elleve medlemmer fra de ulike fylkene.

Av Helene Freilem Klingberg
og Toril Sonja Gravdal
Lars Bjørkmann fra BVG og Terje Alrek og Frauke Museal fra NAFKAM hadde takket ja til å holde foredrag om utprøvende behandling og om den pågående rehabiliteringsstudien fredag kveld. Foredragene ble fulgt av diskusjon og spørsmål fra salen.

Selv landsmetet ble åpnet lørdag morgen av leder Dag Einar Liland, som deretter gav ordet til møteleder Jens Olav Johannessen.

Sekretær Helene Freilem Klingberg leste årsmeldingen for 2013, som kort fortalt blant annet inneholdt følgende:

- Også dette året har henvendelser til myndigheter og politikere, utspill i media, deltagelse på konferanser og messer, samt kontakt med enkeltmedlemmer og fylkeslag preget arbeidet.

- Det er avholdt ni sentralstyremøter i løpet av året.

- Fylkeslaget i Hordaland og representanter fra sentralstyret har deltatt på Alternativmessen i Grieghallen i Bergen.

- Kåre Solberg, Oddvin Herstad og Helene Freilem Klingberg har deltatt som representanter for forbundet på Helsemessen i Trondheim.

- FTH formidlet medlemsblader og informasjonsmateriell til "Odontologiske leker" som fant sted i Oslo.

- Dag Einar Liland deltok på møte i Oslo om brukermedvirkning, der helseminister Bent Høye orienterte om regjeringens nye helse- og sykehusplan. I innsipp til regjeringens plan oppfordret FTH Helse- og omsorgsministeren å ta amalgam og kvikksølvforgiftning på alvor.

- Dag Einar Liland har også deltatt på ledermøte, smågruppeforum, kongress og representantskapemøte i FFO.

- FFO Hordaland har valgt Dag Einar Liland til representant i styringsgruppen "Tannhelse i hjemmesykepleien, kartlegging av praksis".

- Representanter for sentralstyret deltok 8. september i et orienteringsmøte der Frauke Museal og Terje Alrek fra NAFKAM redegjorde for status i rehabiliteringsprosjektet.

- Det er sendt brev fra sentralstyret til helseministeren og til Helse- og omsorgskomiteen med anmodning om et møte. Begge disse brevne
med svar stod trykket i tenner &
helse nr 4-2014.

-Sentralstyret har hatt advokat-
hjelp med sikte på å undersøke
tannlegers habilitet i forhold til
amalgamproblematikken. Inimelertid
har man måttet legge denne saken
til side fordi dette vil medføre altfor
store omkostninger for FTH.

-Sentralstyret har også fulgt opp
saken angående innholdsdeklaras-
sjon for tannyllingsmaterialer. Dette
er en vanskelig og tidkrevende sak.
Ingen har kunnet svare på hvor
mange ulike tannyllingsmaterialer
som finnes. FTH har imidlertid fram-
skaffet oversikt over hvem som
leverer de ulike tannyllingsmateri-
alene til tannlegene, og kan formidle
linker til aktuelle kilder for konkrete
tannyllingsmaterialer som er på
markedet i Norge.

I 2013 har sentralstyret bestått av
Dag Einar Liland, leder, Tormod
Imeland, nestleder, Helene Freilem
Klingberg, sekretær, John Andreas
Pandur, kasserer, Kåre Solberg,
styremedlem, Åse Kjelby, styremed-
lem. Varamedlemmer har vært Toril
Sonja Gravdal, Oddvin Herstad,
Oddny Torbjørg Trædal og Anders
Christensen.

I valgkomteen har Bjørn Borch
vært leder, assistert av Rolf Høvring
og Arve Austgulen.

Kasserer John Andreas Pandur
gjennomgikk forbundets regnskap,
 før landsmøtet deretter tok fatt på
gjennomgang av innkomne saker.

Sentralstyret var pålagt av fore-

gående landsmøte å gjennomgå
FTHs vedtekter og retningslinjer.
Forslag til endringer var sendt ut til
delegatene i god tid før landsmøtet,
sammen med et innkommet forslag
til vedtektsendringer. Vedtekts-
endringene var en omfattende sak
som fylte resten av tiden på lands-
møtet første dag.

Søndag fortsatte behandlingen av
forslåtte vedtektsendringer, før
man så tok fatt på resten av de inn-
komne sakene. Fullstendig protok-
oll med saker og vedtok følger
medlemsblad nr. 3-2014, som
kommer ut medio september.
IMCR-studien

Av Toril Sonja Gravdal

Etter å ha gjennomgått legemessige undersøkelse, havde jeg klar for deltakelse i IMCR-studien. Motivet var å melde meg på i største helse av disse faktisk går ut på, før derigejem som jeg kunne bruke informasjonen videre til Tenner & Helse’s lesere.


Kurset legger vekt på informasjon relatert til egen helse. For en stor del handler dette om ting som er godt kjent for de fleste av oss fra før. Betydningen av vitaminer, mineraler, proteiner, kort sagt riktig ernæring, er et sentralt tema. Det samme er betydningen av avspanning og stressmestring, forståelsen av egne reaksjonsmønstre og egne ressurser.

I utgangspunktet var jeg skeptisk til prosjektet, ikke minst da jeg forstod at detox ikke var innlemmet som et av behandlingsstidbenede til studiens deltager. For meg har detox vært et slags “alpha og omega” i prosessen med å gjennomføre en helse. Det var først da jeg fikk adekvat hjelp til avgiftning at jeg for alvor forstod hvor viktig dette er, og hvor stor rolle kvikk-sølv faktisk spilte i mitt eget sykdomsbilde. All annen behandling fikk optimal virkning først etter gjentatte runder med omfattende detox.

I denne studien dreier seg imidlertid på ingen måte om en erstatning for annen adekvat medisinsk behandling. Den skal heller ikke vurdere sammenhengene mellom amalgam og helseproblematikk.

Studien, eller ”pilotstudien” som dette er, skal kun vurdere gjenomførbarheten av et integrert medisinsk rehabiliteringsprogram, der man fokuserer på et selvhjelpssottende gruppeprogram og et selvvalgt behandlingsprogram.

Det er første gang et slik rehabiliteringsprogram prøves ut i Norge. Målet er å utvikle oppfølgerprogrammet for
hjemme, så vil eventuelle motarbeidende aktører ha mindre sjans til å lykkes i sin hensikt.
Informasjon, årvåkenhet, saklighet, debatt og dialog. Amalgamkampen har mange sider, og
den er på ingen måte vunnet.
Innhaldet i IMCR-studien fokuserer på HELE mennesket.
Det er et fokus som fortjener å stå i sentrum for all betraktning av
sykdom og helbredelse. Jeg håper
inderlig at denne studien skal
lykkes i sin intensjon og at dette på
sikt kan føre til et kjøerkomment
tilbud til syke mennesker, i
TILLEGGER, ikke i stedet for,
annen medisinsk behandling.

nativmessen

hengen. Folk slår gjerne av en
prat, selvom de i utgangspunktet
ikke hadde tenkt akkurat det, kan
hun fortelle. Så snart de forstår at
FTH er en pasientorganisasjon
med fokus på tannhelse, og ikke en
forening for tannleger, blir de
interessert. De vil gjerne både
fortelle om egne erfaringer og
motta informasjon. Særleg respons
fikk vi på den nye «banneren» vi
har laget. Den fokuserer på
innføring av egenandelsordning
for tannlegebehandling. Det viser
seg at dette er noe veldig mange
er opptatt av.

Forbundet Tenner og Helse

Det er på tide å innføre egenandel for
tannlegebehandling, som for annen legebehandling.

Støtt vårt viktige arbeid! Vi trenger deg som medlem!

www.tenneroghelse.no

Reklamen er levert av
Individuell tilpasset detox behandling
Av Dr. Heiko Santelmann

Med stor interesse har jeg lest artikkelom studien «Helseplager etter fjerning av amalgam fyllinger?» i bladet Tenner & Helse 1/14.


Men hun minnet meg om hvor viktig det er med en effektiv rensing av giften kvikksevl fra alle vev etter amalgamsanering, før man kan forvente en tydelig helsegevinst.

I en liten forskningsstudie, som vi gjorde i Mandal på slutten av 80- årene, var det også en stor forskjell i bedringsprosent mellom de som hadde tatt/fatt alt avgiftings kur etter saneringen og de som ikke hadde gjort det (enå). Derfor ble jeg litt lei meg, når jeg skjønte at en så fin, stor og dyr studie, som skal startes nå, ikke tar med avgiftings kur i behandlingsforslaget. Etter en mail til studieansvarlig Frauke Musial, på NAFKAM, forstod jeg at denne behandlingen ikke ble tatt med, fordi en rundsperring blant medlemmer i FTH viste at få hadde merket en bedring etter flere forver- ring av koler, som ble brukt til detox. Det var veldig overraskende for meg og en tankevekker at så mange hadde opplevd avgiftningen som negativ, fordi min erfaring med mine pasienter er annetledes.


- Hvilken diagnosemetode man velger
- Hvor mye man skal beskytte pas. hos tannlegen

Kroppens evidens
Forsknings-update på borrelieosekonferansen i Oslo
Av Raphael Kleimann

Den internasjonale konferansen «NorVect» 26-27.5. 2014 i Oslo samlet mange av de mest prominente og innovative forskerne innen borre- liose og besløkte kroniske, vektor- overførte sykdommer. Selv om myndighetene hadde trukket sit støtte, samt godkjenningen som faglig opp- datering, så kom mange leger, tera- peuter og ikke minst pasienter av eget initiativ. Hvilket bildet satt de igjen med av dagens forsknings situasjon?

- Borrelia bakterier er så forvan- dlingsdyktig, den kan skifte levemåte og form så radikalt, at laboritet- metode her knapt rekker å henge med. Mange av dem (spesielt de som er offisiell standard i Norge) er latterlig upresse (kun ca 50 % treff, med mest feil nettopp ved de mest alvorlige tilstandene). De nyeste og beste kommer opp mot 80-90%, men blir mer og mer kompliserte når de prøver å ta høyde for bakteriens stadig skiftende arvelinjer.
- Kun kombinasjonen av flere ulike laboratoriumstester fører til noenlunde pålitelig påvizing av infeksjon.
- Dette må tolkes i sammenheng med pasientens historie og sykdoms- forløp, med spesielt fokus på visse mønstre som for eksempel skift- ende symptomer i 3 ukers rytmer, spesielle språkkvansker mm.

- En rekke kroniske tilstander er nært knyttet opp mot borrelia og co- infeksjonene: ME, MS, ALS og - i hvert fall en rekke tilfeller - også autisme og Alzheimer.
- Tungmetaller, pesticider og andre mikroorganer er medvirkende: kvikk- sevl, bly og i stadig økende grad også aluminium. Det er stor forskjell på hvor i kroppen disse er deponert: i tarm eller hode, blod, vev, cellens indre, interstitiatrommet...
- Hvis behandlingen baseres på antibiotika, så må den være lang- varig og kompleks, med ulike midler for hver av "bidragsyrerne" i dette mikrobielle fellesangrepet. Samtidig månes det mer og mer for urtemedisin og frekvensmedisin, som samtidig kan motvirke infeksjonene og forandre terrenget.
av mange tusen pasienter og grundig utsporing:

De med allergi, blir ofte dårlig av å pusse tenner med amalgamfyllinger, de har kjente allergier mot nikkel eller andre metaller, de får veldig fort kravende reaksjoner på lavv doser med avgiftningsmidler og blir veldig dårlig under tannlegebesøk.

Jeg har også utallige eksempler på pas. som ikke ble frik før de hadde gjennomført en avgiftning med individuelt tilpassede doser av detoxmidler som ikke belaster lever og nyrer og som renser hele kroppen på cellenivå.

Sammenfattende ønsker jeg å formidle at den viktigste tilleggsbehandlingen til amalgamsaneren er en optimal, individuelt tilpasset detox behandling.

**JEG ER REDD FOR FØLGENDE:**

Hvis denne studien skulle komme fram til at personer som har skiftet ut amalgam og fortsatt har helseplager, blir bedre av «alternative» behandlingsformer, som trening, homeopati og akupunktur, vil det flytte fokus bort fra amalgam som årsaken til helseplager og gi vann på mælrene hos folk, som mener at personer som tror på at amalgam kan være skadelig også tror på alternative behandlingsformer, hvor nyre forskning har avdekket at de bare er humbug.

- Selvfølgelig er jeg ikke enig i en slik argumentasjon!

Men jeg har vært lenge nok med på dette teater, for å gjennomskue hvordan de tenker. Alt skal gjøres for å tåkelegge årsaksomhengene og frykke helsebygden, som var ansvarlig for å putte kvikksølv i friske barns tenner.

Derfor var det også Miljøverndepartementet, ikke Helsedepartementet som sto for amalgamforbudet.

De største løyner i verden kalles ikke Pinocchio, men politikere.

---

Dette var i korte trekk en oppdatering på borrelia-forskningen slik den ble presentert på NorVect-konferansen, med fokus på diagnosen. - Hvor dan ville en oppdatert behandling se ut som er på høyde med de nyeste funn?

**Den må være**

- helhetlig / integrativ
- individualisert
- i stand til å reagere på sterke svingninger i symptomene.

Er det rart at det ledende europeiske borreliose-senteret i Augsburg bruker så mye mer enn bare antibiotika?

Da kan det være ekstra interessant å rette blikket mot en metode for testing og behandling som har vært i front av forskningen gjennom flere tiår; «Autonomic Response Testing», metoden til der tysk-amerikanske legen Dr. med, Dietrich Klinghardt.

**KLINGHARDT METODEN**

Borreliose, ME, autisme, Alzheimer....

Bølgen av nye kroniske sykdommer stiller spørsmålstegn ved tradisjonelle førkante diagnoseverktyg, samtidig som den roper etter nye preparater og intelligente kombinasjoner av behandlingsformer.

Den tyskfødte legen Dr. Dietrich Klinghardt har bidratt mye i så måte. Han anses som "stjernelegene" og behandler mange kjendiser fra Hollywood, samt kongressmedlemmer og næringsstoffer. I 2007 ble han kåret til "Physician of the year" av den Global Foundation of Integrative Medicine, og i 2011 fikk han "Physician of the Year Award" av International Academy of Biological Dentistry and Medicine. Klinghardt metoden er i høyeste grad forskningsbasert i det den tar fram det nyeste innen medisin og biofysikk, med et særlig blikk for sammenhenger i menneskekroppen. Den er samtidig erfaringer og trekker således på den store skatten av naturmedisin i europeisk, ayurvedisk og kinesisk legekunst. Men først og fremst kan den vel kalles en evidensbasert metode, i den forstand at reaksjonen i pasientens kropp er øverste instans i diagnostiseringen. La oss se nærmere på hvilken evidens dette handler om.

Nakkelen er pasientens individuelle evne til å holde seg i flyt og balanse overfor skiftinge indre og ytre påvirkninger: selvregulasjonen som styres via det autonome nervesystemet. Som kjent fra klassisk kinesiologi, kan en svak muskel være uttrykk for at kroppen har "stress" med noen stoffer, basiller (eller forestiller og fæler, for den saksv skylde). Klinghardt har bygget inn sikkerhets- og mottestingsprotokoller som baserer seg på cellenes kommunika sjon via lys (biofotoner).1 Dette overordnete systemet er mye raskere og mer sensitiv enn de biokjemiske reaksjonsskjedene mellom musklene og nervesystemet.

---

1 Popp fortesetter på side 26
Appendix VII

Tenner & helse

Medlemsblad for forbundet Tenner og helse 22. Årgang – nr. 3 sept. 2016
IMCR-studien

Hva er sykdom?

Når hodet halter
**REDAKTØRENS HJØRNE**


Det er godt å se at mennesker samler seg rundt en mer helhetlig forståelse av helse. Jeg vil bemærke initiativtakere og forskere ved nafo for den jobben de har gjort. I norsk sammenheng er det et stykke nybrotts-arbeid som er utført. Jeg håper det bærer rikelig med frukter, og at mange mennesker i fremtiden får nyte godt av det vi har vært med på i IMCR-studien.

Sommeren er på helt, og dagene er litt kortere. Jeg håper at dere alle har fått nytte litt sol og varme. Flere steder i landet har visst sommeren latt vente på seg, og sola har mange steder vist seg i kun korte intervaller. En liten påmunnelse: D-vitamin har kallenavn «solskinnsvitaminet», og for mange av oss kan det nå være tid for å planlegge hvordan vi skal få i oss nok av dette viktige vitaminet i månedene som kommer. Vitamin D spiller en sentral rolle for å opprettholde en god grunnhelse. Både hjertet, hjernen, lungene og musklene er avhengig av dette «solskinnsvitaminet». Å passe på at intoktet D-vitamin er godt nok er god investering i helse.

Jeg ønsker dere alle en fin hest, og ser fram til å presentere resultatene fra IMCR-studien i desemberutgaven av Tenner & helse.

Redaktør
Toril Sonja Gravdal

---

**FORBUNDSLEDER HAR ORDET**

Så kan vi vel slå fast at sommeren 2016 er historie. For oss her vest har den vært helst våt. Ny nedbørerekord både i juli og august sier sitt. Med høsten foran oss øker også aktivitetene i forskjellige organisasjoner, og for noen av oss i FTH har meter og arbeid alt begynt.

22. august deltak Dog Einar og jeg på workshop i forbindelse med IMCR-studien i regi av NAFKAM, Nasjonalt forskningssenter innen komplementær og alternativ medisin. Anita Salamonsen presenterte en evaluering av studien, og Agnete Egelsoe Kristoffersen innvitt oss i hovedfunnene fra spørreundersøkelsen som ble gjennomført blant FTH sine medlemmer i 2011 / 2012. Frauke Mulsal gikk igjennom hovedfunnene i IMCR-Studien. Videre delte to studiedeltakere, gruppelederne og ta programleger sine erfaringer med studieprogrammet. Resultatene viser at det var riktig av FTH å engasjere seg. Mye av det vi har tenkt, ment og trodd er bekræftet. IMCR-Studien har vært omtalt i Tennerhelse ved flere anledninger, og i dette nummeret kan du lese flere av innleggene som ble holdt på workshop’n. Resultatene fra selve studien kan vi imidlertid ikke publisere før alle formaliteter er i orden. Studien har vært en pilotstudie av rehabilitering av personer som opplever å ha kroniske helseplager både før og etter at de har fjernet alle amalgamfyllingene i tennene.

FTH fikk en henvendelse før sommeren om å være behjelpelig som søkerorganisasjon i forbindelse med en studie på tannhelse blant innvandrerede. Dette so vi ja til, og venter med spenning på om denne studien er blant dem som bevilges penger ved årets EXTRA utdeling.

På side 16 til 19 kan dere lese en artikkkel med tittelen "Når hodet halter". Den er skrevet av Jan Schwenke, som opplevet å få hjerneleg i en alder av 53 år. Uttryktet "Når hodet halter", kan nok være beskrivende også for mange amalgiekammer, og mange vil nok kunne gjengjemende til mye av det Jan skriver.


Jeg ønsker dere alle en fin høst.

Vennlig hilsen
Dag Einar Liland,
leder FTH
S 4       IMCR-studien
S 12      Hva er sykdom?
S 16      Når hodet halter
S 20      Takk til Jorunn Østberg
S 22      Rotfyllinger øker risikoen for hjerteinfarkt
S 24      Diverse småstoff
S 26      Tannleger holdt tilbake amalgambrosjyre
S 28      Jeg er en frysepinn
IMCR-studien

22. august inviterte naøkam til en avsluttende Workshop i Litteraturhuset i Oslo.
På gjesteliste stod deltagere i studien, gruppeledere, programleger og, i tillegg til forskere ved naøkam, andre som har tatt del i studien på den ene eller andre måten. Det ble en innholdsrik og inspirerende dag.
På de følgende sidene presenteres noen av erfaringene fra studien. Forskningsresultatene vil bli vist omfattende pluss i neste utgave av Tenner & helse, etter at rapporten fra studien er offentliggjort.
IMCR - et eventyr?

Av Kjersti L. Hassel. studiedeltager ved Senter for livshjelp i Ski


Det var Senter for Livshjelp som kom med en gladmelding fra Helsedirektoratet. Helsedirektoratet hadde bestemt seg for å gjennomføre et pilotprosjekt – en forskningsstudie. Og ikke nok med det, en del av denne studien skulle gjennomføres på selveste Senter for Livshjelp.

Senter for Livshjelp har blitt kjært for svært mange mennesker som har trengt noe annet, noe mer. Jeg er en av dem.

HVA VAR DET SOM VAR SPESIELT MED DETTE?


Medisinske tiltakene strakk ikke til for å hjelpe folk på beina igjen. Ikke var det mulig å klare det på egen hånd.

Så en dag var det noen som ønsket å se om livskvaliteten kunne bedres for de som har slitt i lengre tid grunnet helseplager. Alternative metoder ble tatt: fram og satt sammen i en unik pakke, fikk et helt lite helsehus. I dette huset var det mange rom. Trøning, ernæring, pust, avspennin og oppmerksomhet i hverdagen hadde alle sin sentrale plassering i dette helsehuset.


Ikke nok med det, men de skaffet nye matter, pledd, og sitteputer og pølser, små hjelpeutstyr for å lindre og støtte, som varmevasker, spikermatter og små terapiballer.

Og mat, mye mat. Mye variasjon. Kunne dette være virkelig? Eller var det bare et eventyr?

Vi fikk møte virkeligheten i dette eventyret. Varme engasjerte mennesker med stor kunnskap om selve livet, lange terapeutiske erfaringer, med tid og omsorg for hver enkelt. Menneskene, de viktigste brøkken i det hele. Men hva kan vel bli bedre når de også har sterke faglige kvalifikasjoner, og evne til å tilpassje det de kan til gruppas, og enkeltpersonenes behov på en gang.

Det er ikke til å komme fra at opplegget har fått sin utforming ut fra menneskers egne erfaringer, de som selv har tapt store deler av sin funksjon. De har selv kjempet en lang, og til tider ensom kamp.

De har gjort mange erfaringer. De har funnet verktøy og løsninger. Noen av de som har gjenvunnet og skapt nye funksjoner selv, har ønsket å gi dette verktøyet videre. De vet hvor hardt det er å bli rammet. De vet hvor godt det er å få en bedre hverdag.

HVA SKJEDDE PÅ FERDEN?

Det var en hel dag i uken. Det er krevende for mange som lever med sterke plager. Dette ble godt ivaretatt gjennom hyppige pauser i ulike utgangsstillingar. Og spørsmål: Er det noe du kan gjøre?

Er det noe vi kan hjelpe deg med? Sittende og liggende avslapping og oppmerksomhets-trening.


De vanskelige tingene som andre som ikke har vært syke selv kan for-
stå, kan nå plutselig alle kjenne seg igjen i eller forstå. Her er det trygt å komme fram med utfordringene i hverdagen.

Det går ofte hånd i hånd med latter og lek.

Som om ikke dette var en gave stor nok for oss som var heldige å få lov til å få bli med på denne studien, etter nøyte utredning og godkjenning, var det faktisk enda mer som kom oss til gode.

12 gratis behandlinger var lagt inn i prosjektet. De fleste i gruppa var vant med å sette inn mye innsats selv, for å mestre de dagligdagse situasjonene.

Behandlerne var nøyte utplukket. De viste en empati og bred faglig styrke som stod langt sterkere enn vi forventet. Det gjorde oss vendedig.

Reidun har vært som en god fe i det hele, med synlige og usynlige energier. Hun tar enhver rolle når behovet dukker opp; som vaktmester og sekretær, terapeut og medmenneske, julenisse med generøse gaver, og daglig leder. Jo, kunstner og forretningskvinne også. Humor og alvor, enten ligger det opp i dagen, ellers så er det bare rett rundt et hjørne.

Audun og Reidun, dere drar sterkt sammen. Audun - faglig leder, har et spenn av kvaliteter, de driyser ned på oss som stjernestøv; en bred faglighet som formidles med brennende engasjement og tilpasset vår kapasitet. Audun, overlege, spesialist i allmennmedisin, Fellow i neurologisk musikterapi, forfatter og musiker, og med stor interesse for å finne fram til alt godt som kan komme et menneske til gode, rent medisinsk, ja, men ikke desto mindre integrert medisin.


Vi har fått verktøy og minner for livet. Jeg tror vi må ha haft en hel hørskare med engler, som har brakt store verdier inn i livene våre.

Den siste dagen i prosjektet opprørt. Vi har fått kjenne på at vi som nordmenn på mange vis er en egenart. Vi har et stort behov for frihet. Når det skapes rom for det, og vi slipper for sterke preg av pikt uten sammenheng med mening, kan vi finne fram til kreativitet og innsats og innsikt, der evner kan tilpasses og nytes med funksjonsframgang og produktivitet som resultat.

Både savn og takknemlighet bredte seg i gruppen den siste dagen i prosjektet.

Kristin har vært som en sol for oss, hun har ledet oss i gjennom studien, stødig, omsorgsfullt, sterk, fleksibel og mykt, tross stadige overraskelser i programmet.

Vi har fått så utrolig mye. Vi skal møtes igjen til høsten. Det blir spennende. Hva har eventyret ført med seg? Nå skal vi finne fram til våre egne veier igjen, med nye verktøy, ny innsikt og nye erfaringer og opplevelser. Vi har fått en mye større trygghet i at mange av de tiltakene vi gjør, i tilpasset dose, er vesentlige for å bevare og forhoppentligvis bedre vår tilstand, slik at livskraften bedres, for oss selv, og i et større fellesskap.

Det er i hvert fall ingen tvil blant oss som har deltatt, dette er et opplegg som er av stor verdi.
Vi vil ønske et sammensatt alternativt opplegg hjertelig velkommen inn som et supplement til medisinske tiltak.

Tusen hjertelig takk til alle dere som har vært med på å gjøre dette mulig for oss!
Med håp om at det må komme mange flere til gode med tiden.
Er det et eventyr? Eller en virkelighet?
Noen ganger er virkeligheten sterkere og mer magisk enn eventyret...

Hilsen takknemlig
Studie-deltaker
i amalgsamprosjektet 2014
Av Toril Sonja Gravdal
Deltager i gruppen på Heggeli
Helhetsmedisin i Oslo

Jeg deltok i gruppen på Heggeli Helhetsmedisin i Oslo.
Da jeg så at jeg ville si noen ord her i dag, tenkte jeg at jeg ville ta utgangspunkt i det jeg tenker når jeg ser tilbake.
Har det jeg opplevde i de ukene kurset varte satt noen spor?
Har de gitt noen virkninger som fortsetter i mine hverdager og i mitt liv?

Svaret er " JA".
Jeg meldte meg på til studien uten å ha noen forestillinger om hva jeg kunne vente meg. I ettertid er jeg taksnemlig for at jeg gjorde akkurat det.
Jeg tenker med glede tilbake på det fellesskapet jeg opplevde i gruppen, kursets innhold og, ikke minst, gruppeleders egenskaper som kursleder. Det kan jeg ikke få fullrost nok.
Behandlingene jeg mottok spilte også en viktig rolle i forhold til bedret helse. Jeg valgte å konsentrere meg om en behandlingsform, akupunktur. Det var en særdeles god opplevelse, for både kropp og sjel.
I ettertid tenker jeg ofte på hvor mye det betyr å gis rom for å være seg selv, på akkurat det stedet i livet man befinner seg. I denne sammenhengen symboliseres det for meg av aksept for at man har begrensninger, at man trenger hvile og time-out, at man rett som det er kan trenge en madrass og et teppe og noen minutter ro før man er i stand til å fortsette. Det å oppleve
«tingene» slik de er

et fellesskap der slike begrensninger ikke medfører at man
kjenner seg «rare» og annerledes, det kan komme til å bety mye for en
som ellers står litt på siden av et effektivt samfunn og arbeidsliv.
Kurset åpner for aksept av «tingene» slik de er, samtidig som
det lager silhuetten av et mål som er fullt oppnåelig, fordi målet skapes med fundament i den enkeltes
forutsetninger.
Som amalgamskadet, oppleves ofte følelsen av å være alene.
Særlig gjelder det før man har ervervet seg nok kunnskap til å
forstå egen situasjon. Slik kunnskap bygges opp etter hvert som man
lykkes i å få adekvat medisinsk help.
Jeg ser for meg et snarlig rehabiliteringstilbud for amalgamskadde,
der slike kurs er en naturlig og selvfølgelig del. Jeg tror at et slikt opplegg vil være fruktbart også for andre pasientgrupper. Jeg vil
gjerne understreke snarlig, fordi det virkelig begynner å høste!
IMCR-studiet

Av Kristin Wang


Da jeg ble spurte av Audun om å fungere som gruppeleder i denne studien ble jeg opprørtig glad. Jeg er utdannet tannlege og jobbet i flere år med spesialfjerning av amalgam. Den gang var den svenske tannlegen Christer Malmstrøm min mentor og jeg har mye og takke han for. Denne perioden av mitt liv gav meg masser av erfaring. Derfor ble denne studien en utfordring av noe jeg har breet for lenge. Gruunnet sykdom sluttet jeg som utvende tannlege. Etter det har jeg tatt videreutdanning med fokus på hele mennesket og nå fikk jeg bruk for alt jeg har lært.


Det var en stor glede for meg og de andre på senteret og se denne utviklingen.

Wow, det skjedde virkelig noe! Jeg føler virkelig at vi er i en tid hvor helsevesenet har store utfordringer.

Langtidssyk er en av dem. Fordi jeg selv har vært syk har jeg også kjent dette på kroppen.

Som langtidssyk blir man ofte sittende alene. Dette er, i tillegg til alt annet, en stor utfordring. Tilbudet utover noe hjelp til fysiske plager er minimalt. Det er på tide at noe gjøres. Og denne studien viser meg at det er mulig å gjøre endringer fra den praksis man har i dag. Det gir HÅP. Noe av det viktigste man trenger i en slik situation. Om at hverdagen og livet kan bli bedre. Sammen er man sterkere.

Etter studien har jeg selv vært igjennom kreftebehandling. Så jeg har ikke fått jobbet mer med programmet med andre, men kanske lært like mye ved å bruke det selv. Det er som et under for meg å ha kommet meg gjennom alt dette uten depressjon og angst, noe jeg har kjent på tidligere i livet. Jeg har sørget for å ha et sosialt nettverk, spist sundt og godt, trent
det jeg har orket, serget for å ha tid til hvile og meditasjon, og ikke minst gitt meg selv godhet og kjærlighet. Jeg har sluttt helt med å kritisere meg selv, gi meg selv skyld for det som hender. Skylder ikke på andre heller. Og midt i dette har jeg funnet ut at alt det jeg har prøvd å få «der ute», kan jeg gi til meg selv. Det hjelper meg!

På workshopen refererte jeg til en drøm jeg hadde hatt natten før. For meg var den herlig. Jeg så et svært Protesttog, hvor mange av deltakerne var med. De bar på store plakater med paroler: We are WORTHYs!! Og det som kom til meg som forklaring var:

Sykdom er et sunnhetsstegn i et dysfunksjonelt samfunn!

Karen Van der Starre
HMS rådgiver/fysioterapeut og gruppeleder på Hegelit Helhetsmedisin:

DEN VIKTIGE OVERFØRINGSVERDIEN
Det jeg synes er viktig i forbindelse med IMCR-prosjektet er overføringsverdien til praksis, både i terapi one-to-one, og i kursvirksomhet. Jeg har gitt flere stressmestringsskurs i etterkant av prosjektet, og jeg har tatt i bruk flere av modulene og skjemaene. I terapi bruker jeg også ofte elementer fra mindfulness, kognitiv terapi (ABC-modellen, indre drivere, motiverende samtale, sosiale nettverket, innom ernæring, trening, søvn, egenpleie)!

Jeg har gjort dette stoffet så pass mitt eget, at jeg først ikke tenkte på hvor jeg har mye av dette fra, men jeg har lært utrolig mye av IMCR-prosjektet!

Jeg forklarer det ofte slik at jeg setter klienten i midten, og så beveger vi oss rundt og ser hvor krenge det forbedring, forandring, og hvor vi vedkommende gode ressurser. Slik tar vi for oss hele personen og hans/hennes liv. Dette er mat- nyttig, klientene føler seg sett og det er lettere for dem å se problemene sine i et større perspektiv.

Det gir klienten opplevelsen av egenkontroll...

Og jeg avsluttet med: tenk om det er sann da??

Hvorfor jeg tok med denne drømmen er for å belyse et av kapitlene i studiet som har med persepsjon å gjøre. Det å ta på seg andre briller og se på ting fra et annet ståsted og på en annen måte enn vi pleier. Jeg føler at dette er på tide. Vi sitter så fast i gamle firekantede måter å se og styre på. Og altfor mange tror at sin sannhet er den eneste rette. Tenk hva som skjer når vi ser på livet gjennom andre briller. Hvor annerledes det blir da. Og hvem eier sannheten? I så fall bare sin egen!

Det er på tide at vi rommer våre ulikheter og respekterer alle som de er. Ingen er mer verd til noen annen. Det er det bare samfunnet som har skapt. Og vi må ta vare på HELE mennesket.

Kanske denne studien om den virkelig videreføres og brukes riktig kan endre på dette?

Kanske kan langtidsyke i stedet bli en ressurs som kan få være med og delta. Altfor mange faller utover og føler seg verdiløse slik det er i dag.

Hva med å bruke disse pasientenes egne erfaringer som et ledde i å bygge videre og utvide det helsevesenet vi har i dag. Til det beste for alle!

Karen Jansen
Fysioterapeut, Spesialist i kvinnehelse, og gruppeleder ved Regnbuen Helsesenter:

GOD OPPLÆRING OG VIKTIGE TEMAER
Som gruppeleder var jeg glad for å få god opplæring og et veldig bra Håndbok hvor hvert tema var systematisk og godt beskrevet.

Det som jeg synes var viktig, og den røde tråden gjennom hele studien, var helheten som ble godt illustrert med helsetemplet og de fem søylene.

Ernæring var nyttig, og det var veldig bra å ha med ernæringsfysiologien i en time ved hver samling.

Tema sosialt nettverk hadde jeg ikke jobbet mye med tidligere, og jeg oppdaget viktigheten av dette tema.

Det var bra at vi kunne jobbe individuelt men også mye i gruppe. Flott med fysisk aktivitet og avspenning ved hver samling.