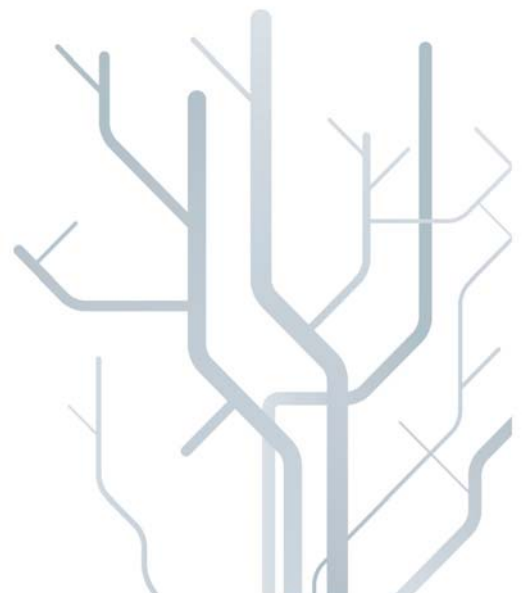




Referral and treatment practices in Orthodontics.
*A questionnaire study to dentists and dental hygienists
in Troms County*
2011

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ABSTRACT

Objective: The purpose of this study was to find out how screening and referring arrangements of patients with malocclusions was working between different dental professional groups in the public dental health services in Troms County. We also wanted to find out to what extent general dentists in Troms County were involved in interceptive orthodontic treatment.

Material and Methods: The study subjects were dental hygienists, dentists and orthodontists in Troms County. All dentists and dental hygienists working in the dental public health care in Troms County were invited to participate in the survey. After several reminders 18 dental hygienists, 39 general dentists and 6 orthodontists responded (total N=63). The data was collected through a questionnaire, which included questions on personal data, orthodontic screening, treatment and referring, and a clinical photo of a unilateral posterior crossbite.

Results: The response rate was 64%. The most common age of referring children to orthodontic treatment was at 12-13 years of age. Late referral age (14 years or older) was significantly more often favored by dentists, as compared to the dental hygienists. 71% of dental hygienists preferred referring patients straight to a specialist, and the rest made the decision between dentist and specialist. There was no significant difference ($P=0,741$) in the approximated number of referrals made by the dentists and dental hygienists. 62% of the dentists and 44% of the hygienists considered that treatment of unilateral posterior crossbite belonged to both dentists and specialists. Almost one third of the dentists reported that they did no orthodontic treatment at all. The most common malocclusion treated by the dentists was unilateral posterior crossbite. The procedures related to orthodontics done by dentists in their daily practice, were screening for malocclusion, preventive palpation of the position of

permanent canines and primary tooth extractions due to orthodontic reasons. 83% of the orthodontists consulted dentists regarding interceptive orthodontic treatments and/or planning treatments of patients.

Conclusions: The majority of dentists in Troms County were involved in orthodontic treatment, but only to a small extent. Dental hygienists and dentists referred approximately the same number of patients to orthodontic treatment, but general dentists may prioritize later age of referral. Availability of continuing education in orthodontics might enhance the treatment skills and interest in orthodontics among the general practitioners.

Introduction

The initiative to write about orthodontic treatment came after our seventh semester, during which the students worked in different public dental health care clinics. There we saw a vast difference in handling malocclusions. In some clinics the students got to treat a lot of patients with certain malocclusions with removable appliances, while in some other vast majority of patients with the need for orthodontic treatment, were transferred straight to consultation and specialist treatment. We got interested in the organization of orthodontic care and wanted to find more information how it works in Norway and to study the differences and reasons behind them in Troms County.

Organization of Orthodontic treatment in Norway as compared to other Nordic countries

Norway has a higher number of specialist's 1:25000, per population as compared to other Nordic countries, 1:32692 in Finland, and 1: 31034 in Sweden [1]. In 2007, there were 180 specialists in Norway, 140 specialists in Finland and 260 specialists in Sweden. The number of specialists in Norway has been relatively constant over the last 25-30 years [2].

Orthodontic treatment is differently organized and funded in the Nordic countries, and the distribution of tasks between orthodontist, general practitioner and other dental health personnel also varies [3]. In Norway, almost all treatments are done by specialists, while about half of the treatments in Finland and 20 % of the treatments in Sweden are carried out by general dentists [1] (Table 1).

Denmark and Finland have national guidelines for the selection of patients for treatment, while Norway and Sweden have none [1] (Table 1). The Nordic countries except Norway; provide orthodontic treatment as part of the public dental health care, where there are no costs for those who have received treatment [1]. The specialists in Norway work mostly in private practice, and orthodontic treatment of children is the only dental care funded through a

combination of user fees and insurance reimbursement in Norway [1]

The Norwegian system of reimbursement of orthodontic treatment costs

Reimbursement is paid by the social security according to the orthodontic specialist's evaluation on the severity of the patient's malocclusion as follows: [4]

Group A: Treatment mandatory -100% reimbursement.

Group B: Great need for treatment - 75 % reimbursement.

Group C: Obvious need for treatment - 40% reimbursement.

Group D: Little need for treatment – No reimbursement

Regarding malocclusions in groups B and C treatment must be started latest the year the patient is 18 years of age.

The funding system has not resulted in major differences between the Nordic countries regarding orthodontic treatment rate. It seems that treatment rates vary more between different areas within countries than between countries, and must be attributed to other causes than funding [1][5][6]. About 1 / 3 of the children and adolescents are treated in Nordic countries in spite of diverse organizations, which seem to be a generally approved treatment frequency correspond the demand. Because manpower levels vary in different countries, there are also differences in the proportion of patients being treated by a specialist, and in need of involving general dentists in orthodontic treatment.

The fact that most specialist orthodontists in Norway work on the private sector, may explain why the general practitioners only insignificantly perform clinical orthodontic treatment, as compared to other Nordic and also many European countries. It has been easier and more natural for specialists employed in the public dental services to co-operate with and delegate orthodontic procedures to the general dentists in the same organization, than it has been for private Norwegian specialists to share orthodontic responsibilities with the public sector [1].

In Sweden, delegation of work has been facilitated by systematic training of orthodontic assistants [1]. In Finland, the share of health centers applying delegation of orthodontic tasks to auxiliaries had increased from 28% to 61% from 1991 to 2001 [7]. This development seemed to be largely accepted among Finnish orthodontists.

Geographic distribution of orthodontists in Norway is mostly centralized around the cities Oslo and Bergen (Fig.1). The low number of orthodontists for the Troms County region, contributed to long waiting lists [8]. In 2006 there were 1237 patients on waiting list for orthodontic treatment in Troms County [9].

Screening of children and adolescents for orthodontic treatment

General dentists and /or dental hygienists are the “gatekeepers”, who see the child population on regular basis and can assess if the individual's bite development, bite morphology or bite function should be examined further by an orthodontist.

The time and strategy of selecting patients to orthodontic treatment varies. General practitioners and dental hygienists are responsible for those children in need of orthodontic treatment, are detected and referred [2]. In Finland and Sweden, interceptive orthodontic treatment procedures, such as palpation of canines to prevent canine impaction, grinding or extractions of primary teeth for orthodontic purposes, and instructions how to break sucking habits are commonly carried out by general dentists in the primary or early mixed dentition [5]. The main aim of interceptive treatment is to avoid or reduce orthodontic treatment in a later stage, when treatment is usually more extensive and costly. In Norway, in general, orthodontic treatments are started relative late, approx at the age of 11-15 [2], as compared to Finland, where the mean age of starting orthodontic treatment was reported to be 9 years [5].

Screening of children and adolescents for orthodontic treatment in Troms County

In Norway there are no national guidelines concerning timing or strategy of screening for malocclusions. For reimbursement purposes, however, the treatments must be started before the patient is 18 years of age [10]. In principle, the county is responsible for dental services, according to § 1-1 in dental health services-Act. The dental service law § 1-1: "The County shall ensure that dental health services, including specialist services, are reasonably available to all who live or temporarily residing in the county". This involves that a member of the "folketrygd" should be offered orthodontic treatment when in need.

In Troms County it is up to each clinic to decide interval of screening, and who is screening, which may result in inconsistency between practices of different clinics, and also between different dentist and dental hygienists [11].

Orthodontics in the dental curriculum

Teaching of orthodontics in dental undergraduate studies in the Nordic countries is concentrated in the understanding of growth and development, diagnosis of malocclusion and bite monitoring, and simple interceptive treatment, and to a lesser extent on comprehensive orthodontic treatment [12][13][14]. The same trend is seen in the rest of Europe, and it is in accordance with the recommendations of the European organization of education institutions, ADEE [15]. Teaching of orthodontics in different universities in Norway varies in regard to requirements of the clinical duty and the emphasis on the role of general dentist in carrying out interceptive treatment. Teaching in orthodontics for dental hygienists in Norway is concentrated around the same topics as dental students, but no clinical treatment in orthodontics is included [16][17][18]. Postgraduate courses for general practitioners in orthodontics are not available in Norway, unlike in other Scandinavian countries [19][20][21].

Aims of the study

Our aim was to find out how screening and referral of patients with malocclusions works between different dental professional groups, in the public dental health services in Troms County. We also wanted to find out to what extent general dentists in Troms County were involved in interceptive orthodontic treatment.

Subjects and Methods

Subjects

The study population was dentists, dental hygienists and orthodontists in Troms County. All dentists and dental hygienists who were entered in the employee lists of the dental public health care in Troms County were included, 57 dentists and 33 dental hygienists altogether. Since most children from the age 0-18 years are treated in the public dental health care clinics private dentists were not involved. All 9 orthodontists, working in Troms County, were included. The distribution of the sample between professional groups and places of working is shown in Table 2.

Methods

This was a questionnaire study. The questionnaire was sent out using QuestBack, which is a web-based questionnaire system. All subjects (n=99) received the same letter of introduction by email including the aims and general information of the study. They were kindly asked to participate in the study by completing the questionnaire that was attached as a link. The answers were anonymous. The QuestBack system was programmed to send out reminders every 7 days to the email addresses that had not answered. The survey was sent out in September 2010, with 4 reminders.

Dental hygienists, dentists and orthodontists got different questionnaires, where part of the questions were the same so that they could be compared with each other (Appendix 1).

The questions which were equal for all three groups regarded age, gender, working percent, years in current position, place of education, the area of working in Troms County, and the number of years in profession. A clinical photo showing unilateral posterior crossbite of a 7-year-old girl was included in all questionnaires with following questions: *Who do you feel should treat this? And when should treatment of this malocclusion start?* (Fig 2)

Questions to hygienists included how many patients they referred per year, to whom, and at what age were the children usually referred to orthodontic treatment?

Questions only to dentists were about how much they do orthodontic treatment, who refers patients to them, how much, and which kind of orthodontic treatment was included in their every day practice. We also asked them if they would be interested in carrying out more orthodontic treatment, provided there were continuing education courses or guidance in orthodontics.

Questions for only orthodontists were how many referrals they received per year from dentist, and how many from dental hygienists. They were also asked if they cooperated with dentists regarding orthodontic treatment of patients.

Data analysis

The data from the questionnaires was installed and analyzed in the statistical program SPSS for Windows (version 17.0). Frequencies and percentage distribution of the answers were calculated for dental hygienists, dentists and orthodontists separately, and Pearson's Chi-Square was used to test differences between the three groups. Differences with P-values < 0.05 were considered statistically significant.

Results

The response rate was 64%, 18 of 33 dental hygienists (55%), 39 of 57 dentists (68%), and 6 of 9 orthodontists responded (67%), (Table 2).

Description of the respondents

Half of the dentists (51 %) were educated outside Norway, 21 % in Oslo, 17% in Tromsø, and the rest in Bergen. Most of the orthodontists were educated in Oslo. Two thirds (67%) of the dental hygienists were educated in Tromsø (Table 3). The majority of the respondents were over 30 years of age (Table 3).

The dental hygienists who answered were equally distributed from the different districts, except from TKNN where we got no responses.

Practices of referring children with malocclusions to orthodontic treatment

The most common age of referring children to orthodontic treatment was at 12-13 years of age. In general, the dentists tended to favor somewhat older referral age than the dental hygienists. The latest referral age option (14 years or older) was significantly more often ($p=0.008$) favored by dentists as compared to the hygienists (Fig.3). 71% of dental hygienists preferred referring patients straight to a specialist, and the rest made the decision between dentist and specialist depending on the malocclusion, but none of the hygienists sent referrals first to a dentist as a routine. There was no significant difference ($P=0,741$) in the approximated number of referrals made by the dentists and dental hygienists, both groups reported most commonly on making between 10-50 referrals per year for orthodontic reasons (Fig. 4). Comparison with the answers from dental hygienists and general practitioners with those of orthodontists showed that, in average, orthodontists got approximately 60% of their

patients referred from dental hygienists, 32 % from general practitioners and in 8 % the patients made direct contact to the orthodontist (Fig.5).

Questions regarding treatment and timing of unilateral posterior crossbite of a 7-year old patient in Figure 2

62% of the dentists and 44% of the hygienists considered that treatment of unilateral posterior crossbite belonged to both dentists and specialists (Fig. 6). Nearly half (44%) of dental hygienists considered this primarily as a specialist treatment, as compared to 18% (7/39) of the dentists and 17% (1/6) of the orthodontists, but the difference did not reach statistical significance ($P=0.088$) (Fig.6). Regarding timing of treatment, all three professional groups agreed that treatment should start as soon as possible. However 17% of dental hygienists, 26% of general practitioners and one specialist wanted to wait until permanent dentition before treatment.

Results from questions directed to dentists only

Almost one third of the dentists (31%) reported that they did no orthodontic treatment. The dentists reported most commonly (31%) to have had between 5-10 orthodontic patients during the last year. Almost half of them (46%) had less than five or no orthodontic patients at all during the last year.

The most common malocclusion treated by 72% of the dentists was posterior unilateral crossbite, followed by anterior crossbite (69%) and anterior open bite (55 %).

The most common procedures related to orthodontics done by dentists in their daily practice, were screening for malocclusion, preventive palpation of the position of permanent canines and primary tooth extractions due to orthodontic reasons (Table 4).

44% of the dentists reported to be interested in treating more patients with orthodontic problems. If continuing education or supervision in orthodontics was available, 74% of the dentists reported to be interested in treating more patients with orthodontic problems.

Questions to specialists

83% of the orthodontists consulted general practitioners in interceptive orthodontic treatments or planning treatments of patients. Half of the orthodontists (50%) reported to have consulted general dentists on more than 30 patients during the last year.

Discussion

Our survey can be considered as a pilot study restricted to Troms County only. Although the original samples consisted of all dentists and dental hygienists employed by the county, the groups were mainly too small for finding statistically significant differences between groups. No power calculations of how many responses needed were done. From previous literature we anticipated a response rate between 60-70%, and our 64% is in line with that [22][23]. One orthodontist did not have an e-mail address that was accepted by the secure intranet of Troms County, and was therefore excluded. One dentist excluded himself or herself from the survey in lack of clinical work. The QuestBack system secured that there was only one answer accepted per subject.

Practices of screening and referring patients with malocclusions

In Norway there are no national guidelines on at what age children should be screened for malocclusions, and who should have the main responsibility for screening patients to treatment, dental hygienists or dentists. Therefore it is up to each clinic in the public dental health system, to decide their practices, which may result in inconsistency between different

clinics, and also between different dentists and dental hygienists. This also reflect in our study, where dentists had a tendency to refer patients to orthodontic treatment at a later age as compared to hygienists, which difference was significant concerning children at age 14 or older.

According to “Troms fylkeskommune Fylkestingsmelding 1:2007” almost all screening of patients, including patients with malocclusions, from 0-18 years is recommended to be performed by dental hygienists [8]. This is because the wish to use the competence of the dental hygienists according to the LEON principal which means Lowest Effective “Omsorg” (caretaker) “Nivå” (level) [9]. Our results suggest that this recommendation may not be implemented in practice, since no difference between dental hygienists and dentists was found in the numbers of patients, referred for orthodontic reasons. Indicating that the responsibility of screening of malocclusions were not concentrated to one professional group.

Our results showed that the preferred age of referring to orthodontic consultation/treatment was between 9-13 years in Troms County. The disadvantage of this is that the window for early interceptive treatment is more or less closed by that age [5].

Nearly half of the dental hygienists seemed to favor specialist treatment in the treatment of lateral crossbite, as compared to approximately every 5th of the general dentists, although the difference did not reach statistical significance. Also, five of six orthodontists considered unilateral crossbite to be primarily treated by a general practitioner. This may reflect somewhat different attitudes between dental hygienists and dentists/specialists to simple orthodontic treatments in children. Therefore co-operation between specialists and general dentists could be encouraged to improve the uniformity of the screening and referral practices, in the public dental health service in Troms County.

Orthodontic treatment done by dentists

It has been claimed that in Norway general practitioners are little involved in orthodontics [1]. In our study from Troms County, 69% of the dentists reported that they do some orthodontic treatment, but the number of orthodontic patients they had treated was generally low, between 5-10 patients per year. According to the chief dental officer in Troms County, the main supplier of removable appliances in the public dental health care is Harstad Hovedtannklinikk (table 5) [8]. Their statistics showed that approximately 9 appliances per dentist were delivered yearly, which is in accordance with the answers reported by the dentists in this study. The reason for the low number of patients can be discussed. The fact that dental hygienists did most of screenings, and that referrals to specialist skip general practitioners, leaves general practitioners with less opportunities to treat patients, who could be managed with simple orthodontic appliances.

There was however discrepancy between the responses from the dentists. Regarding question “Do you do any orthodontic treatment”? 31 % responded no, while to the question “Where did you get your orthodontic patients referred from”; only 16% responded that they did not have orthodontic patients. The discrepancy may be explained by different interpretations of what was considered as orthodontic treatment. Hence, possibly up to 84% of the dentists in Troms County may do some orthodontic procedures.

The common malocclusions treated by general dentists, were posterior unilateral crossbite, anterior crossbite and anterior open bite, all of which are typically managed with removable appliances, and therefore in the field of general dentist [5]. However, only 20% of the general dentists considered that treatment of unilateral crossbite belonged primarily in their field of responsibility and expertise, and 18% considered that to be a specialist treatment, which reflects rather low preparedness to basic orthodontic procedures. The majority however (62%) wanted to share the responsibility with the specialist

Continuing education in Orthodontics

Three out of four (74%) dentists reported that they wanted to do more orthodontic treatment, provided continuing education courses or orthodontic supervision available. At present, no courses which are directed to general dentists are organized in Norway. Therefore, it is difficult for dentists to become updated in orthodontics, and to receive further education in the field of orthodontics, without being a specialist or a specialist candidate. Half of the dentists in Troms County reported to have graduated outside Norway, and also in Norway there are differences in undergraduate curriculum in orthodontics. Variation in the basic knowledge in orthodontics among dentists can therefore be anticipated. Recently, because of the increasing reimbursement costs of orthodontic treatments, some pressure of involving general practitioners more in orthodontic treatments has been exerted from the health directory, e.g. a suggestion that retention controls of orthodontic patients should be transferred from specialist, to dentists [24]. This may not be the only or the most useful way of involving general dentists in orthodontics, and the specialists would also lose the important follow-up of the work they have done. Any kind of orthodontic responsibilities transferred to general dentists, also trigger even greater need for continuing education courses in orthodontics for dentists to ensure the standard of treatment.

Conclusion

The majority of general practitioners in Troms County were involved in orthodontic treatment, but only to a small extent. Dental hygienists and dentists refer approximately the same number of patients to orthodontic consultation/treatment but general dentists may prioritize later age of referral. Availability of continuing education in orthodontics might enhance the treatment skills and interest in orthodontics among the general practitioners.

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Table 1. *Orthodontic treatment in Denmark, Finland, Norway and Sweden [3]*

	(%)	National guidance	(%)
	Children treated	for selection	Treatment done by dentists
Denmark	29	Yes	20
Finland	25-50	Yes	50
Norway	Ca. 35	No	0
Sweden	30	No	20

Table 2. *Distribution of the total participants according to professional group and the place of working*

	Dental hygienists	Dentists	Spezialists
Nord-Troms	6	8	
Tromsø	10	19	
Midt-Troms	6	9	
Harstad	5	8	2
TKNN			7
Universitetstannklinikken	5	13	
Total	33	57	9
Total responded	18	39	6

Table 3. The distribution of the respondents according to age, gender, years in practice and place of education

		Dental hygienist N=18		General practitioner N=39		Orthodontic specialist N=6	
		N	%	N	%	N	%
Age	<30	2	11,1	8	20,5	0	0
	30-50	8	44,4	15	38,5	3	50
	>50	8	44,4	16	41	3	50
Gender	M	0	0	21	46,2	4	66,7
	F	18	100	18	53,8	2	33,3
Years in practice	5 years or less	4	22,2	12	30,8	3	50
	5-10	4	22,2	5	12,8	0	0
	11-20	4	22,2	6	15,4	1	16,7
	More than 20	6	33,3	16	41	2	33,3
Place of education	Oslo	4	22,2	9	23,1	3	50
	Bergen	2	11,1	7	17,9	1	16,7
	Tromsø	12	66,7	3	7,7	1	16,7
	Others	0	0	20	51,3	1	16,7

Table 4. Interceptive orthodontic measures done by dentists in their daily practice. Number of respondents=39

	OFTEN/USUALLY		SELDOM	
	N=39	(%)	N=39	(%)
Screening for malocclusion	37	95	2	5
Palpation for canines	36	92	3	8
Grinding of primary teeth	15	38	24	62
Extraction of primary teeth due to orthodontic reasons	30	76	9	24
Instructions in stopping sucking habits	12	31	11	29

Table 5. Removable appliances produced by the laboratory in Harstad Hovedtannklinikk (2009), by number and distribution

PUBLIC DENTAL DISTRICT	NUMBERS
Nord-Troms	11
Tromsø	82
Midt-Troms	154
Harstad	97
TKNN	15
TOTAL	359

Figure 1. Geographic distribution of orthodontists in Norway 1999

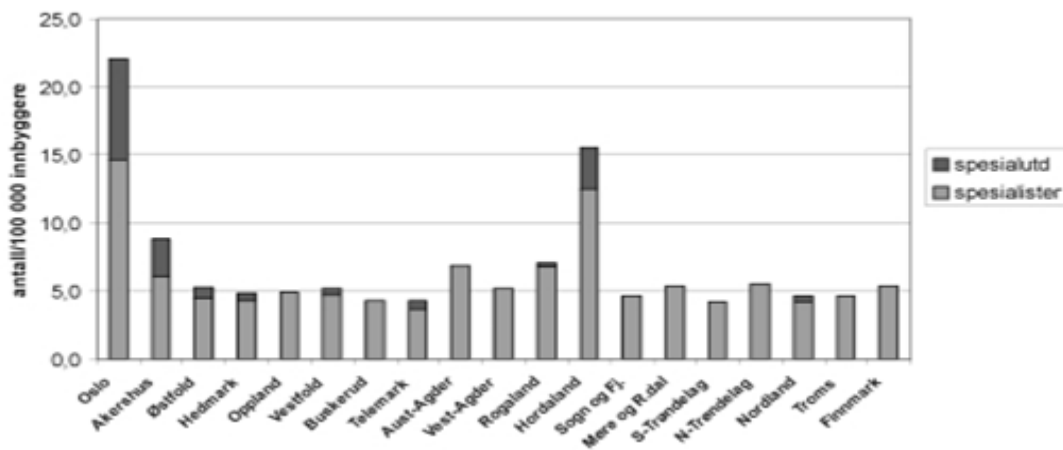


Figure 2. 7-year old girl with unilateral posterior crossbite



In your opinion, does the treatment of this malocclusion

belong for treatment to:

- A) Dentists
- B) Orthodontists
- C) Both

Figure 3. The preferred age of children being referred to orthodontic treatment by:

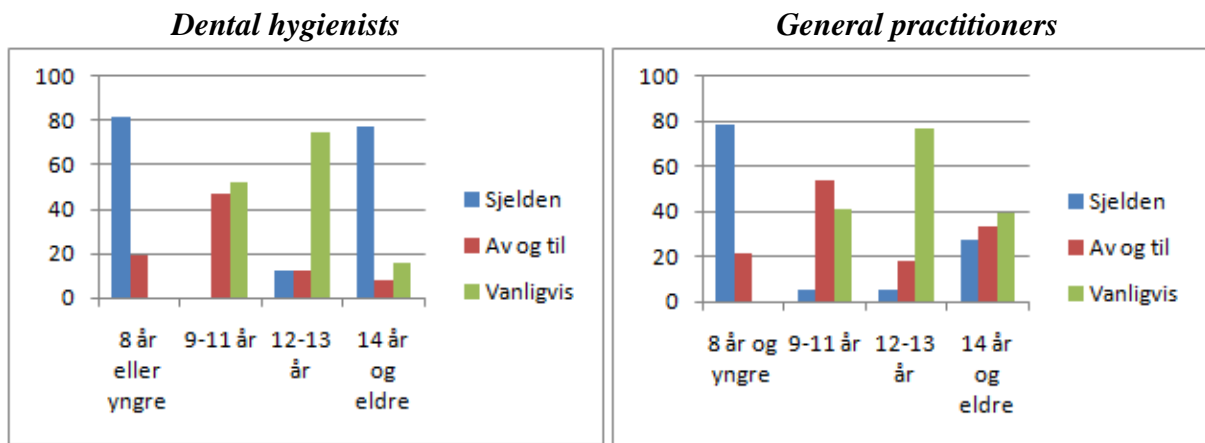


Figure 4. Number of patients referred to specialists for orthodontic treatment by:

A. Dental hygienists

B. Dentists

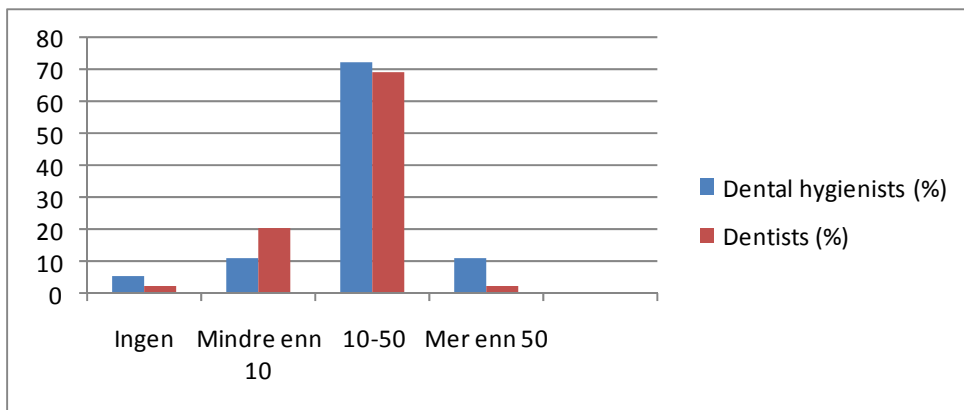


Figure 5. Approximated number of patient consultations the specialists got from different sources during the last year. One orthodontist is missing because of not answering this question.

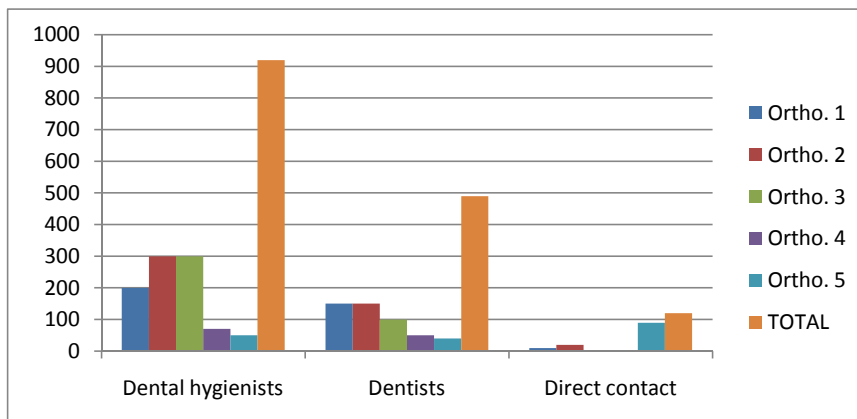
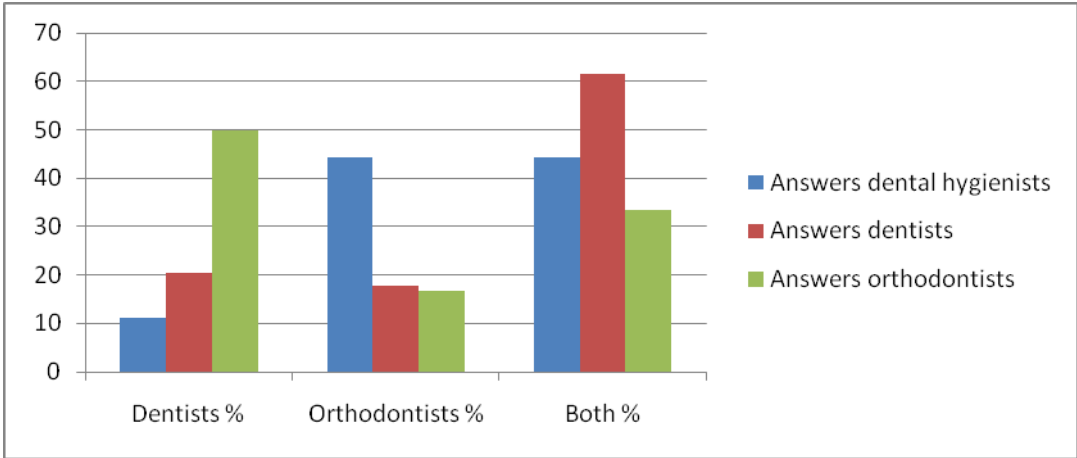


Figure 6. *Opinions reported by dental hygienists and dentists on who should primarily treat unilateral posterior crossbite?*



Appendix 1

Tannpleier(1)

Hide my identity

Read about [hidden identity](#). (Opens in a new window)

1) Din alder:

- Under 30
- 30-50
- over 50

2) Kjønn:

- Kvinne
- Mann

3) Hvor mange år har du vært yrkesaktiv som tannpleier?

- 5 år eller mindre
- 5-10
- 11-20 år
- mer enn 20 år

4) Utdanningssted:

- Oslo
- Bergen
- Tromsø
- Andre

5) Stillingsprosent

- 100 %
- Deltid

6) Tannhelsedistrikt:

- Nord-Troms
- Tromsø
- Midt-Troms
- Harstad
- TKNN
- Universitetstannklinikken



Jente 7 år, med posterior kryssbitt/tvangsføring.
(Hvis bildet ikke vises: klikk F5 på tastaturet for å laste siden på nytt, svar deretter "nei/no" på spørsmålet om du kun vil se det sikre innholdet på siden)

7) Etter din mening, hører behandling av denne malokklusjonen til arbeidsområde for en :

- Tannlege
- Kjeveortoped
- Begge

8) Etter din mening, når er det optimale behandlingstidspunktet? (se bilde til spørsmål 7)

- Så snart som mulig
- Vente til premolarer og caniner erupterer
- Vente til permanent tannsett

Til spørsmål 9 og 10. Dersom du ikke har jobbet det siste året, kan du bruke det siste året du var i jobb.

9) Ca. hvor mange pasienter henviste du til tannlege/kjeveortoped pga malokklusjoner i løpet av det siste året?

- Ingen
- mindre enn 10
- 10-50
- mer enn 50 til 100
- mer enn 100

10) Til hvem sendte du vanligvis henvisninger til pga malokklusjoner i løpet av det siste året?

- Ingen
- Tannlege
- Kjeveortoped
- Begge, avhengig av type malokklusjon

11) Ved hvilken alder bruker du henviser barn for kjeveortopedisk behandling?

	Sjelden	Av og til	Vanligvis
8 eller yngre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12-13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 og eldre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

100 % completed

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Tannlege(1)

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1) Din alder

- under 30
- 30-50
- over 50

2) Kjønn

- Kvinne
- Mann

3) Hvor mange år har du vært yrkesaktiv som tannlege?

- 5 år eller mindre
- 5-10
- 11-20 år
- mer enn 20 år

4) Utdanningssted :

- Oslo
- Bergen
- Tromsø
- Andre

5) Stillingsprosent :

- 100 %
- Deltid

6) Tannhelsedistrikt :

- Nord-Troms
- Tromsø
- Midt-Troms
- Harstad
- TKNN
- Universitetstannklinikken

7) Gjør du noe kjeveortopedisk behandling?

- Ja
- Nei

Tannlege(1)

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1) Din alder

- under 30
- 30-50
- over 50

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6) Tannhelsedistrikt :

- Nord-Troms
- Tromsø
- Midt-Troms
- Harstad
- TKNN
- Universitetstannklinikken

7) Gjør du noe kjeveortopedisk behandling?

- Ja
- Nei

8) Hvor fikk du kjeveortopediske pasienter henvist fra?

- Tannpleier
- Egen vurdering
- Kjeveortoped
- Ingen

Dersom du ikke har jobbet det siste året, kan du bruke det siste året du var i jobb.

9) Ca. hvor mange pasienter henviste du til kjeveortoped i løpet av det siste året?

- Ingen
- mindre enn 10
- 10-50
- mer enn 50 til 100
- mer enn 100

Dersom du ikke har jobbet det siste året, kan du bruke det siste året du var i jobb.

10) Ca. hvor mange pasienter hadde du under kjeveortopedisk behandling i løpet av det siste året?

- ingen
- mindre enn 5
- 5-10
- mer enn 10

11) Har du behandlet pasienter kjeveortopedisk med følgende malokklusjoner?

	Ja	Nei
Unilateralt posterioert kryssbitt	<input type="radio"/>	<input type="radio"/>
Anterioert åpent bitt	<input type="radio"/>	<input type="radio"/>
Anterioert kryssbitt	<input type="radio"/>	<input type="radio"/>
Angle klasse II med stort overbitt (div I)	<input type="radio"/>	<input type="radio"/>
Skeletal angle klasse III	<input type="radio"/>	<input type="radio"/>
Dentoalveolar angle klasse III	<input type="radio"/>	<input type="radio"/>
Retinerte caniner	<input type="radio"/>	<input type="radio"/>



Jente 7 år med posterior kryssbitt/tvangsføring.
 (Hvis bildet ikke vises: klikk F5 på tastaturet for å laste siden på nytt, svar deretter "nei/no" på spørsmålet om du kun vil se det sikre innholdet på siden)

12) Etter din mening, hører behandling av denne malokklusjonen til arbeidsområde for en :

- Tannlege
- Kjeveortoped
- Begge

13) Se bildet ovenfor. Etter din mening, når er det optimale behandlingstidspunktet for denne pasienten? (se bilde til spørsmål 13)

- Så snart som mulig
- Vente til permanente premolarer og caniner erupterer
- Vente til permanent tannsett

14) I din normale praksis, inkluderer du følgende prosedyrer :

	Ofte	Vanligvis	Sjelden
Screening for bittfeil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palpering av caniner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sliping av melketenner pga tvangsføring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ekstraksjon av melketenner pga kjeveortopediske årsaker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruksjon i å stoppe sugevaner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15) Ved hvilken alder bruker du henvisne barna for kjeveortopedisk behandling?

	Sjelden	Av og til	Vanligvis
8 eller yngre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9-11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12-13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 og eldre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16) Skulle du ønske å behandle flere pasienter innenfor kjeveortopedi?

Ja Nei



Ville du være interessert i å behandle flere pasienter dersom du fikk mer kurs eller veiledning?

Ja Nei

Send

100 % completed

Kjeveortoped(1)

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Read about [hidden identity](#). (Opens in a new window)

1) Din alder

- Under 30
 30-50
 Over 50

2) Kjønn

- Kvinne Mann

3) Hvor mange år har du vært yrkesaktiv som kjeveortoped?

- Mindre enn 5
 5-10
 11-20
 Mer enn 20

4) Utdanningssted

- Oslo
 Bergen
 Tromsø
 Andre

5) Stillingsprosent

- 100 %
 Deltid

Til spørsmål 6, 7, 8 og 10. Dersom du ikke har jobbet det siste året, kan du bruke det siste året du var i jobb.

6) Ca. hvor mange pasienter med henvisninger fikk du fra tannpleier i løpet av det siste året?

7) Ca. hvor mange pasienter med henvisninger fikk du fra tannlege i løpet av det siste året?

8) Ca. hvor mange pasienter tok direkte kontakt utenom henvisningene i løpet av det siste året?

9) Samarbeider du med tannlege ved interseptiv ortodontisk behandling og/eller behandlingsplanlegging mht deres pasienter?

- Ja Nei

10) Ca. hvor mange pasienter samarbeidet du med tannlege i løpet av det siste året, mht ortodontisk interseptiv behandling og/eller behandlingsplanlegging?

- Ingen
 mindre enn 10
 10-30
 mer enn 30



Hvis bildet ikke vises: klikk F5 på tastaturet for å laste siden på nytt, svar deretter "nei/no" på spørsmålet om du kun vil se det sikre innholdet på siden

11) Se bildet ovenfor. Etter din mening, hører behandling av denne malokklusjonen til arbeidsområde for en :

- Tannlege Kjeveortoped Begge

12) Etter din mening, når er det optimale behandlingstidspunktet for denne pasienten? (se bilde til spørsmål 11)

- Så snart som mulig
 Vente til premolarer og caniner erupterer
 Vente til permanent tannsett

100 % completed

