Series of Reports on European Orthodontics

A Survey of the Delegation of Orthodontic Tasks and the Training of Chairside Support Staff in 22 European Countries

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Abstract. *This paper reports on a survey which was undertaken to investigate the delegation of orthodontic tasks and the training of chairside support staff in Europe. Two questionnaires were posted to all members of the EURO-QUAL BIOMED II project together with an explanatory letter. The first dealt with the delegation of nine clinical tasks during orthodontic treatment. The second with the types of chairside assistant employed in each country and the training that they are given. Completed questionnaires, which were subsequently validated, were returned by orthodontists from 22 countries. They indicated that there was no delegation of clinical tasks in six of the 22 countries and delegation of all nine tasks in five countries. The most commonly delegated tasks were taking radiographs (in 14 of the 22 countries) and taking impressions (in 13 of the 22 countries). The least commonly delegated tasks were cementing bands (in five of the 22 countries) and trying on bands (in six of the 22 countries). Seven of the 22 countries provided chairside assistants with training in some clinical orthodontic tasks. Eighteen of the 22 countries provided general training for chairside assistants and offered a qualification for chairside assistants. Four of these 18 countries reported that they only employed qualified chairside assistants. Of the four countries which reported that they did not provide a qualification for chairside assistants, two indicated that they employed chairside assistants with no formal training and two that they did not employ chairside assistants. It was concluded that there were wide variations within Europe as far as the training and employment of chairside assistants, with or without formal qualifications, and in the delegation of clinical orthodontic tasks to auxiliaries was concerned.*

Index words: Chairside Support Staff, Europe, Orthodontic Tasks, Training.

Introduction

This survey was one of a series carried out by the Professional Development Group (PDG) of the EUROQUAL BIOMED II project (ter Heege, 1997).

The PDG were aware that the law differs widely from country to country within Europe as far as the delegation of clinical tasks in dentistry is concerned. However, a review of the literature revealed that, although there was good data for a few countries, no data was available for many countries with regard to exactly which tasks could be delegated or of the training provided for orthodontic auxiliaries or chairside support staff.

The survey was limited to non-dentist personnel who perform clinical tasks related to orthodontics (orthodontic auxiliaries), or who assist dentists and orthodontists, at the chairside (chairside support staff). It did not seek to obtain information relating to professions complimentary to dentistry, including dental technicians, hygienists, and therapists, who may perform some of the clinical tasks listed in the questionnaire (such as scaling and polishing, and taking radiographs) in some countries.

Aims

This survey aimed to establish, in the countries surveyed:

1. Which clinical tasks could be delegated to orthodontic auxilliaries?
2. Whether or not those who provide chairside assistance during orthodontic treatment had received general and/or specific 'orthodontic' training?

Methods

The methodology described in the general introduction to this series of papers was used.

Which of the following orthodontic tasks may be delegated to a chairside assistant (nurse) or orthodontic auxilliary in your country?

Taking impressions
Taking radiographs
Removing cement and bonding material
Scaling and polishing teeth
Trying on bands
Cementing bands
Ligating archwires
Removing archwires
Placing bands

FIG. 1 Questionnaire 1: education of auxiliaries.

Do the following types of Chairside Assistant work in your country?

1. Chairside assistants with no formal training
2. Chairside assistants with general training who have passed a formal examination and are qualified
3. Chairside assistants with formal training as Orthodontic Assistants

FIG. 2 Questionnaire 2: education of auxilliaries.

However, in this particular survey two questionnaires (Figures 1 and 2), rather than one were employed.

Results

It was possible to validate the responses from 22 countries.

As far as delegation to a nurse (chairside assistant) or orthodontic auxilliary was concerned, the responses indicated that all nine of the orthodontically related tasks listed in the questionnaire (Figure 1) could be delegated in five of the 22 countries (Austria, Finland, the Netherlands, Norway, and Sweden). In a further five countries (Czech Republic, Denmark, Germany, Portugal, and Spain) at least five of the specified tasks could be delegated. At the other end of the scale, it was reported that none of the specified tasks are delegated in six countries (Belgium, France, Greece, Hungary, Poland, and Slovenia), and only one task in a further four countries (Ireland, Italy, Switzerland, and the U.K.). In three of these four countries (Ireland, Italy, and the U.K.) the task which could be delegated was reported to be the taking of radiographs. This was the most commonly delegated task (reported as taking place in 14 of the 22 countries). The next most commonly delegated task was the taking of impressions (reported as taking place in 13 of the 22 countries). The least frequently delegated tasks were reported to be cementing bands, taking place in five of the 22 countries, and trying in bands, taking place in six of the 22 countries (Figure 3).

As far as training was concerned, seven countries (Bulgaria, Denmark, Finland, Germany, Portugal, Spain, and Sweden) reported that they provided some orthodontic training for chairside assistants.

With the exception of four countries (Albania, Belgium,

Task	A	B	C	D	E	F	G	H	I
Albania	Yes	Yes	Yes	Yes	No	No	No	No	No
Austria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Belguim	No	No	No	No	No	No	No	No	No
Bulgaria	Yes	No	Yes	No	No	No	No	No	No
Czech. Republic	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Denmark	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Finland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
France	No	No	No	No	No	No	No	No	No
Germany	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Greece	No	No	No	No	No	No	No	No	No
Hungary	No	No	No	No	No	No	No	No	No
Ireland	No	Yes	No	No	No	No	No	No	No
Italy	No	Yes	No	No	No	No	No	No	No
Netherlands	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Norway	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Poland	No	No	No	No	No	No	No	No	No
Portugal	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Spain	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Slovenia	No	No	No	No	No	No	No	No	No
Sweden	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Switzerland	Yes	No	No	No	No	No	No	No	No
United Kingdom	No	Yes	No	No	No	No	No	No	No

Key
A - Take Impressions
B - Take Radiographs
C - Remove cement and bonding material
D - Scale and polish teeth
E - Try on bands
F - Cement bands
G - Ligate arch wires
H - Remove arch wires
I - Place bands

FIG. 3 Delegation of tasks.

Country	Chairside Assistants no formal training	Chairside Assistants with general training-qualified	Chairside Assistants with formal orthodontic training
Albania	No	No	No
Austria	Yes	Yes	No
Belguim	Yes	No	No
Bulgaria	Yes	Yes	Yes
Czech Republic	Yes	Yes	No
Denmark	Yes	Yes	Yes
Finland	Yes	Yes	Yes
France	Yes	Yes	No
Germany	Yes	Yes	Yes
Greece	Yes	Yes	No
Hungary	No	No	No
Ireland	Yes	Yes	No
Italy	Yes	No	No
Netherlands	Yes	Yes	No
Norway	No	Yes	No
Poland	Yes	Yes	No
Portugal	Yes	Yes	Yes
Slovenia	No	Yes	No
Spain	Yes	Yes	Yes
Sweden	No	Yes	Yes
Switzerland	No	Yes	No
United Kingdom	Yes	Yes	No

FIG. 4 Types of chairside assistant.

Hungary, and Italy), it was reported that there was formal training, which could lead to a formal qualification for chairside assistants (dental nurses) in all responding countries. Of these four countries, two (Albania and Hungary) reported that no chairside assistants, either qualified or unqualified, were employed. The responses from a further four countries (Norway, Slovenia, Sweden, and Switzerland) indicated that chairside assistants without formal training and a qualification were not employed as chairside assistants. In the remaining 14 countries it was reported that there were chairside assistants with both formal general (as opposed to orthodontic) training and a qualification and those with no formal training (Figure 4).

Discussion

For many years, in the United States of America and Canada, a range of routine orthodontic tasks have been delegated to suitably trained dental nurses (chairside assistants), who work as orthodontic auxiliaries under the supervision of an orthodontist. The current survey has indicated that there is no uniform pattern for the use of orthodontic auxiliaries in Europe. An analysis of the results of this survey has indicated that with the exception of the Czech Republic, Portugal, and Spain, delegation is commoner in Northern European countries. As Portugal and Spain currently have fewer dentists per 10,000 inhabitants (Eaton *et al*., 1998) than any other countries in the European Economic Area and relatively few orthodontists (Widström *et al*., 1996) it is not surprising that at least five of the tasks listed in the questionnaire were delegated, thus improving the availability of orthodontic treatment to their populations. However, three of the countries which reported that they allowed delegation of all the tasks listed in the questionnaire (Finland, Norway, and Sweden) currently have high dentists to population ratios (Eaton *et al*., 1998) and relatively large numbers of orthodontists for their populations (Widström *et al*., 1996). As far as the decision whether to delegate routine orthodontic (or other tasks) is concerned, in some countries, existing national laws and the views of the dental profession may have exerted greater influence in the past, than the 'national wish' to make orthodontic treatment more available to the population.

As far as training was concerned, it was encouraging to see that 18 of the 22 countries who responded to the questionnaire indicated that they employed chairside assistants (dental nurses) with general dental training and qualifications in dental nursing. However, there was clearly a wide range of practice in that two countries reported that they did not train or employ chairside assistants and two that they only employed chairside assistants with no formal training. Fourteen reported that they employed both formally trained and untrained chairside assistants, and four that they employed only formally trained and qualified chairside assistants.

Although seven countries reported that they provided specific training in orthodontic tasks for chairside assistants, only two (Finland and Sweden) reported that they allowed trained orthodontic auxiliaries to undertake all nine of the tasks listed in the questionnaire once they had completed training. Four of the seven allowed most of the nine tasks to be delegated after specific orthodontic training and the final country (Bulgaria) only two tasks. It was perhaps surprising that three of the five countries which reported that they allowed all nine orthodontic tasks to be delegated and many of those who reported that they allowed some tasks to be delegated, also reported that they provided no specific (formal) orthodontic training for the chairside assistants who carried out these tasks. It may well be that in these countries training is provided informally, at the chairside, by the orthodontists concerned.

In conclusion, this survey has shown a wide diversity in

current practice with Europe as far as the delegation of orthodontic tasks to chairside assistants is concerned and in the training and employment of formally trained or untrained chairside assistants.

Acknowledgements

The authors would like to thank members of the EURO-QUAL BIOMED II project, and colleagues in the countries who took part in the survey for their help and advice. Thanks are also due to Kate McWilliams for her help in producing the figures.

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