## Letters to the Editor

Dear Dr. Turbill,

I read with interest your paper which was published in the current issue of the BJO and I congratulate you and your colleagues Stephen Richmond and Jean Wright.

I do not find the results too surprising and I thought the conclusions quite fair. However, I did regret that one issue was not addressed, in that in addition to many children receiving the treatment that they require, orthodontic cases treated within the General Dental Services are extremely cost effective to the government and in fact the same cases treated within the Hospital Service would cost much more, it was suggested to me perhaps four times as much. This point is often neglected when the emotive subject of high earnings in the GDS is considered.

It will be interesting to see whether your paper will now spark off further high level discussion.

With kind regards.

Your sincerely,

Barry D. Aron LDS. D.ORTH. RCS.

Dear Dr. Aron.

Re: A critical assessment of high-earning orthodontists within the GDS of England and Wales, 1990–1991 Turbill, Richmond and Wright, Br J Orthod 1998; 25: 47–54.

Thank you for your letter concerning the above article.

The main purpose of our article was to address the concerns raised by the Schanschieff Report, that there may be an element of 'over-prescription and under-treatment' linked to high-earning orthodontic practitioners, and so that was the main focus of the article, its literature review and the discussion.

However, the point you raise is valid and interesting. Certainly cost-effectiveness is significant amongst several other considerations in assessing a service, and would perhaps have been worthy of mention in our discussion. Comparing the cost effectiveness of the services providing orthodontics in this country is however complex, particularly as the hospital service has additional responsibilities to train both future orthodontic practitioners, and future trainers in Orthodontics.

Nonetheless, how far the three main providers of NHS orthodontic care in the UK fulfil their special remits, and how far these overlap unnecessarily in some areas, would be an interesting topic for further study.

Thank you again for your letter, and your interest in our article.

Kind regards, Yours sincerely, (Dr.) Liz Turbill Dear Sir,

A Critical Assessment of High-earning Orthodontists in the General Dental Services of England and Wales (1990–91). Turbill *et al.* Vol. 25/1998/47–54.

I read the above letter with interest. It told me much—yet left as much untold. Even the acceptance of the DPB definition of "high earners" as "the 20 practitioners with the highest gross earnings from orthodontics nationally", is not particularly helpful and some idea of how the earnings of this group relate to those of the rest would have been of interest. Furthermore, it is not immediately apparent that the "other practitioners" are in exclusive specialist practice (although it is hard to see how meaningful comparisons relating to earnings can otherwise be made.)

The first question which will form itself in the minds of readers—regardless of whether they themselves practise within the General Dental Services—is likely to be: What are the 'high-earners; doing that other practitioners are not?" The paper finds that the treatment standard for the two groups were not substantially different, while the mean treatment time was the same for both groups.

The high-earners may, of course, still treat more patients, either by operating faster or by working for longer hours—and some comparison of the number of treatments carried out by the two groups would have been most informative. If patient numbers did not differ sufficiently to account for the discrepancy in earnings then the answer would have to lie elsewhere. There are rumours of operators who "treat the system", (for example, by the indiscriminate provision of a removable appliance at the start of every fixed appliance treatment) or who have an inordinate proportion of patients with a high breakage rate. It might have been of interest to be given some insight into how the groups differed in such aspects.

This omission is particularly disappointing because such information will, presumably, have been available to the authors.

Yours faithfully,

J. D. Muir,

St. Margaret's, Clayton Road, Newcastle under Lyme, Staffordshire ST5 3ES

Dear Sir,

We thank Mr. Muir for his letter.

We agree that it would have been preferable to have presented more detailed information about the categories of practitioners and their patterns of working. Unfortunately however, information about practitioners and their incomes is regarded as very sensitive by the Dental Practice Board, and we were only permitted access to the data we presented.

We would have preferred to have been able to analyse and present continuous data about gross incomes, and any variance they may have shown with uptake or outcome measures, but we were only furnished with the categories we presented in our paper. BJO May 1998 Letters to the Editor 305

Similarly, as the DPB makes no recognition of Specialist Practitioners, we were not informed as to which practitioners in either the 'High Earners' or 'Other' category had practices limited to Orthodontics. However, our presentation of data for numbers of practitioners with Memberships or Diplomas in Orthodontics may arguably be regarded as an approximation to that. This parameter was included in our multivariate analyses.

Mr. Muir makes one or two other points of interest. We were not informed as to the annual caseloads of any of the practitioners in the study. It is difficult to estimate from our data the numbers of cases completed by individual practitioners during the collection period, as the only way of identifying practitioners was by their practice postcodes. We were told by the DPB that the samples from the 'High Earners' represented approximately 20 cases from each practitioner. However, the 'Other Practitioners' group represented, on the whole, only small numbers of cases from each address; most practices submitted only one to six cases, whilst only three submitted twenty or more. Clearly, however, some practices would have more than one practitioner, whilst some practitioners would operate from more than one address; another problem is that some practices may submit cases in batches, and others may submit them as they are completed. It is therefore difficult to draw any firm conclusions about the caseloads of most of the 'Other Practitioners' group – some of them may indeed have high incomes from other areas of practice.

Regarding the question of prescription of unnecessary appliances, the proportions of three- and four-stage treatments were very low, and closely similar between the two groups. However, the 'High Earners' actually completed a slightly higher percentage of one-stage treatments than the 'Other' group (64 per cent cf 56 per cent; Chi squared = 6.712, df = 3, P = 0.08), so there is nothing to suggest that over-prescription in that sense was a major factor. One deduces that the higher incomes arise from them seeing more patients per month than other practitioners.

The objective of our study was simply to investigate the suggestions of poor treatment, and treatment of cases with

no or little objective need for treatment, which were made in the Schanschieff Report<sup>1</sup>. However, all systems of payment are open to exploitation, and whilst it may be of interest to address the question of some practitioners possibly 'treating the system' more closely, it would involve a detailed case by case study. It would also involve making what would often be rather arbitrary judgements as to whether fewer appliances could or should have been used. After all, approaches to treatment vary in this way between operators in the salaried services, where there is no financial incentive to use more appliances.

Yours faithfully,

pp Stephen Richmond (Cardiff) Elizabeth A. Turbill Manchester pp Jean L. Wright (Manchester)

<sup>1</sup> D.H.S.S. (1986) Report of the Committee of Enquiry into Unnecessary Dental Treatment.

Dear Sir.

I wonder if I could comment on the case presented by Jayne Harrison (BJO 25: 1–9, 1998). I have considerable regard for her mentor Richard Parkhouse and the two cases were nicely presented and treated to standards that any orthodontist would respect. However I am concerned that good dental alignment should not be our sole objective.

A pre-treatment SNA of 75.5° suggests to me, that despite the overjet, the maxilla and upper incisors were distally placed, relative to the cranium. I and others might expect that the extraction of pre-molars followed by retraction would result in flattening of the face. As the nose is partially attached to the nasal bones and forehead, one might also expect it to look even more prominent, if forward growth of the maxilla were restricted. This in fact happened. I took the liberty of asking four lay judges to rate the attractiveness of the lateral view of her face before and after treatment (Figure 1) on a scale of 0 to 10 after the





Fig. 1 The patient in question before and after treatment.

method of Shaw (1981), and the score dropped from 7.0 to 5.0

It was interesting to note that despite the obvious changes in facial appearance, the radiographic superimpositions showed minimal contrasts in skeletal growth. As long ago as 1977 Bjork observed that skeletal changes were "largely disguised by remodelling", and this is probably why marked facial changes (damage) are often not visible on x-rays.

These comments are not meant as criticism of the treatment but as a caution that lay people may not always share the values of orthodontists. Until there is sufficient research to guide us we *must* warn patients of the risks of facial damage.

Yours faithfully,

John Mew.

## References

Bjork, A. and Skieller, V. 1977

"Growth of the maxilla in three dimensions". *British Journal of Orthodontics*, 4, 53–64.

Shaw, W

"The influence of children's dentofacial appearance on their social attractiveness, as judged by peers and lay adults". *American Journal of Orthodontics*, **79**, 399–415, 1981.

Dear Sir,

I would like to thank Mr Mew for his comments about one of the cases I have recently presented. I totally agree that good dental alignment should not be our only goal when providing orthodontic treatment for our patients.

When writing up the case I, too, was concerned at the changes which appeared to have taken place to the facial profile as seen in the clinical photographs. However, I was reassured to see that what appeared to be an adverse change on the photographs was not reflected in the cephalometric superimposition. Also, seeing the girl personally, I felt that she had a pleasing facial outcome.

The true answer lies in the orientation of the facial photographs which is less obvious in the article due to the masking of the eyes. In the pre-treatment photograph I suspect she may be posturing her mandible forward, while in the post-treatment she has her head tilted down and her



Fig. 2

eyes looking up, which gives the appearance of a prominent nose and a retrognathic mandible.

I now have another set of photographs taken one year after her appliances were removed. These are taken in her natural head position and I think they show that she does indeed have a pleasing profile. I enclose copies of the three profiles for comparison. She has given written permission for publication of these so, at the editor's discretion, it may be possible to leave them un-masked (Figure 2).

This does clarify the situation as well as highlighting the need to position our patients in the natural head position when taking our clinical photographs.

In view of considerable growth of the nose 'growth modification' or surgical correction of her skeletal discrepancy may have produced a more favourable profile. However, these options would have necessitated either an earlier referral (she was 13 years 8 months when first seen) or have posed the risks associated with mandibular surgery.

Yours faithfully, Jayne E. Harrison