Oral Health of Adults in Northern Norway – A Pilot study

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Contents

Abstract

There is a deficiency of data on oral health of adults in northern Norway, and available reports indicate poorer oral health in the north as compared with the rest of the country. The objective of this pilot study was to develop and test out tools for a larger epidemiological study of oral health among adults in northern Norway. The study was conducted in the municipalities of Nordkapp and Båtsfjord located in the northernmost county, Finnmark. Questionnaires and letters of invitation were sent to 100 randomly selected individuals in each town, in total 200. Those who filled and returned the questionnaires were sent appointment cards to a free oral examination at the local dental clinic. The main finding from the study was a low response rate; 34% responded to the questionnaire and 26.5% attended the oral examination. Response rate was highest among women above forty years old (37%) and lowest among men under forty years (12%). There is a necessity for further studies and the need to find strategies to increase response rate to subsequent oral epidemiologic studies in northern Norway. Radiological examination is not necessary for such studies but a questionnaire and a physical oral examination should be included.

Background

Oral health is an important aspect of general health and well-being for both children and adults [1]. In Norway the state-supplied oral health service and municipality-state reporting system (KOSTRA) ensures a constant access to oral health data for children and adolescents, but there is a deficiency of scientifically acquired information on the oral health status of the adult population, particularly in the northern parts of the country [2]. Reports from National Bureau of Statistics (SSB) have consistently reported a poorer oral health status in the 3 northernmost counties [2], worst being the county of Finnmark and especially in some of the communities with a large proportion of indigenous Sami population. Finnmark is an area with low population density (a population of 1.5 persons per km²) and historically, a low dentist density (DD = population/dentist). The White Paper, number 35, "Stortingsmelding nr. 35 (2006-2007) *Tilgjengelighet, kompetanse og sosial utjevning – Framtidas tannhelsetjenester* [Accessibility, competence and equalization – The future dental service] specifically mentions (chapter 5.2.2,) the poorer dental health situation of the Sami population in northern Norway as compared to the rest of the population [3]. The same document (chapter 5.7) also mentions the deficiency of data on the oral health status of this adult population and the need for epidemiological research on oral health status of adults.

Most of the epidemiological information of oral health status available on the adult population in Norway is from the Trøndelag and Oslo studies [4, 5]. The studies are carried out on a fairly regular basis of approximately 10 years interval. They have shown a marked

improvement in oral health over the years [4-6]. Another study of oral health in adults is one that has regularly followed up dental health status of military recruits from 1968 [7]. Besides these, there are some studies that target particular population groups, for example the elderly [8, 9].These studies have shown that northern Norway had the lowest percentage of the elderly who had their own teeth and the highest proportion of denture users [2]. The latest official reports on dental health states that residents of northern Norway have the poorest oral health and teeth status as compared with the rest of the country. In addition, they are the ones with the least frequent dental visits, most emergency visits to the dentist, and are least satisfied with how quickly they receive treatment when they have acute problems [10]. Based on statistics from municipalities there is an indication that there is a higher risk of poor dental health among indigenous Sami as compared to the indigenous Norwegian population living within the same county [11]. There is however no recent published studies on oral health and underlying determinants among adults in northern Norway generally, and specifically among the indigenous Sami population which are predominantly located in the north. A study from 1988 on dental status of adults from the northern towns of Alta, Honningsvåg, Karasjok and Kautokeino which included 900 adults did not include any information on ethnicity but results from the study showed that at that time, oral health was poorer in the north when compared with the rest of the country [12, 13].

This paper presents results from a pilot study for an epidemiologic oral health survey of adults being planned for northern Norway and specifically for areas with large indigenous Sami populations, the so called SAMINOR 2 study. The SAMINOR project (“*Population based study of health and living conditions in areas with both Sami and Norwegian*

populations") is a population-based study aimed at studying health and disease in relation to living conditions among the Sami population and to compare these with the Norwegian population in the same area [14]. The first data collection in the SAMINOR study was carried out in 2003-2004. A second data collection (SAMINOR 2)is being planned for 2012/2013 with focus on 5 major health related issues; Diabetes type II, health service research, use of disability pension, mental health and dental health.

The general aim of this pilot study was to develop and test out methods for the planned epidemiological survey of dental health among adults in northern Norway. Specifically the study was to develop a questionnaire appropriate for the specified study, validate the findings of a clinical examination with and without radiographs, and find out the response rate of the target population group for such a study.

Materials and Methods

Sampling and data collection

The pilot study was conducted in the municipalities of Nordkapp and Båtsfjord in Finnmark County. These municipalities were chosen for practical reasons; the presence of a functioning public dental clinic in each of these towns and location in the northernmost county of Finnmark, but not part of the geographic area for the main SAMINOR 2 study. Inclusion criteria for the pilot study were residence in these municipalities and age between 18 and 69 years.

Random selection of 100 adults (50 women and 50 men) from each of the municipalities, in total 200, was done based on the Norwegian National Register. The registry provided the names, addresses, year of birth, and gender of those selected.

The 200 persons invited were mailed letters of information explaining the project (appendix 2), including information about a free oral examination as part of the study. They also received questionnaires (appendix 6), consent forms and postage-paid return envelopes. Prior to sending out questionnaires, awareness about the project had been created by the use of local newspapers and local radio broadcasts. Respondents to the questionnaires and consent forms received appointment cards to a free oral examination at the government dental clinic located in their town of residence. The appointment cards were sent by post and included a message that participants could call to change appointment time if time allocated was inconvenient. The oral examinations were carried out from October 2010 to February 2011. One reminder (appendix 3) was sent out in January 2011 with the questionnaire included.

Questionnaire (Appendix 6)

The questionnaire was aimed at collecting information about oral health status through the use of oral health indicators, oral hygiene habits (past and present), use of and cost spent on dental services, satisfaction with different aspects of available dental service, and self-perceived oral health. The questionnaire had 40 questions (appendix 6). There were questions on ethnicity because the SAMINOR study targets areas where there is a mixture of indigenous Sami and Norwegian population. In addition to questions formulated specifically for this study, some questions were modeled after the oral health study under the Trøndelag-HUNT 3 study [15] and some after the Finnmark study of 1988 [12]. Socioeconomic status was measured by questions on education, income and income source. Questions on ethnicity were based on language (own and parents/grandparents), ethnicity of parents, and self- perceived ethnicity. Use of dental services was assessed by questions on regularity of visits and type of dental service (private or public). Regularity was measured by questions on if attendance has been once a year in the last 5 years, how appointments are booked (e.g. regular invitation or when in pain), how often if regularly invited? Accessibility, costs and satisfaction with dental services were measured by questions on economic hindrances, cost of dental services in the last year, and satisfaction with treatment received, cost, information and geographical distance to dental clinic. Oral health indicators were measured by questions on oral symptoms, earlier diagnosed oral disease, self-perceived oral health status and satisfaction with teeth/oral status. Present oral hygiene behavior was measured by questions on regularity of tooth brushing, use of dental floss, toothpicks, toothpaste, fluoride tablets and fluoride mouth rinses. There were questions about past oral hygiene behavior and parental control of oral hygiene practice

(tooth brushing) in childhood.

Oral Examination

Dental status was assessed by clinical and radiological oral examinations using the DMFT (Decayed, Missing, Filled Teeth) and CPITN (Community Periodontal Index of Treatment Needs) indices. The DMFT index measures past and present caries experience and is a summation of all teeth that are filled, carious or extracted due to caries. The CPITN index measures the health status of the Periodontium (teeth supporting structures) using a periodontal probe. In measuring the CPITN, the mouth is divided into six (sextants) and a score is recorded for each sextant (0 = healthy gingiva, 1= bleeding on gentle probing, 2= calculus, 3= shallow periodontal pocket 4-5mm, 4 = deep pocket
6mm or more). All examinations were carried out by dental nurses/hygienist working at the clinics under artificial illumination (fiber optic light) using mouth mirrors, probes and oral X-ray units. There was a calibration session with all the examiners prior to the commencement of the study (appendix 4). Clinical measures of tooth status, caries experience and periodontal disease were recorded using standard WHO criteria for basic oral surveys [16]. There was in addition a radiological examination consisting of bilateral-bitewing radiographs. Recordings were made manually (appendix 5). Mean DMFT were calculated with and without radiographs and compared. Periodontal health status was assessed by the use of a standard CPI probe (WHO) to measure the community periodontal index of treatment needs (CPITN). Use of removable dentures was also recorded.

Statistical analysis

All data management and analyses were performed using the SPSS software (version 16). Bivariate analysis was carried out with cross tables and chi-square test. Bland Altman scatter chart was used to investigate agreements between results of DMFT with and without radiographs. The following variables were dichotomized in the analysis due to the low sample size; satisfaction with teeth (satisfaction measured on a scale of 1 to 5, where 1 was least satisfied and 5 most satisfied; dichotomized in 1-2 not satisfied, 3-5 satisfied), experience with dental pain in the past year (answer alternatives were; never or seldom= no pain, few times, rather often or often = pain), satisfaction with different aspects of dental services (scale of 1 to 6 where 1 was most dissatisfied and 6 was most satisfied; dichotomized in 1-3 not satisfied, 4-6 satisfied), self-perceived oral health and regularity of dental visit. The question on self-perceived oral health had 4 answer alternatives; poor/bad, not so good, good and very good. In the data analysis the variable was dichotomized to poor/bad or good. T test was carried out for DMFT/ CPITN and some variables from the questionnaire.

Ethics

The study was approved by the Regional Committee for Medical and Health Research Ethics-Northern Norway. All participants were invited to join the study by completing and returning a consent form.

Results (Tables and figures in appendix 1)

Response rate and basic characteristics

Of the 200 men and women invited, 34% (n=68) answered and returned the questionnaires and 27% (n=53) showed up for the oral examination (8%, n=15, answered the questionnaire but did not attend the oral examination) (Table 1). Only 6% of the participants were aged between 18 and 29 years. Linear by linear association Chi square test showed a higher response rate for older age groups (p = 0.08) (Table 2). Mean age of men that participated was 48 yrs, for women 45.3 yrs. There was no significant difference in age between men and women (p = 0.19). Response rate was highest among women above forty years old (37%) and lowest among men under forty years (12%)(Figure 1).

Response rate to the questionnaire

There was 100% response rate among participants to the question on present oral hygiene habits. The questions on how much dental treatment had cost in the last year and satisfaction with different aspects of available dental service had response rates of 97% and 92% respectively. Ninety six percent responded to the question about visiting a dental clinic at least once a year in the last 5 years, but 32% did not respond to questions on how often there were invited for an oral check-up if they were regularly invited. The questions on how long it took to get an appointment the last time they needed to see a dentist and

compliance to treatment recommended were left unanswered by
19% and 20% respectively. Thirty one percent left unanswered the questions on how long dental treatment took in total (including travel and waiting time). Response rate to the question on oral hygiene practice in childhood (10 years) was 98%, and 75% indicated that they did not have children less than 12 years old living at home.

Table 3A presents oral health indicators and table 3B presents use of, and satisfaction with available dental services as reported by respondents to the questionnaire. Twenty eight percent attend a dental clinic only when they have pain or have lost a filling and 22% had not complied with the recommended treatment due to the treatment costs. The most used oral hygiene product was the toothbrush (95% indicated regular daily use).

Results from oral examination and comparisons with questionnaire data

Oral health status observed during the oral examination was measured by the DMFT and CPITN indices. Mean DMFT with radiograph was 13.4 and without radiographs 13.3 (t-test, p=0.14). A CPITN score of 0 for the highest scoring sextant was recorded for 13% of participants, 0.5% had scores of 1 or 2, 36% had scores of 3 or 4. One participant was edentulous and used full upper and lower dentures and 15% (n=8) had removable partial dentures.

A Bland Altman plot indicated good agreement between DMFT scores measured with or without radiographs (fig 2). The findings on regularity of dental visit in the last 5 years, and some of the findings on oral health indicators (satisfaction with teeth, dental pain in the last year, self-perceived oral health and earlier diagnosis of gum disease) were tested against findings from the oral examination (DMFT and/or CPITN). These are presented in tables 4 and 5. The number of participants (n) in table 4 and 5 are different from tables 3A and 3B because not all who answered
the questionnaire (n=68) showed up for the oral examination (n=53). T test on mean DMFT and mean CPITN of highest scoring sextant showed no significant differences between; those satisfied and those not satisfied with teeth, those who have been attending regularly in the last 5 years and those who have not been attending regularly, those who had dental pain in the last year and those who have not, and those who consider their oral health as good and those who did not (Tables 3 and 4). No significant difference was registered in CPITN values for those who have had an earlier diagnosis of gum disease (periodontitis) and those who had not.

Discussion

The purpose of this study was to develop and test out methods for an oral epidemiologic study of adults in northern Norway under the SAMINOR study. The main finding was a low response rate which casts doubts on the feasibility of reproducing the study design on a large scale. The results obtained cannot be used to make any conclusions about oral health in the populations studied because of the low response rate, but that was not the primary aim of the study. Participants were randomly selected in order to ensure a proper representation of the population. The low response rate in spite of media generated awareness (through local newspaper and radio), was unexpected and difficult to explain. It raises a question of whether there is a lack of awareness of the importance of dental health in these communities or, whether there is a lack of interest in dental health. A study aimed at answering these questions by identifying attitudes to, and awareness of different aspects of dental health in northern Norway is recommended. Issues that should be addressed include intrinsic motivation to maintain or improve oral state, awareness of functional and social/aesthetic consequences of a poor dental status, awareness of possible consequences of poor oral health on general health, and suspicion/trust regarding the motives of dental health care professionals [17, 18]. It will be important to include questions on ethnicity in such a survey to identify cultural differences in attitudes.

For the main study (SAMINOR 2), a better response rate is required. In 2003/4 when the first data collection was carried out for the SAMINOR study, oral health was not included and response rate was 60.6% (n=16865) [14]. Variables measured in that study included height, weight, pulse recordings and blood pressure. Blood samples were taken and blood cholesterol, triglycerides, glucose and iron levels were measured. Participants received

letters informing them of the test results and recommendations to see a doctor for those with unhealthy results. The inclusion of oral health as part of a more comprehensive health examination could possibly enhance response rate for the oral health survey. An alternative way of improving the response rate could be by collecting oral health data from adult patients that attend the local clinics in the SAMINOR areas through collaboration with these clinics. The problem with this method would be a selection bias; data collected would be from those that normally attend dental clinics and not from the total population. Collecting data from those who do not normally attend dental clinics is a challenge and as the pilot study showed, even the prospect of a free dental check-up was not enough to get a good response rate.

Of those that responded, 56% were women and 71% were over 40 years old. The same pattern was observed in the SAMINOR studies (women and older people were more responsive). Younger people are often less interested in answering questionnaires and this was confirmed by the fact that only 15% (n=4) of the invited (n=27) in the age group 18 and 29 years participated. Generally, many in this age group are students who live away from home and it is possible that some of those invited in this age group did not respond because they are living and studying in other towns. To get satisfactory response rate it is recommended that the main study should target adults aged 40 to 70 years. However, appropriate methods for assessing dental health for the younger population should be developed. The question directed at those who were regularly invited for a dental check-up on how often they were invited can be omitted in the main study because the issue of regularity is well covered by the questions on whether there has been dental visits at least once a year in the last five years, and how appointments for dental visits are made (regular invitation, regular self- registration or appointments only when in pain or lost fillings). The

questions on how long it took to get an appointment last time at the dentist, and if cost affected compliance to treatment recommended were left unanswered by 19% and 21%. The information they would have supplied (an indication of adequacy and affordability of available dental service) are provided by other questions (the question on costs and satisfaction with different aspects of available dental service), and these questions can therefore be omitted.

The question about present oral hygiene habits was answered by everyone and is an important pointer to oral health. Questions in relation to oral health, cost of dental service and satisfaction with available dental services are highly relevant in an oral health survey and were answered by more than 90 percent, an indication that they were well understood. The questionnaire did not include a question on how many teeth were in the mouth because the survey included an oral examination. It would be important to include this question in subsequent studies to provide valuable information in the eventuality that the participant does not show up for an oral exam (or if there is no oral examination).

Nearly everyone responded to the question on oral hygiene practice in childhood but most participants (75%) indicated that they did not have children below the age of 12 at home. In spite of this, the inclusion of questions on present parental attitude to oral health and oral hygiene habit is highly recommended. Questions on teeth alignment and use of orthodontist were mostly left unanswered and should be omitted from the main study.

The percentage that have regular dental visits (at least once a year in the last 5 years) and percentage that had been to a dentist within the last year was low compared to a nation-wide study in 2004 that found 69% had been to the dentist at least once a year in the last 5 years, and 78% had been to a dentist within the last year [19]. Although this findings

support the latest official reports on dental health which claims that residents of northern Norway are the ones with the least frequent dental visits[10], the external validity of the results are questionable due to low response rate. A nation-wide study of adults in 2004 [20] found that 68% considered their oral health as good while in this study 56% did so. The findings on satisfaction with treatment cost, postponement of dental visit and lack of compliance to recommended treatment due to treatment costs indicate that treatment cost could be a factor contributing to the relatively lower attendance rate reported [10] in this part of the country. Those who indicated "Daily use of a toothbrush" (96%) were similar to results from a nation- wide study on oral health habits of adults (97%) [21].

The oral examination was both clinical and radiological. The clinical examination was based on WHO guidelines with focus on caries experience and periodontal disease[16]. The findings from the comparison of mean DMFT with and without radiographs support the view that radiographs are not necessary for oral epidemiological surveys that study trends rather than prevalence of caries[22] .

Periodontal health status was assessed by the community periodontal index of treatment needs (CPITN)[23] . Mean DMFT for the study sample was 13.3. The Oslo study found mean DMFT for 35-year-olds to be 11.7 in 2003[24], and 14.6 for 35-44-year-olds in the Trøndelag study in 2006[6]. Eleven percent had CPITN scores of 4 (at least one pocket > or = 6 mm). A study on periodontal health status of 35 year olds in Oslo showed a decrease in the proportion of persons with CPITN scores of 4 from 21.9% in 1984 to 8.1% in 2003[25]. It is difficult to compare the DMFT and CPITN values from this study with the studies from Oslo and Trøndelag because of the small sample size and wide age range in this study. There were several questions with more than 2 answer alternatives because of the subjective nature of the

questions and it was necessary to dichotomize these variables prior to data analysis because of low sample size. However, it is recommended that these questions are presented with more than 2 answer alternatives in the main study. The low sample size could account for the absence of significant difference in mean DMFT and CPITN scores for the variables tested from the questionnaire due to low statistical power. The lack of observed significance could also be due to other reasons for example, differences in personal expectations/definition of what a healthy oral status is. The subjective nature of findings from a questionnaire makes it important to include a physical examination (which is more objective and factual) in an oral epidemiologic study.

In conclusion, the pilot study has tested out tools and methods for a larger oral health survey in the north of Norway and revealed that carrying out such a survey in isolation in this part of the country can result in a low response rate. There is a need for oral health epidemiological studies in these parts of the country but also a need to develop strategies to ensure good response rate while planning for such studies. While a radiological examination can be excluded in subsequent epidemiologic studies for describing oral health status in northern Norway, it is important to have an appropriately designed questionnaire and an oral examination.

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Appendices

Appendix 1: Tables and Figures

Table 1. Basic Characteristics of participants (n=68).

Characteristics	***n***	**%**
Age (years)		
18-29	4	6
30-39	16	23
40-49	17	25
50-59	8	12
60-70	23	34
Gender		
Men	30	44
Women	38	56
Geographical area of residence		
Nordkapp	39	57
Båtsfjørd	29	43
Oral examination		
Yes	53	78
No	15	22

Table 2. Response rate in different age groups.

Age	**Total Invited (n)**	***Participants % (n)***
18-29	27	*15% (4)*
30-39	41	*39% (16)*
40-49	49	*35% (17)*
50-59	30	*27% (8)*
60-70	53	*43% (23)*

Table 3A. Questionnaire response for oral health indicators (n=68)

Category	**n**	**%**
Self perceived oral health		
Poor	27	40
Good	38	56
Missing	3	4
Oral pain in the last year		
No	39	57
Yes	26	38
Missing	3	4
Earlier diagnosis periodontal disease		
yes	18	26
No/don't know	36	53
Missing	14	21
Satisfaction with teeth		
Not satisfied	15	22
Satisfied	52	76
Missing	1	2

Table 3B. Questionnaire response for questions on use of dental services, level of satisfaction with accessibility and costs of dental services (n=68)

Category	**n**	**%**
Dental visit yearly in last 5 years		
Yes	33	48
No	33	48
Missing	2	3
Use of dental services		
Regularly invited by dental clinic	35	51
Regular self -registration for dental check-ups	6	9
Dental visit only when in pain or lost a filling	19	28
Does not visit the dentist often	8	12
Missing	0	0

Postponed dental visit due to financial constraints		
Yes	20	29
No	45	66
Missing	3	4
Satisfaction with dental services;		
Geographic distance to dental clinic		
Yes (satisfied)	56	82
No (not satisfied)	2	3
“I don’t know”	6	9
Missing	4	6
Advice and treatment received		
Yes	52	77
No	3	4
“I don’t know”	10	15
Missing	3	4
Cost of dental expenses		
Yes	31	46
No	24	35
“I don’t know”	9	13
Missing	4	6

Table 4; Mean DMF (95% confidence interval) by selected variables from the questionnaire (n=53)

Variable	Yes		No		p-value
	number	Mean DMFT (CI)	number	Mean DMFT (CI)	
Satisfied with teeth	42	12.8 (11.3-14.3)	9	15.0 (12.9-17.1)	P= 0.8
Regular visits (yearly in last 5yrs)	28	13.6 (12.0-15.2)	24	12.4 (10.8-14.0)	P= 0.8
Dental pain in the last year	19	11.9 (10.1-13.6)	32	13.7 (12.2-15.2)	P = 0.6
Self-perceived oral health; good	30	13.2 (11.5-14.9)	21	12.9 (11.4-14.4)	P = 0.2

Table 5; Mean CPITN (95% confidence interval) by selected variables from the questionnaire (n=53)

Variable	Yes		No		p-value
	number	Mean CPITN (CI)	number	Mean CPITN (CI)	
Satisfied with teeth	42	2.1 (1.8-2.4)	9	2.0 (1.6-2.4)	P= 0.3
Regular visits (yearly in last 5 yrs)	28	2.1 (1.8-2.4)	24	2.1 (1.8-2.4)	P= 0.8
Dental pain in last year	19	2.1 (1.8-2.4)	32	2.2 (1.9-2.5)	P = 0.9
Self-perceived oral health; good	30	2.0 (1.7-2.3)	21	2.2 (1.9-2.5)	P = 0.5
Earlier diagnosis of Gum disease	11	2.7 (2.4-2.9)	41	1.9 (1.6-2.2)	P= 0.9

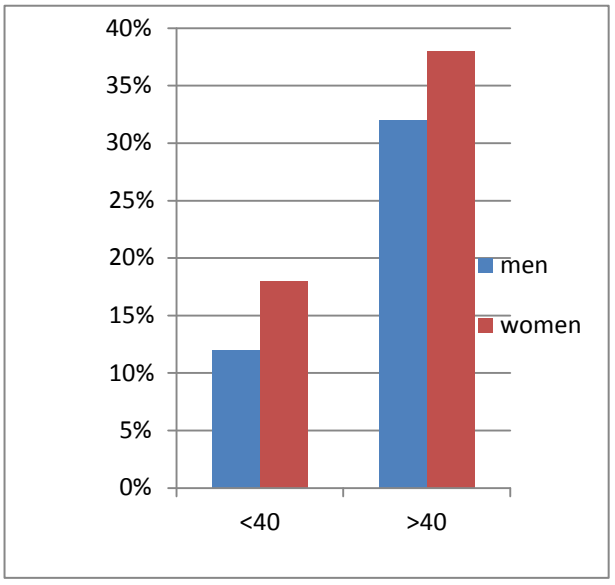


Fig 1. Distribution of male and female respondents below and above 40 years.

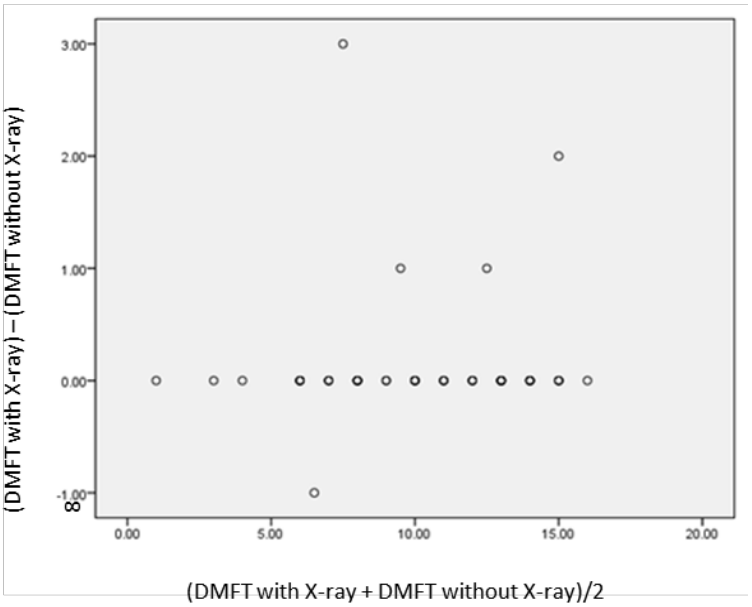


Fig 2; Bland Altman plot for DMFT with and without radiographs

Appendix 2: Letter of invitation/information

DET HELSEVITENSKAPELIGE FAKULTET
INSTITUTT FOR SAMFUNNSMEDISIN
UNIVERSITETET I TROMSØ

Dato: 10.01.11

Forespørsel om deltakelse i forskningsprosjektet *Tannhelse i Nord*

Bakgrunn og hensikt

Dette er et spørsmål til deg om å delta i en forskningsstudie for å studere tilgang og bruk av tannlegetjenester samt tannhelse i områder med norsk og samisk befolkning i Norge. Som forberedelse til en større studie har vi valgt ut din kommune for å gjøre en forundersøkelse for å teste ut spørreskjema og måter å undersøke tannhelsa på. Du er tilfeldig valgt ut i din kommune til å få invitasjon om deltakelse. Studien utføres av Senter for Samisk Helseforskning, Institutt for Samfunnsmedisin, Universitetet i Tromsø.

Hva innebærer studien?

I undersøkelsen vil du bli invitert til å svare på vedlagte spørreskjema og sende det tilbake til oss i tillegg til å møte opp på et lokalt tannlegekontor/tannhelseklinikk. Her vil det bli gjort en undersøkelse av tennene dine der en tannpleier vil ta røntgenbilde og undersøke hvor mange tenner, fyllinger du har og eventuelle synlige hull. Du vil få et timekort i posten om når og hvor undersøkelsen skal finne sted når vi har fått samtykke og spørreskjema tilbake fra deg.

Mulige fordeler og ulemper

Alle som deltar vil, dersom de ønsker det, få individuell tilbakemelding på tannhelsesjekken med eventuell anbefaling om behov for behandling. Det forventes ikke noen risikoer forbundet med tannundersøkelsen. Selve undersøkelsen på tannklinikken vil ta om lag en halv time.

Hva skjer med testresultatene og informasjonen om deg?

Prøvene tatt av deg og informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Alle opplysningene og prøvene vil bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger og prøver gjennom en navneliste. Det betyr at opplysningene er avidentifisert etter at du har mottatt individuell tilbakemelding på prøvesvarene.

Det er kun autorisert personell knyttet til prosjektet som har adgang til navnelisten og som kan finne tilbake til deg. Når bearbeidelse av data er ferdig slettes identifiseringen senest 2 år etter prosjektstart.

Det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres.

Frivillig deltakelse
Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side, svar på vedlagt spørreskjema og sende de tilbake til oss (vedlagt frankert konvolutt). Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke til å delta i studien. Dersom du senere ønsker å trekke deg eller har spørsmål til studien, kan du kontakte Magritt Brustad tlf 77644843 eller Ragnhild Vassvik Kalstad tlf 78468901

Ytterligere informasjon om studien finnes i kapittel A – *utdypende forklaring av hva studien innebærer.*

Ytterligere informasjon om biobank, personvern og forsikring finnes i kapittel B – *Personvern, økonomi og forsikring.*

Vennlig hilsen

Magritt Brustad
Prosjektleder

Sign.

Ragnhild V Kalstad
Adm. leder

Kapittel A- utdypende forklaring av hva studien innebærer

Et tilfeldig utvalg fra personer bosatt i de to kommunene Båtsfjord og Nordkapp i alderen 18-69 år inviteres til å delta i studien.

Studien ønsker å bidra til mer kunnskap om hvordan man kan studere tannhelse i befolkningen. Generelt er det gjort få undersøkelser på tannhelse i Norge. Noen begrensede data har antydet at tannhelsen er dårligere jo lenger nord man kommer. For å studere om dette stemmer samt eventuelt finne mulige forklaringer på dette er det nødvendig å utvikle forskningsmetoder der man på en tilfredsstillende måte kan få god kunnskap om befolkningens tannhelse.

Det er frivillig å delta i studien og det får ingen konsekvenser for deg dersom du takker nei til invitasjonen i forhold til fremtidig kontakt med tannhelsetjenesten.

Deltakerne i studien er invitert til å svare på spørsmål i et spørreskjema og delta på en tannhelsesjekk hvor antall tenner, tannfyllinger og synlige hull registreres. Videre vil det bli tatt røntgenbilde.

Undersøkelsen vil bli gjort i løpet av siste del av 2010 og begynnelsen av 2011.

Deltakelse i studien innebærer en gratis tannundersøkelse med råd om eventuelt behov for videre behandling. Det er ingen kjente bivirkninger knyttet til undersøkelsen.

Undersøkelsen, inkludert utfylling av spørreskjema vil ta om lag en halv time.

Det gis ingen kompensasjon for deltakelse ut over gratis tannhelsesjekk.

Kapittel B - Personvern, biobank, økonomi og forsikring

Personvern

Opplysninger som registreres om deg er opplysninger om alder, kjønn, utdanning/skolegang og inntekt samt informasjon om morsmålet ditt og din egen og foreldre/besteforeldres etnisitet. Videre vil du bli spurt om din egen tannhygiene, bruk av tannhelsetjenester og hvordan du selv opplever din egen tannhelse. Opplysningene vil ikke kobles opp mot andre register i Norge.

Universitetet i Tromsø ved Instituttleder Bjørn Straume ved Institutt for Samfunnsmedisin er databehandlingsansvarlig.

Økonomi

Studien finansieres gjennom forskningsmidler fra Helsedirektoratet og Senter for samisk helseforskning. Ingen av finanskildene har interessekonflikter knyttet til prosjektet.

Forsikring

Deltakerne er dekket gjennom pasientskadeerstatningsloven

Informasjon om utfallet av studien

Resultater av undersøkelsen vil publiseres i en mastergradsavhandling ved Institutt for Samfunnsmedisin, Universitetet i Tromsø. Denne kan lånes ut ved universitetsbiblioteket om ønskelig. Hver studiedeltaker vil få individuell tilbakemelding dersom det avdekkes behandlingsbehov ved tannsjekken.

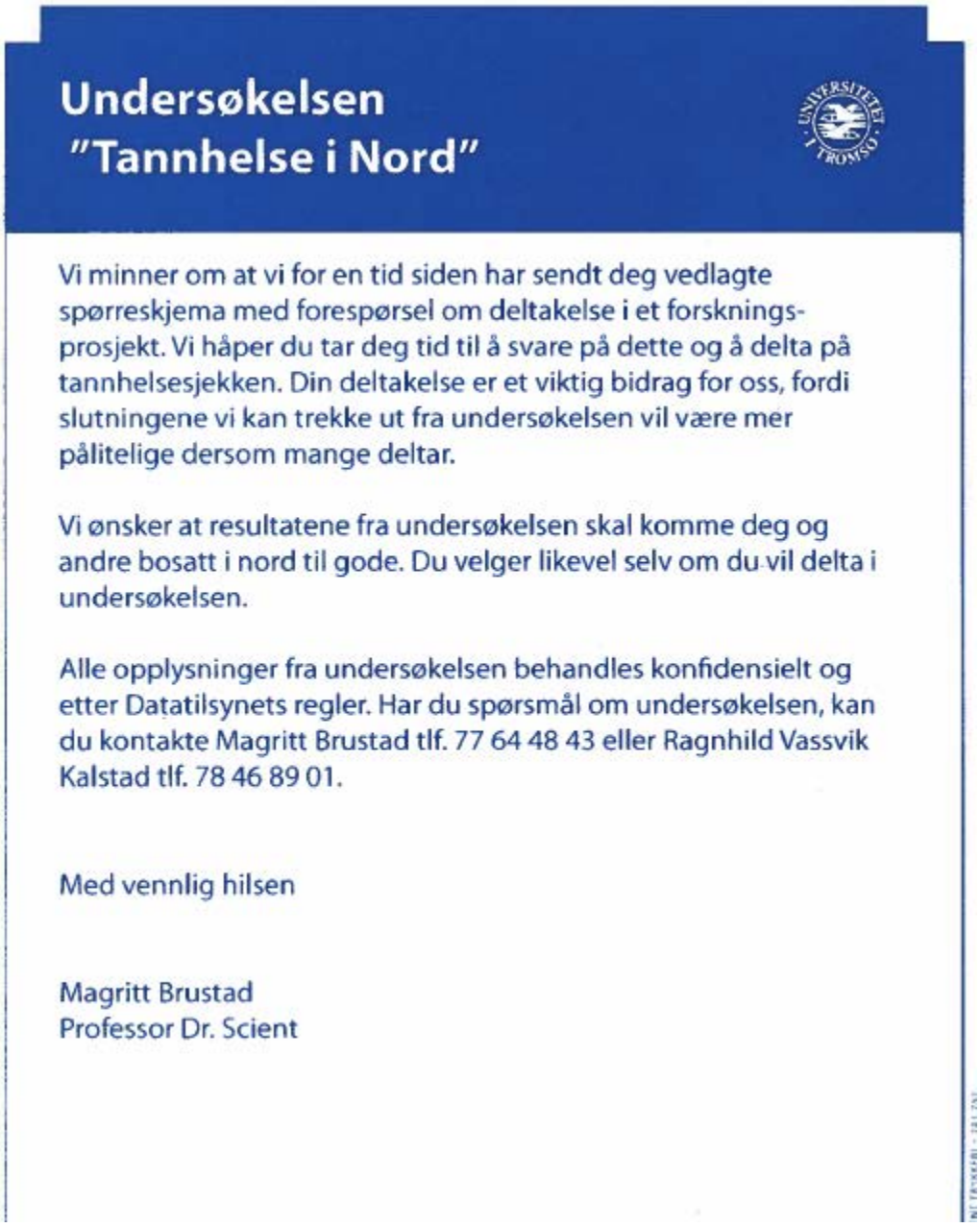
Samtykke til deltakelse i studien *Tannhelse i nord*.

Dersom du ønsker å delta i studien, undertegner du denne samtykkeerklæringen og svarer på spørreskjemaet og returnerer begge disse i vedlagte frankerte konvolutt.

Jeg er villig til å delta i studien

(Signert, dato)

Appendix 3: Letter of reminder



Undersøkelsen "Tannhelse i Nord"

Vi minner om at vi for en tid siden har sendt deg vedlagte spørreskjema med forespørsel om deltakelse i et forsknings-prosjekt. Vi håper du tar deg tid til å svare på dette og å delta på tannhelsesjekken. Din deltakelse er et viktig bidrag for oss, fordi slutningene vi kan trekke ut fra undersøkelsen vil være mer pålitelige dersom mange deltar.

Vi ønsker at resultatene fra undersøkelsen skal komme deg og andre bosatt i nord til gode. Du velger likevel selv om du vil delta i undersøkelsen.

Alle opplysninger fra undersøkelsen behandles konfidensielt og etter Datatilsynets regler. Har du spørsmål om undersøkelsen, kan du kontakte Magritt Brustad tlf. 77 64 48 43 eller Ragnhild Vassvik Kalstad tlf. 78 46 89 01.

Med vennlig hilsen

Magritt Brustad
Professor Dr. Scient

Appendix 4: Procedure for Oral examination

Klinisk og Røntgenologisk Undersøkelse for pilot prosjektet "Tannhelse I Nord".

1. Deltakerne ankommer klinikken; nummer av spørreskjema er registrert på undersøkelsesskjema. Dersom røntgen system er digitalt må deltakere registreres også i datasystem (f.eks. Opus) og da kan registrering av DMF også gjøres digitalt i tillegg til manuelt.

2. **Klinisk undersøkelse**;

A. Registrering av karies prevalens ved DMFT indeks

D; "Decayed" (kariøse tenner); kun karies grad 3-5 registreres.

M; Missing; manglende tenner pga karies (manglende pga andre årsaker registreres men er ikke med i beregning av DMFT).

F; Filled (fylte); Disse demonstrerer tidligere karies aktivitet som har fått behandling.

T; Tooth (Tann); Kariesprevalensen beregnes ut fra antall tenner som er affisert.

Funnene registreres manuelt på et papir skjema (Oral Helse Evalueringsskjema).

I skjemaet er det ingen forskjell mellom sekundær og primær karies, dvs.; dersom en tann har en fylling fra før og har karies på nytt registreres det som "Fylt og Kariøs"= FK = 2, uavhengig om det er samme overflate det gjelder.

DMFT tall for hver deltaker er beregnet ut fra de registrerte funnene (ikke mens undersøkelse foregår); det er summen av D, F og M (pga karies)

B. Periodontal Helse;

Registreres ved bruk av CPI (Community Periodontal Index) og feste tap.

Munnen er delt opp i 6 områder (sekstant); (18-14, 13-23, 24-28, 38-34, 33-43 og 44-48).

Hvert område har en eller 2 indeks tenner som er; 16/17, 11, 26/27, 36/37, 31,46/47.

De er undersøkt ved hjelp av en CPI sonde (WHO probe LM 550B XSi eller LM 550B Si)

langs gingivalt spalte med et trykk som ikke overstiger ca 20grm ved sondering).

Funnene fra undersøkelse er gradert på følgende måte;

0; Frisk gingival.

1; blødning etter sondering

2; Tannstein ("calculus") som kjennes ved sondering.

3; Peiodontal lomme 4-5mm, (svart linje på sonden synlig over gingival rand)

4; Periodontale lomme over 5mm (den svarte linje på sonden er ikke lenger synlig over gingival randen)

Det høyest tall for hver sekstant er registrert, og fra disse et gjennomsnitt som representere hele munnen er beregnet.

C. Registrering av protese bruk; partielle eller hel.

D. Malokklusjon; Registreres som mildt eller moderat/alvorlig.

3. Røntgenologisk undersøkelse;

Et venstre og et høyre "bitewing" røntgen bilde tas med en stor film som inkluderer området fra den distale overflaten av andre molar (7'er) til den mesiale overflaten av første premolar (4'er).

Funnene fra røntgen skal registreres, uavhengig av den kliniske undersøkelsen, på en egen del av skjema. Dette er fordi man ønsker å se om den røntgenologiske undersøkelsen gir mer informasjon enn den kliniske undersøkelsen alene.

4. Deltakere takkes for deltakelse og informeres om behandlingsbehovet funnet i undersøkelsen (dersom de ønsker det).

Appendix 5: Oral Health assessment form

Oral Helse Evalueringsskjema (SAV1a)*

Dato; **Undersøkt av;**
Pasient nummer;

TANNSETT STATUS (KLINISKE UNDERSØKELSE)

18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

STATUS
0 = Frisk (F)
1 = Karioøst (K)
2 = Fylt og K (FK)
3 = Fylt, ingen karies(FF)
4 = Mangler pga K (MK)
5 = Mangler, andre årsaker(M)
6 = Fissurforsegling (sealant = S)
7 = Fast protetikk (FP) bropilar,krone
8 = ikke inkludert (I)
9 = Frakturert, pga Trauma (T)

PERIODONTALE STATUS

CPI

17/16	41	26/27
47/46	31	36/37

0 = Frisk
1 = Blødning
2 = Tannstein
3 = lomme 4-5 mm (svart linje på sonden synlig)
4 = lomme 6mm eller mer (svart linje på sonden usynlig)
x = sekstant ekskludert

FESTE TAP

17/16	41	26/27
47/46	31	36/37

0 = 0-3mm
1 = 4-5mm (CEJ innen svart linje)
2 = 6-8mm (CEJ mellom svart linje og 8,5mm linje
3 = 9-11mm (CEJ mellom 8,5mm og 11mm linje)
4 = 12mm og mer (CEJ over 11.5mm linje)
X = Sekstant ekskludert
9 = ikke registrert

MALOKKLUSJON

0 = ingen
1 = liten
2 = moderate eller alvorlig

BRUKER PROTESE

0 = Ingen
1 = Partiell protese
2 = Hel protese

Overkjeve	Underkjeve

TANNSETT STATUS (RØNTGENOLOGISKE UNDERSØKELSE)

18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

STATUS
0 = Frisk (F)
1 = Karioøst (K)
2 = Fylt og K (FK)
3 = Fylt, ingen karies(FF)
4 = Mangler pga K (MK)
5 = Mangler, andre årsaker(M)
6 = Fissurforsegling (sealant = S)
7 = Fast protetikk (FP)
8 = ikke inkludert (I)
9 = Frakturert, pga Trauma (T)
10 = Impantant (I)

Appendix 6: Questionnaire

Tannhelse i nord

Takk for at du vil delta i denne undersøkelsen. På denne måten vil du bidra til økt kunnskap om tannhelse og bruk av tannhelsetjenester i befolkningen i områder med norsk og samisk befolkning i Norge. Vi ber deg svare på spørsmålene nedenfor så nøye som mulig.

Besvar hvert spørsmål så godt som mulig uten å fundere så mye. Hvis du ikke finner et alternativ som passer helt med det du helst ville ha svart, velg da det som ligger nærmest det du ville ha svart. Både positive og negative svar er like viktige.

Skjemaet skal leses av en maskin. Det er derfor viktig at du legger vekt på følgende ved utfyllingen:

- Bruk blå eller sort kulepenn
- I de små avkrysningsboksene setter du ett kryss slik ☒
- Hvis du mener at du har satt kryss i feil boks, kan du rette det ved å fylle boksen helt, slik ■
- Tallboksene har to eller flere ruter. Når du skriver et ett-sifret tall bruker du den høyre ruten. Eksempel: 2 skrives slik 2
- Vennligst skriv tydelig med store bokstaver når du skriver fritt

Dato for utfylling av skjemaet — Dag | Måned | År

1. Fødselsår

2. Fødested (land)

☐ Norge ☐ Sverige ☐ Finnland
☐ Annet (beskriv): .....

3. Hvor bodde du som 10 åring

☐ Finnmark ☐ Troms
☐ Nordland ☐ Trøndelag
☐ Annet (beskriv): .....

4. Hvis du er født i utlandet: Hvor lenge har du bodd i Norge ?

år

5. Hvor mange års skolegang har du gjennomført *(Ta med alle år du har gått på skole eller studert)*

år

6. Hvilket hjemmespråk har/hadde du,dine foreldre og besteforeldre? *(sett ett eller flere kryss)*

	Norsk	Samisk	Kvensk	Annet, beskriv:
Morfar	☐	☐	☐	☐ .....
Mormor	☐	☐	☐	☐ .....
Farfar	☐	☐	☐	☐ .....
Farmor	☐	☐	☐	☐ .....
Far	☐	☐	☐	☐ .....
Mor	☐	☐	☐	☐ .....
Jeg selv	☐	☐	☐	☐ .....

7. Hva er din, din fars og din mors etniske bakgrunn? *(sett ett eller flere kryss)*

	Norsk	Samisk	Kvensk	Annet, beskriv:
Min	☐	☐	☐	☐ .....
Min fars	☐	☐	☐	☐ .....
Min mors	☐	☐	☐	☐ .....

8. Hva regner du deg selv som? *(sett ett eller flere kryss)*

Norsk	Samisk	Kvensk	Annet, beskriv:
☐	☐	☐	☐ .....

9. Hvilken type arbeid/livsopphold har du? *(sett ett eller flere kryss)*

☐ Fastlønnet, heltid ☐ Fastlønnet, deltid
☐ Sesongarbeid ☐ Selvstendig næringsdrivende
☐ Arbeidsledig ☐ Hjemmeværende
☐ Alderstrygg ☐ Uføretrygd
☐ Annet (beskriv): .....

10. Hvor stor er familiens/husstandens bruttoinntekt per år

☐ Under kr. 150 000 ☐ Kr 150 000–300 000
☐ Kr 301 000–450 000 ☐ Kr 451 000–600 000
☐ Kr 601 000–750 000 ☐ Kr 751 000–900 000
☐ Over kr 900 000

11. Sist du gikk til tannlege, gikk du til en tannlege/tannpleier i privat praksis eller til en tannlege/tannpleier ansatt i Den offentlige tannhelsetjenesten? *(sett kryss)*

- ☐ Tannlege i privat praksis
- ☐ Tannlegespesialist i privat praksis
- ☐ Tannpleier i privat praksis
- ☐ Tannlege ansatt på offentlig tannklinikk
- ☐ Tannlegespesialist ansatt på offentlig tannklinikk
- ☐ Tannpleier ansatt på offentlig tannklinikk

12. Bruker du selv noen av følgende hjelpemidler – og i tilfelle hvor ofte?

	Regelmessig/ daglig	Uregelmessig/noen ganger i uka	Uregelmessig/noen ganger i mnd.	Sjeldnere/aldri
Tannbørste	☐	☐	☐	☐
Fluortannkrem	☐	☐	☐	☐
Tanntråd	☐	☐	☐	☐
Tannstikkere	☐	☐	☐	☐
Fluortabletter	☐	☐	☐	☐
Skyllevæske	☐	☐	☐	☐
Protesebørste	☐	☐	☐	☐

13. Når var du sist hos tannlege (eller tannpleier)? (sett kryss)

- ☐ Mindre enn ett år siden
- ☐ 1–2 år siden
- ☐ 3–5 år siden
- ☐ Mer enn 5 år siden

14. Hvis det er mer enn 2 år siden, hva er da grunnen ? (sett kryss)

- ☐ Jeg har ikke blitt innkalt
- ☐ Det er lang ventetid hos tannlegen
- ☐ Jeg har ikke hatt tid
- ☐ Økonomiske årsaker
- ☐ Jeg har ikke hatt behov for tannbehandling
- ☐ Jeg er redd eller engstelig for å gå til tannlege
- ☐ Andre årsaker:

.....

15. Har du vært hos tannlege (eller tannpleier) regelmessig (minst 1 gang i året) de siste 5 år?

☐ Ja ☐ Nei

16. Hvordan bruker du tannhelsetjenesten ?

- ☐ Blir regelmessig innkalt av tannlege eller tannpleier
- ☐ Melder meg regelmessig for undersøkelse
- ☐ Melder meg når jeg har vondt eller har mistet en fylling
- ☐ Bruker ikke å gå til tannlege så ofte

17. Dersom du blir innkalt av tannlege eller tannpleier regelmessig til undersøkelse, hvor hyppig skjer dette?

- ☐ Det kan variere fra gang til gang
- ☐ Hver 6. måned eller hyppigere
- ☐ Hver 12. måned
- ☐ Hvert annet år eller mer

18. Hvor lenge måtte du vente for å få en avtale sist du bestilt time hos tannlegen

- ☐ Mindre enn 1 uke
- ☐ Mellom 1 uke og 1 måned
- ☐ Mellom 1 måned og 6 måned
- ☐ Mellom 6 måned og 1 år
- ☐ Over 1 år

19. Har du i løpet av de siste 2 årene helt konkret utsatt å gå til tannlege fordi du ikke hadde penger til å betale regningen ?

☐ Ja ☐ Nei

20. Dersom du har vært hos tannlegen i løpet av de siste 2 årene, utførte du den behandlingen tannlegen anbefalte, eller førte kostnadene til at du enten avsto fra eller utførte rimeligere behandling enn du fikk anbefalt?

- ☐ Utførte den behandlingen tannlegen anbefalte
- ☐ Utførte rimeligere behandling enn anbefalt
- ☐ Avsto fra behandlingen på grunn av høye kostnader

21. Har du i løpet av de to siste årene fått en eller flere av disse diagnosene hos tannlege ?

	Ja	Nei	Vet ikke
Alvorlig tannkjøttsbetennelse	☐	☐	☐
Mild tannkjøttsbetennelse	☐	☐	☐
Munntørrhet	☐	☐	☐
Hull (karies) i en eller flere tenner	☐	☐	☐
Andre diagnoser	☐	☐	☐

22. Hvor mye har du betalt i alt for din egen tannbehandling (tannlege, spesialist og tannpleier) de siste 12 månedene?

- ☐ Ingenting (har ikke vært hos tannlegen)
- ☐ Ingenting (har fått kostnadene dekket)
- ☐ Mindre enn 1000 kroner
- ☐ 1000–5000 kroner
- ☐ 5001–10 000 kroner
- ☐ 10 001–20 000 kroner
- ☐ Over 20 000 kroner

23. Hvordan vurderer du din tannhelse og din generelle helsetilstand på en skala fra 1–4?

	Dårlig	Ikke helt god	God	Svært god
min tannhelse	☐	☐	☐	☐
min generelle helsetilstand	☐	☐	☐	☐

24. Nedenfor stilles noen spørsmål om du i løpet av det siste året har hatt problemer eller ubehag på grunn av dine tenner eller proteser (gebiss) eller på grunn av andre forhold i munnen.

	Aldri	Sjelden	Av og til	Ganske ofte	Ofte	Vet ikke
Har du i løpet av det siste året hatt vanskeligheter med å uttale ord eller lage spesielle lyder på grunn av dine tenner, forhold i munnen eller proteser?	☐	☐	☐	☐	☐	☐
Har din smakssans i løpet av det siste året blitt endret/dårligere på grunn av dine tenner, forhold i munnen eller proteser?	☐	☐	☐	☐	☐	☐
Har du i løpet av det siste året hatt smerte eller vondt i tennene, munnen eller fra proteser?	☐	☐	☐	☐	☐	☐
Har du i løpet av det siste året opplevd at mat har har gitt deg ubehag på grunn av dine tenner, forhold i munnen eller proteser?	☐	☐	☐	☐	☐	☐
Har du i løpet av det siste året følt deg usikker på grunn av dine tenner, forhold i munnen eller proteser?	☐	☐	☐	☐	☐	☐

25. Hvor fornøyd/misfornøyd er du med følgende aspekter ved ditt siste tannlegebesøk:

	Svært misfornøyd					Svært fornøyd	Vet ikke
Geografisk avstand til tannlegekontoret	☐	☐	☐	☐	☐	☐	☐
Ventetiden for å få time	☐	☐	☐	☐	☐	☐	☐
Tannlegens tilgjengelighet på telefon	☐	☐	☐	☐	☐	☐	☐
Muligheten for å få akutt hjelp	☐	☐	☐	☐	☐	☐	☐
Personellets serviceinnstilling	☐	☐	☐	☐	☐	☐	☐
Tannlegens faglige dyktighet	☐	☐	☐	☐	☐	☐	☐
Tannlegens evne til å snakke et lettforståelig språk	☐	☐	☐	☐	☐	☐	☐
Tannlegens evne til å lytte til deg	☐	☐	☐	☐	☐	☐	☐
Tannlegens evne til å ta deg og dine plager på alvor	☐	☐	☐	☐	☐	☐	☐
Tannlegens evne til å gi smertefri behandling	☐	☐	☐	☐	☐	☐	☐
I hvilken grad du har en fast tannlege å forholde deg til	☐	☐	☐	☐	☐	☐	☐
Informasjon om behandlingen og hva som feiler/feilte deg	☐	☐	☐	☐	☐	☐	☐
Informasjon om hva behandlingen vil koste	☐	☐	☐	☐	☐	☐	☐
Tannlegens råd og behandling	☐	☐	☐	☐	☐	☐	☐
Behandlingsresultatet	☐	☐	☐	☐	☐	☐	☐
Den fysiske tilgjengelig-heten til tannlegekontoret	☐	☐	☐	☐	☐	☐	☐
Den samlede pris	☐	☐	☐	☐	☐	☐	☐

26. Hvor lang tid bruker du på et tannlegebesøk inkludert reisetid og ventetid ?

Ca ☐☐ timer totalt, da reisetiden alene var

☐☐ timer

27. Hvor lang tid brukte du på et tannlegebesøk inkludert reisetid og ventid i 10 års alderen?

Ca ☐☐ timer totalt, da reisetiden alene var

☐☐ timer

28. Hva er det aller viktigste med tennene for deg personlig. Nevn gjerne flere ting.

	Ja	Nei
At tennene er pene når jeg snakker og smiler	☐	☐
At tennene er smertefrie	☐	☐
At jeg kan tygge uten problemer	☐	☐
At jeg kan smile uten å skjemmes	☐	☐
At min pust er god	☐	☐
At jeg har mine tenner resten av livet	☐	☐

Andre aspekter: .....

29. Røyker du daglig?

☐ Ja ☐ Nei

30. Hvor ofte pusset du tennene dine som 10-åring?

☐ En gang om dagen eller mer
☐ Av og til
☐ Sjelden eller aldri

31. Hvor ofte kontrollerte foreldrene eller dine foresatte at du hadde pusset tennene dine, da du var i 10-årsalderen?

☐ Ofte (omtrent daglig)
☐ Av og til
☐ Aldri

32. Hadde dere noen faste regler for spising av sjokolade og andre søtsaker hjemme hos dere da du var omtrent 10 år?

☐ Ja ☐ Nei

33. Om du har barn under 6år boende hos deg; hvor ofte hjelper du til med tannpuss eller kontrollere at barna har pusset tennene sine?

☐ Ofte (omtrent daglig)
☐ Av og til
☐ Aldri
☐ Har ikke barn i alderen under 6 år boende hos meg

34. Om du har barn som er mellom 6–12 år boende hos deg; hvor ofte hjelper du til med tannpuss eller kontrollere at barna har pusset tennene sine?

☐ Ofte (omtrent daglig)
☐ Av og til
☐ Aldri
☐ Har ikke barn i alderen 6–12 år boende hos meg

35. Dersom du har barn i aldergruppen 0–12 år boende hjemme hos deg, har dere da praktisert faste regler for spising av sjokolade og andre søtsaker for barna?

☐ Ja ☐ Nei ☐ Har ikke barn boende hjemme hos meg i alderen 0–12 år

36. Er du fornøyd med tennene dine eller protesene? Angi svaret på en skala der 1 er svært misfornøyd og 5 er svært fornøyd

	1	2	3	4	5	
Svært misfornøyd	☐	☐	☐	☐	☐	Svært fornøyd

37. Er du fornøyd med tannstillingen din i fronten?

☐ Veldig misfornøyd
☐ Misfornøyd
☐ Ganske misfornøyd
☐ Hverken fornøyd eller misfornøyd
☐ Ganske fornøyd
☐ Fornøyd
☐ Veldig fornøyd

38. Ønsker du/ har du ønsket å å få rettet opp tennene dine?

☐ Ja, absolutt
☐ Ja
☐ Ja, kanskje
☐ Hverken ja eller nei
☐ Tror ikke det
☐ Nei absolutt ikke

39. Har du noen gang vært hos reguleringstannlege?

☐ Ja ☐ Nei ☐ Vet ikke

40. Dersom du har vært hos reguleringstannlege, men det ikke ble satt i gang behandling, hva var årsaken til at det IKKE ble satt i gang behandling?

☐ Jeg syntes det ikke det var nødvendig
☐ Reguleringstannlegen syntes ikke det var nødvendig
☐ Det var for dyrt
☐ Jeg syntes at behandlingen var altfor krevende
☐ Hadde hørt at det var smertefullt med streng
☐ Jeg syntes det var stygt med streng
☐ Vet ikke/annen årsak:

.....

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