

**Chairside prophylaxis  
at dental clinics in  
Nordland, Troms and Finnmark  
– evidence based routines?**

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# ABSTRACT

**Introduction** Dental students in Tromsø wrote reports during the external practice on 7<sup>th</sup> semester regarding public dental services, and a subject covered was prophylactic routines at the clinic. Vast differences between routines were revealed, and it has been shown that preventive guidelines are hard to find, but they exist.

**Aim** The aim of the study is to look into how the clinics in the three northernmost counties carry out their chairside prophylactic routines, and if it is in accordance with available literature.

**Method** A questionnaire was designed and sent to a total of 24 clinics in collaboration with the chief county dental officers. These were answered by the clinic managers and returned anonymously. Also, we investigated literature from Cochrane, PubMed and various educational books and the results were compared to the answers from the questionnaires.

**Results** Although several clinics base their routines on individual needs, numerous clinics provide additional prophylactic treatment measures than what is accounted for in the literature, e.g. some clinics applied fluoride varnish and professional dental cleaning on every patient. 14 clinics felt that there is room for improving their prophylactic routines. When asked whether the clinics perceived a need for national guidelines seven answered “yes”, five answered “no” and six answered “uncertain”.

**Discussion** The clinics are responsible for keeping their routines updated, but available scientific literature is scattered in different databases and books and is hard to find. National guidelines may be one way to keep the clinics up to date on chairside prophylaxis.

# INTRODUCTION

In 2009, the Norwegian Institute of Public Health (FHI) published a report [25] concerning the dental health situation in Norway. The report revealed significant geographical differences, showing that the northernmost counties of Norway are in the bottom range regarding patients under the age of 18 and the elderly. In recent years, the scarcity of dentists in the public sector has dominated these provinces. As early as 1994-1995, the Norwegian Parliament looked into the possibilities of establishing an education in dentistry in Tromsø. In 2004, these plans were finally realized. Dental public health is emphasized in this education, in a view that the graduating students will remain in the northern areas and provide services in public facilities. Thus, a substantial part of the education involves practice in external public clinics.

During the external practice in the 7<sup>th</sup> semester, the students wrote reports from their experience and analyzed particular subjects. One of these subjects was how the prophylactic routines at the clinic were done. The papers showed vast differences in chairside prevention, ranging from e.g. fluoride varnish consistently to *all* patients, to not having any guidelines at all. This indicates that the clinics use their own methods to master prophylaxis, and do not necessarily distinguish between the majority of the public and high risk individuals (patients with elevated risk of developing caries).

The aim of this study is to investigate the routines of chairside prevention at public clinics in the three northernmost counties in Norway, Nordland, Troms and Finnmark. The focus will be on the caries preventive approaches.

## METHOD

In order to carry out this qualitative search a questionnaire was prepared (Appendix 1). Among topics emphasized were existing or non-existing routines, fluoride recommendations to specific groups of patients (pre-school children, school children and adults), routines on fluoride varnish and fissure sealants, and the need for national guidelines concerning prophylaxis. The age, sex and county differences among the clinic managers were also compared. A pre-study was performed by sending out a preliminary questionnaire to two clinics that the students visited in the 7<sup>th</sup> semester practice. The managers gave feedback by telephone and e-mail, and changes were made based on responses indicating confusing and unclear questions.

In collaboration with the Chief Dental Managers of the Public Dental Service (PDS) in Nordland, Troms and Finnmark, 24 dental clinics (8 from each county) were selected to participate. In total 19 clinics responded, all of them anonymously. One questionnaire was removed to get equal distribution between the counties. The final material consisted of 6 questionnaires from each county.

The results were interpreted and compared with the curriculum for dental students in Tromsø, and with articles found in Cochrane database: "Oral Health → Caries → Prevention". Owing to the lack of Norwegian literature regarding the relevant topics, guidelines from other countries were used, such as the Swedish Council on Technology Assessment in Health Care (SBU) summaries regarding caries [7] and periodontal disease [20], the Central Board for

Social Welfare Services' Guidelines for dental treatment for adults 2010 [6] and the Scottish Intercollegiate Guidelines Networks (SIGN) clinical guidelines regarding caries prevention [8,9].

## RESULTS

### *Results from search in literature; preventive modalities*

#### *The mechanisms of fluoride*

Fluoride has many mechanisms of action. It *induces remineralization* by attaching to partly demineralized crystals on the tooth surface and speeds up the process of attracting calcium ions. In addition to the remineralization, fluoride *inhibits demineralization* in two ways; through the formation of fluorhydroxyapatite (lowers the critical pH value, at which apatite crystals in the tooth structure dissolve, from 5,5 to 4,5) and by the formation of calcium fluoride (a reservoir which increases the resistance against acidic challenges on the tooth surface). Fluoride also has an *antimicrobial effect* through inhibition of various intracellular metabolic enzymes which in total will lead to lowered production and secretion of acid from the cariogenic bacteria (clinical studies indicate this effect, although dependent on factors such as concentration) [5, 21].

#### *Dental cleaning with fluoride toothpaste, toothpicks and dental floss*

Tooth brushing has a good effect in preventing caries if done properly and with fluoride containing toothpaste, and this is the major reason for the decline in caries incidence during the last decades [5, 6, 8, 9]. Dental floss reduces the amount of bacteria in interproximal spaces [22], but should be performed at a professional level to have a caries preventive effect. Instructions should be restricted to those in need of such treatment if they are able to follow the recommendations [5]. To promote periodontal health instructions should be given regarding proper use of dental floss and toothpicks [4].

#### *Fluoride mouth rinse*

No literature stating that fluoride mouth rinse should be recommended to all patients was found. However, people at high risk for caries seem to benefit from this additional fluoride supply [1, 2, 3, 4, 5, 6]. The best effect is achieved if the mouth rinse is used at different times than the fluoride toothpaste. This will give a continuous fluoride supply throughout the day and one avoids losing the high amount of fluoride from the tooth paste [5, 7]. Individuals at the age below six should not use fluoride mouth rinse due to the risk of swallowing [5]. Patients with root surface caries would clearly benefit from the fluoride mouth rinse regimen [6, 7].

#### *Fluoride tablets*

Fluoride tablets show only a cariostatic effect post-eruptively. Therefore recommending this to young children with erupting teeth, hoping to prevent caries pre-eruptively, will not give the desired effect and clearly increases the risk of developing dental fluorosis [5]. A post-eruptive effect is seen on high risk individuals if used regularly for some considerable time, but this should not be recommended for every patient, and even for individual use, the effect is limited [5, 6, 7, 8]. The best effect is achieved if the fluoride tablets are used at different times during the day than the fluoride toothpaste [8]. The set book for the education in public dental health at UIT states a 40-50 % reduction in caries experience with the use of fluoride tablets, but caries risk level, the frequency of use and how it is used is not specified [4].

### *Fluoride varnish*

Fluoride varnish may be an effective approach to reduce caries if applied at least twice a year on permanent teeth in high risk individuals, and on small enamel lesions in the primary dentition [4, 5, 6, 7, 8, 9, 11, 12, 13, 14]. The effect is also evident regarding root surface lesions [6]. The effect in low risk individuals is negligible [5, 8]. Fluoride varnish is not superior to other fluoride supplements, e.g. fluoride mouth rinse [10].

### *Diet*

Dietary advice should be given to high risk individuals, and advice given to those with a diet that does not compromise dental health is inconvenient for the patient, as well as time consuming for the personnel [5]. The effectiveness of dietary advice given in the dental office is poorly documented [7].

### *Fissure sealants*

Indications for fissure sealants found in the literature were active caries in fissure(s), high risk individuals, and deep fissures that compromise cleaning [5, 8]. If fissure sealants are indicated, all susceptible sites for caries should be sealed [4]. Fissure sealants on high risk individuals are beneficial, but effectiveness has not been proven in other groups of the population [16]. Long-term caries prevention can be achieved when recall of the patient is difficult [5]. Looking at the cost-effectiveness of fissure sealants, it is advantageous to seal the teeth of all high caries risk individuals, rather than sealing consistently no teeth at all or the teeth of the whole population [5]. The literature found is insufficient to determine whether the fissure sealants actually are cost-effective in low risk versus high risk individuals, as well as short term versus long term benefits [6, 7, 9, 15].

### *The effect of chlorhexidine*

Chlorhexidine is a cation which binds to negatively charged microbial surfaces, such as free groups of carboxyl and phosphate in Gram positive bacteria and lipopolysaccharides in Gram negative bacteria. The effect is reduced metabolic activity in biofilms and thus reduced acidic attacks on the tooth surface. The enzymes glucosyl transferase and phosphoenol phosphotransferase is also inhibited which gives the effect of respectively reduced microbial accumulation on the tooth surface and less transportation and phosphorylation of glucose over the cell membrane. High concentrations of chlorhexidine gives a bacteriocidal effect and low concentrations gives a bacteriostatic effect [5].

### *Chlorhexidine in preventing caries*

Some of the literature states that chlorhexidine gel, varnish and/or paste have a 46 % caries reduction, and should be used at every 3 months [8]. Other sources claim that the chlorhexidine regimen may only have an effect in children and adolescents who are not exposed to fluoride, and there is no evidence stating that individuals already using fluoride will have an additional effect [5, 17]. Chlorhexidine gel used in a dental bar gives a reduction in caries when used with a strict dental hygiene regimen (including dietary advice, oral hygiene instructions and fluoride varnish), but there is also reason to believe that the same results will be achieved without chlorhexidine [5, 6]. Also, some of the studies show that after 10-11 weeks the level of *Streptococcus mutans* will return to baseline [23, 24].

Generally the evidence of chlorhexidine as a caries preventive measure is lacking, and the existing evidence comes from inadequate studies that cannot be implemented in clinical practice, or the results were inconclusive [5, 17, 18, 19]. To increase the efficacy of the

antimicrobial approach in preventing caries, the chemotherapeutic agent needs to be aimed at specific microorganisms to establish a non-cariogenic environment in dental plaque [18]. More well executed studies are needed to promote clinical use of chlorhexidine gel, and until scientific evidence is available, the practitioners should use the measures already proven to be efficient, e.g. fluoride varnish and fissure sealants [17, 19].

### *Professional dental cleaning*

Regular professional dental cleaning followed by fluoride delivery may be effective as a caries preventive measure in high risk individuals, but the effect is low in initial caries lesions. Intervals of each visit have been suggested to range from every fortnight to every other month [5, 6]. When the patient can obtain adequate oral hygiene, the time between the visits may be increased [5]. Other literature states a variable effect of professional dental cleaning in preventing caries, but evidence regarding this topic is insufficient [7]. However, regular teeth cleaning executed by trained personnel may reduce the prevalence of gingivitis, but the effect is negligible compared to repeated oral hygiene instructions [6, 20].

### *Results from questionnaires*

Out of 18 responses, 11 clinics informed that they had specific prophylactic routines. These routines were, according to the participants, updated “when needed” and briefed for the personnel at clinic meetings. Five clinics rested their routines on clinical experience and five clinics answered “other sources” without specifying them. Only one clinic based the routines on courses. The remaining clinics stated various reasons for not having specific routines, such as no need, turn-over of personnel and professional disagreement.

The answers regarding routine prophylactic measures provided on every patient in a specific group is listed in Table 1. Table 2 describes the measures applied in patients with specific needs.

	Pre-school children	School children	Adults	No one
Instructions in toothbrushing	7	6		
Dental floss instructions	6	6	3	
Toothpick instructions				5
Recommendation of fluoride mouthrinse	2	5	1	
Recommendation of fluoride tablets	7	7		
Duraphat®-varnish	4	6	1	
Analysis of diet	6	6	1	4
Fissure sealant		2		
Chlorhexidin gel				2
Professional dental cleaning with polishing paste	3	4	7	
Caries risk assesment	1	1	1	3

Table 1: Prophylactic measures that are provided on everyone, sorted by age groups, regardless of individual needs. If the specific routines are consistently not being done, the answer “no one” was checked. Note that clinics may have marked more than one age group, none of the groups, or may instead have answered in Table 2.

	Pre-school children	School children	Adults
Instructions in toothbrushing	11	12	17
Dental floss instructions	8	13	15
Toothpick instructions	1	1	12
Recommendation of fluoride mouthrinse	5	11	16
Recommendation of fluoride tablets	10	11	11
Duraphat®-varnish	12	11	13
Analysis of diet	5	5	7
Fissure sealant	6	15	7
Chlorhexidin gel	2	5	13
Professional dental cleaning with polishing paste	11	12	11
Caries risk assesment	3	6	7

Table 2: Prophylactic measures provided on patients on an individual basis, sorted by age groups. Note that clinics may have marked more than one age group, none of the groups, or may instead have marked Table 1. The participants that did not answer these questions are not found in the table.

From Table 1, some of the results revealed routines consistently being done to every patient in one or more groups (for example all adults):

- 6 clinics recommended fluoride tablets and mouth rinse to every patient in one or more groups
- 7 clinics applied Duraphat® to every patient in one or more groups
- 7 clinics carried out professional dental cleaning on every patient in one or more groups

14 clinics felt that there is room for improvement concerning prophylactic measures at the clinic, while four clinics were not sure. Diagram 1 demonstrates the clinics' satisfaction with their routines.

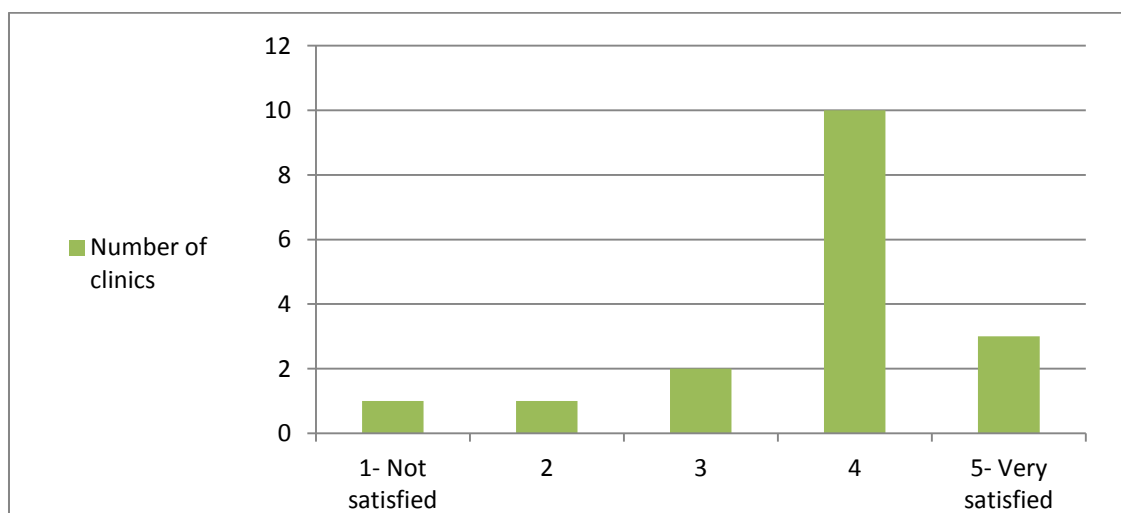


Diagram 1: Level of satisfaction regarding prophylactic routines internally at the clinics. Note that the participants that did not answer this question are not included in the diagram.

When asked who is responsible for suggesting the routines, 14 answered the clinic manager, 11 answered dental hygienists, eight answered dentists and five answered chief dental



officers. This is illustrated in Diagram 2. Note that the participants had the option of giving more than one alternative.

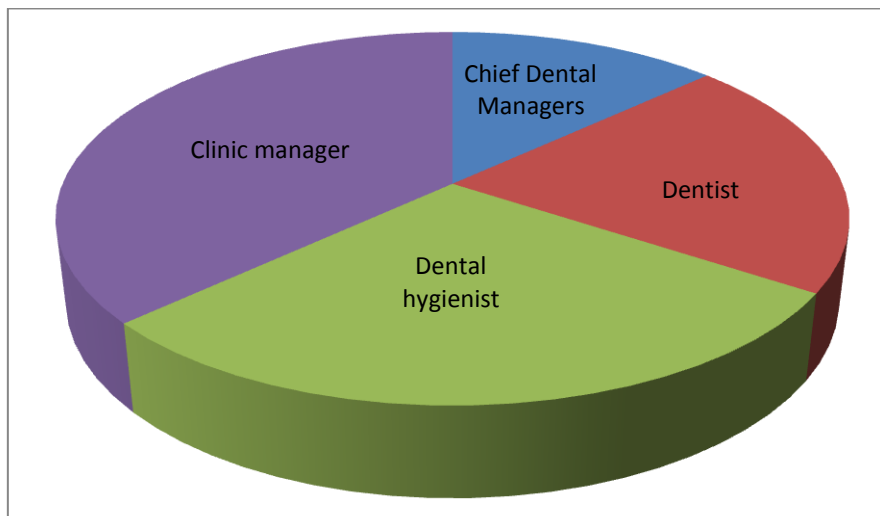


Diagram 2: Illustration of who the clinic managers think is responsible for the prophylactic routines used in the clinic.

The pattern from the questionnaires revealed a more individual based prophylaxis among the larger clinics with managers under the age of 40, while the smaller clinics seemed to have routines, not based on individual needs, but for entire patient groups. No significant differences were detected between the clinic manager's sex and county.

When asked whether the clinics perceived a need for national guidelines 7 answered "yes", 5 answered "no" and 6 answered "uncertain", regardless of the clinics' routines. Some of the comments were:

- "It would be convenient if there was one simple routine which applied to the whole country. This would secure equal treatment for all patients on a national basis". This is a point of view which was expressed by several participants.
- "A total lack of collaboration and professional disagreement at the clinic" is one clinic's reason for wanting national guidelines.
- "Large variations in oral health and treatment needs between northern and southern parts of Norway" is one clinic's reason for **not** needing national guidelines.
- "Lots of vacancies and instability lead to lag of conservative treatment, and consequently downgrades prophylaxis".

## DISCUSSION

In addition to cariological subjects, the questionnaire originally contained questions regarding periodontal prophylactic measures, such as removal of calculus. Some clinics stated that they removed calculus on both patients with individual needs and on every patient, and some clinics stated that they did both measuring of index pockets and full mouth periodontal pocket measuring. From the answers, it seems that these questions were misinterpreted and therefore the answers were not included in the final results. In addition, literature regarding efficacy of periodontal prophylaxis was difficult to find. Thus, the emphasis in this master thesis has been on cariological chairside prophylaxis.

The results from the literature are conflicting, but there is evidence that some cariological prophylactic measures are more effective than others. The clinical part of the study was based on a rather small material and the results have to be interpreted with some caution. It seems that, in general, there are many clinics giving instructions in tooth brushing, but all clinics ought to consistently instruct all pre-school children and school-children in tooth brushing with fluoride toothpaste, at least once, as evidence refer to this as one of the best ways in preventing caries. One can argue that not all children are in need of such instructions, e.g. children with no caries, but the fact that the child is free from caries can be due to the diet at home. When the child grows up, sugar consumption may increase, and without the knowledge of proper tooth brushing, caries can develop. There were also many clinics instructing all pre-school children and school children in the use of dental floss. This should be restricted to those in need, but only the ones who are capable of using it correctly. For instance pre-school children do not have the motor development to perform this adequately, and after tooth brushing one cannot expect the parents to use dental floss on the dentition of an inpatient child.

Only a few clinics recommend fluoride mouth rinse to every patient, while the majority of the clinics were in accordance with the literature as they based their recommendations on individual needs. In regards to fluoride tablets, the effect might be low, but a highly caries active child needs every additional fluoride supply that they can get. Although fluoride tablets should not be consistently recommended, the questionnaires revealed that several clinics have this as a routine for both pre-school children and school children. There may be various reasons for this, e.g. to keep a primary dentition free from caries, to prevent developing caries in permanent erupting teeth etc. Literature does not promote this regimen as it is recommended, if at all, to high risk individuals only. The risk for dental fluorosis should also be taken into consideration. Therefore, clinics ought to moderate these recommendations. It can be mentioned that fluoride tablets might be more suitable for e.g. the elderly as it is easier to handle.

In spite of the substantial amount of evidence concerning when to use fluoride varnish, there are some clinics applying Duraphat® to every patient. When looking at the cost-effectiveness, as well as the long waiting lists, especially in the peripheral regions in the counties where recruiting dental health personnel might be difficult, this expensive and time consuming routine should definitely be restricted to high risk individuals. It should also be done at the lowest competence level as possible [5]. This might be solved by educating the dental nurses in applying Duraphat®, e.g. when high risk individuals are going through intensive fluoride therapy. This is one way to increase the efficiency in the public dental health system.

Numerous clinics apply fissure sealants based on individual needs, and this is a good measure for preventing fissure caries lesions in high risk individuals. Some clinicians may hesitate to apply fissure sealants because of the possibility of developing secondary caries, but it is worth noting that optimal conditions are essential to achieve a proper sealant, e.g. a dry environment. As these tasks are not only performed by dentists, the dental nurses should be flexible and, if feasible, also assist the dental hygienists when applying fissure sealants.

Regarding dietary advices, the operators should choose their battles, as patient motivation needs to be directed towards e.g. instructions in tooth brushing if the diet is already satisfactory. If the oral hygiene and diet is O.K, and the patient is free from caries, why not let the patient be credited, give the patient a pat on the shoulder and say “keep up the good work”? You might need the motivation for later in case of a life style change, and one would

benefit from not having nagged the patient previously. This would also lead to better use of the working hours.

The long term effect of chlorhexidine in preventing caries is questionable. The approach is time consuming, expensive and a hassle for the patient. It might be utilized as a temporary treatment in high risk individuals in the process of changing oral care regimen, but bacteria will recolonize after ended therapy. Until more evidence is available, one should focus on therapies that are well-documented regarding the prevention of caries.

The caries preventive effect of professional dental cleaning in high risk individuals may be present, but this needs to be done at regular intervals to be effective, and therefore, polishing e.g. once a year during examination is insufficient. In caries active children where parents do an inadequate job in cleaning the children's teeth, and patients that are unable to clean their own teeth, e.g. because of poor motor control, professional polishing at regular intervals can be justified. For patients who are motivated to improve their oral hygiene, a onetime polishing can be done to demonstrate the feeling of a clean dentition. Otherwise, routinely polishing every patient is an incomprehensible inefficient way to spend valuable time. This time could be spent instructing the patients how to properly brush their teeth at home and patients who already maintain proper oral hygiene have no need for additional cleaning at the clinic.

The routines at the clinics were variable, and there was definitely room for improvement. Several clinics performed routinely preventive measures that cannot be justified when compared with literature. Many of the routines were based on experience and updated "when needed". What are the factors deciding when to update the routines? And if one experiences a decrease in caries after e.g. Duraphat®-varnish on every school child, how can one be sure that this is not due to environmental factors such as a recently introduced sugar free regimen at the school? This is one reason for why "experience" should not come before "evidence".

It should be mentioned that some of the elderly might fall under the category "high risk individuals" because of hyposalivation (due to polypharmacy/use of several medications) or reduced motor skills. This should be taken into consideration when recommending preventive measures, e.g. fluoride tablets vs. fluoride mouthrinse or regularly applied fluoride varnish, but this topic is not emphasized in this study.

The northernmost parts of Norway have had problems recruiting dental personnel, especially dentists, and long waiting lists still persists. There are some clinics that routinely use Duraphat®-varnish on all pre-school children, school children and adults, and one of these clinics downgraded the prophylactic routines in times when conservative treatment was highly needed. If there were individual based routines from the beginning, no downgrading would be necessary as there would be time for both conservative treatment and evidence based preventive treatment for those in need. As mentioned before, superfluous routines are ineffective, time consuming and not desirable work for the dentist/dental hygienist. Also, this will not help the recruitment of new personnel, as well as retaining present staff.

All in all, the majority of clinics were satisfied with their prophylactic routines although they recognized the potential for improvement. The clinics seem eager to carry out prophylactic measures, but bear in mind that prophylaxis should be done as regards to quality, not quantity. From the questionnaires it was revealed a pattern with more individual based prophylaxis in larger clinics with younger managers. Could this be because more employees increase the chances of someone coming across new updated knowledge? Could it also be that more

experienced clinic managers remain in their old routines? Results from the questionnaires showed that the majority of the respondents expected the clinic manager or a dental hygienist to be responsible for making prophylactic routines. Prophylactic evidence is hard to find, and summarizing available scientific literature is demanding as it is scattered in different databases and books. There is not enough time for clinicians to thoroughly investigate the available information and to keep the prophylactic routines updated.

More than 1/3 of the participants perceived the need for prophylactic guidelines, and if we look at e.g. Sweden and Scotland, they both have national recommendations regarding prophylaxis. The problem is that guidelines tend to become quite extensive, and the regular clinician does not have the time, or willingness, to look through all these pages. As for Norway, all we have to show for today is “Tenner for livet” which was published in 1999. A short, concise regularly updated recommendation from central authorities, with the most common prophylactic measures, would be preferable. This could ensure that efforts are directed towards the patients who actually need it.

## CONCLUSIONS

Scientific evidence is scarce, difficult to come across and often contradictory. Still, there are some prophylactic measures that are proven to work better than others, and therefore these would provide us with the best results. We should not use approaches that are poorly studied, and until national guidelines exist, each clinic is responsible for making routines and keeping them updated according to available literature. Also, continuing professional development, e.g. participating in courses, should be encouraged for both dentists and dental hygienists. Several clinics have good individual based prophylactic routines, and this should be applauded. However, there are some superfluous work being done, and to avoid this, an initiative from central authorities is desirable. Based on the studied literature a small list of recommendations is presented below.

### **Suggested prophylactic recommendations**

- Instructions in tooth brushing with fluoride toothpaste to *all patients*.
  - In case of poor oral hygiene, this should be repeated at the next visits.
  - In case of good oral hygiene, no further need of instructions is required.
- Instructions in dental flossing should be given only to those in need *and* who are able to perform this at an adequate level.
- Recommendations of fluoride tablets or fluoride mouth rinse should only be given to *high risk individuals*, respectively to patients below and above six years of age. These fluoride supplements should be taken at different times than the tooth brushing.
- *High risk individuals* can benefit from fluoride varnish if applied at least twice a year.
- *High risk individuals* can benefit from fissure sealants, and all susceptible sites should be sealed. Optimal conditions are crucial.
- Dietary advice should be given to *high risk individuals*.
- *High risk individuals* can benefit from regular professional polishing of teeth at intervals from every fortnight to every other month. When oral hygiene improves and the patient is committed to maintain good oral hygiene, the regimen can stop.
- *Elderly* who are at high risk need to be identified, and an individual based prophylactic program needs to be made for these patients.

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# APPENDIX 1: Project outline and questionnaire

Prosjektbeskrivelse 25.3.2011

Profylaktiske rutiner i offentlig tannhelsetjeneste i Nord-Norge

Masteroppgave

Izabel Høgstad og Anders Engesbakk, Odo-07

Veileder: Eeva Widstrøm

**Introduksjon** Tromsøs tannlegestudenter har ekstern praksis på 7. semester, og her skrives det rapporter om tannhelsetjenesten i de besøkte kommunene. Blant annet har studentene utformet rapporter om profylaktiske rutiner på de ulike klinikkene. I disse oppgavene ble det observert store forskjeller, alt fra Duraphatpensling på *alle* pasienter, til ingen retningslinjer overhodet. I undervisningen av samfunnsodontologi diskuteres retningslinjer for bevisbasert profylaktisk behandling (evidence based), både fra kurslitteratur og internasjonale publikasjoner. Det har vist seg at det er vanskelig å finne retningslinjer om ulike preventive behandlinger, men det eksisterer informasjon om hvilken type profylakse som har effekt.

**Mål** Målet med vår masteroppgave er å undersøke de offentlige tannklinikkers rutiner på intern profylakse i de tre nordligste fylkene, samt å finne ut hva klinikkene baserer rutinene deres på, hvor ofte rutinene oppdateres og eventuelle behov for nasjonale retningslinjer.

**Metode** På basis av lærebøker og annet undervisningsmateriale, samt rapporter fra eksternpraksis har vi utarbeidet et spørreskjema som anonymt skal besvares av klinikksjefer i den offentlige tannhelsetjenesten. Spørreskjemaet tar for seg rutiner som Duraphatpensling, fissurforsøgling og lommedybdemåling, hva rutinene baseres på og hvilke yrkesgrupper som gjør hva. En prestudie ble utført på to klinikksjefer, noe som førte til små endringer i det ferdigstilte spørreskjemaet. Dette sendes ut til et tilfeldig utvalg av klinikksjefer (8 klinikker per fylke) i Nordland, Troms og Finnmark, noe som gjøres i samarbeid med de tre fylkestannlegene. Vi tar sikte på å sende ut skjemaet når vi fått navn og adresser til klinikksjefene.

**Resultat** Vi skal oppsummere de ulike rutinene og sammenlikne fylkene og/eller store og små klinikker. Ettersom et mindre antall klinikker deltar er det snakk om en kvalitativ undersøkelse. Resultatene blir tolket i lys av tilgjengelig informasjon, blant annet fra lærebøker, internettdatabaser og forelesninger som holdes av professorer ved UIT.

**Praktisk nytte av prosjektet** Vi kommer til å sende den ferdige masteroppgaven til de klinikkene som har vært med i prosjektet, samt til fylkestannlegene. Basert på hva resultatene viser kan vi senere diskutere om en mer omfattende undersøkelse vil gagne den offentlige tannhelsetjenesten i Norge.

**Anonymitet** Spørreskjemaet skal ikke inneholde navn eller klinikk. Om identitet framgår på annen måte, vil deltakerne likevel holdes anonyme i rapporten.

**Kontaktinformasjon** Izabel Høgstad      [anahita1101@yahoo.no](mailto:anahita1101@yahoo.no)  
Anders Engesbakk      [anders\\_engesbakk@hotmail.com](mailto:anders_engesbakk@hotmail.com)

**Vedlegg** Spørreskjema



## SPØRRESKJEMA OM INTERN PROFYLAKSE VED DIN KLINIKK

**1. Har dere klinikkspesifikke rutiner for intern profylakse (profylakse som utføres individuelt på pasienter) som hele personalet kjenner til?**

Ja

Nei

**2. Hvis ja, for hvilke pasientgrupper gjelder disse rutinene?**

	<b>Ved behov</b>	<b>Alle</b>
Gruppe A1-pasienter (barn 0-6 år)	<input type="checkbox"/>	<input type="checkbox"/>
Gruppe A2-pasienter (6-18 år)	<input type="checkbox"/>	<input type="checkbox"/>
Gruppe B-pasienter	<input type="checkbox"/>	<input type="checkbox"/>
Gruppe C1-pasienter	<input type="checkbox"/>	<input type="checkbox"/>
Gruppe C2-pasienter	<input type="checkbox"/>	<input type="checkbox"/>
Gruppe D-pasienter (19-20 år)	<input type="checkbox"/>	<input type="checkbox"/>
Betalende voksne	<input type="checkbox"/>	<input type="checkbox"/>
Pasientgrupper som bestemmes av klinikken (noter):		

.....

**3. Hvis ja, når ble disse rutinene utarbeidet?**

.....  
.....

**4. Hvis ja, hvor ofte oppdateres rutinene?**

.....  
.....

**5. Hvis ja, hvem utarbeider disse rutinene?**

.....  
.....

**6. Hvis ja, hva baseres disse rutinene på?**

.....  
.....

**7. Hvis ja, gjelder rutinene både for tannpleiere og tannleger?**

.....

**8. Hvis ja, hvordan informeres personalet om rutinene?**

.....  
.....

## 9. Hvis nei, hvorfor finnes det ikke profylaktiske rutiner ved klinikken?

.....

.....

## 10. Hvis nei, hva er kunnskapskilden(e) til klinikkens internprofylakse?

- |   |   |
|---|---|
| <input type="checkbox"/> Tannlegenes iboende kunnskap   | <input type="checkbox"/> Andre kurs                             |
| <input type="checkbox"/> Tannpleiernes iboende kunnskap | <input type="checkbox"/> Det Norske Tannlegeforeningens Tidende |
| <input type="checkbox"/> Klinikkmøter                   | <input type="checkbox"/> Utenlandske magasiner                  |
| <input type="checkbox"/> Klinikksjefmøter               | <input type="checkbox"/> Internett                              |
| <input type="checkbox"/> Kurs i regi av fylket          |   |
| <input type="checkbox"/> Andre kilder (noter)           |   |
- .....

## 11. Hva undersøkes *rutinemessig* av tannhelsepersonellet ved klinikken, og hos hvilke pasienter? **Kryss av boksen hvis det gjøres hos alle pasienter i gruppen, sett ring rundt hvis det gjøres ved behov!**

	Førskolebarn	Skolebarn	Voksne	Ingen
• Måling av indeksslommer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Full lommedybdemåling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Kostutredning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Kariesrisikobedømming (bakterieprøve, salivaprøve etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Annet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ved annet, hva?.....

## 12. Hvilke kliniske profylaktiske tiltak gjøres *rutinemessig* av tannhelsepersonellet ved klinikken, og hos hvilke pasienter? **Kryss av boksen hvis det gjøres hos alle pasienter i gruppen, sett ring rundt hvis det gjøres ved behov!**

	Førskolebarn	Skolebarn	Voksne	Ingen
• Duraphat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Fissurforsegling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Klorhexidingel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Tannrens med pussepasta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Fjerning av tannstein	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Instruksjon i tannbørsting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Instruksjon i bruk av tantråd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Instruksjon i bruk av tannpirker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Anbefaling av fluortabletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Anbefaling av fluorskyll	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Annet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ved annet, hva?.....

**13. Hvem har ansvar for utarbeidelse og oppdatering av disse rutinene ved klinikken? (mulighet for å krysse av flere alternativ)**

- Klinikksjef
- Tannlege
- Tannpleier
- Overtannlege
- Fylkestannlege
- Ingen
- Annen person (hvis ja, hvem?) .....

**14. Hvordan følger man opp om det profylaktiske arbeidet gjennomføres?**

.....  
.....

**15. Har klinikken noen spesifikk(e) målsetning(er) ved de profylaktiske rutinene? Hvis ja, hvilke?**

.....  
.....

**16. Hvor fornøyd er du med det profylaktiske arbeidet ved din klinikk? 1 = ikke fornøyd, 5 = veldig fornøyd.**

- 1                       2                       3                       4                       5

**17. Ser du forbedringspotensiale ved det profylaktiske arbeidet ved klinikken? Begrunn svaret.**

- Ja                       Nei                       Usikker

.....  
.....

**18. Ser du et behov for nasjonale retningslinjer vedrørende intern profylakse? Begrunn svaret.**

- Ja                       Nei                       Usikker

.....  
.....

**19. Finnes det bonusordninger for de ansatte ved deres klinikk? Hvis ja, hva utbetales det bonus for?**

- Ja                       Nei

.....  
.....

**Vennligst kryss av for korrekt informasjon om deg:**

- Kjønn:                     Mann                     Kvinne
- Alder:                     Under 40 år             Over 40 år
- Fylke:                     Nordland                 Troms                     Finnmark

**Vennligst noter korrekt informasjon om klinikken:**

Antall tannleger: .....

Antall tannpleiere: .....

*Spørreskjemaet sendes til 8 tilfeldig utvalgte klinikker i Nordland, Troms og Finnmark. Spørreskjemaet skal ikke inneholde navn eller klinikk. Om identitet framgår på annen måte, vil deltakerne likevel holdes anonyme i rapporten.*