Summary of: Socioeconomic deprivation and NHS orthodontic treatment delivery in Scotland

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FULL PAPER DETAILS

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Objective The purpose of this observational study was to investigate the relationship between deprivation and the delivery of primary care NHS orthodontic services across Scotland. **Method** Deprivation was measured using the Scottish Index of Multiple Deprivation (SIMD). The Information Services Division, NHS National Services Scotland, supplied data on all claims for orthodontic treatments in Scotland for the years 2008 and 2009. Each claim was assigned to a SIMD quintile (SIMD 1 being the most deprived, and SIMD 5 the least deprived), and odds ratios were calculated. **Results** Uptake of orthodontic services is highest in the least deprived areas. Patients from the least deprived areas are nearly twice as likely to receive orthodontic treatment as those from the most deprived areas (odds ratio of 1.90 with a 95% confidence interval (CI) 1.86 to 1.94). **Conclusion** Patients from more the most deprived backgrounds are less likely to receive orthodontic treatment than those from more affluent backgrounds, which does not necessarily reflect need.

EDITOR'S SUMMARY

Offered: free orthodontic care for all children and free GDP check-ups. So free treatment equals a fair deal for all surely? That's certainly what I thought, but apparently this is not the case where orthodontics is concerned. Despite the offer of free orthodontic care for children, socioeconomic deprivation persists according to this *BDJ* observational study carried out on the delivery of primary care NHS orthodontic services across Scotland.

Socioeconomic position refers to a person's place in the social hierarchies built around education, occupation and income. These three elements can shape a person's life chances and living standards. In this study the authors wanted to see if the uptake of free children's orthodontic services was affected by socioeconomic position, which was measured using the Scottish Index of Multiple Deprivation. During the main period of the study 2008-09, all orthodontic care for children was completely free. (Since then the provision has been changed to bring Scotland in line with the rest of the UK and the eligibility of Scotland's children for NHS orthodontic care is now assessed by the Index of Orthodontic Treatment Need criteria.) The authors found that, though there is no real difference in clinical need between deprived and affluent areas, the children from the most affluent areas are nearly twice as likely to receive orthodontic treatment as those from the most deprived areas.

It is interesting that people will often go to great lengths to 'get free stuff' – entering competitions, filling in lengthy surveys, using their guile and charm – but not necessarily in terms of their own healthcare. Why is this? Perhaps orthodontic treatment isn't a priority for people in more deprived areas? It can also cost significant amounts of time and money to travel to obtain treatment. In the paper, the authors only surmise as to the reasons why: it is possible that patients are being referred for treatment but do not attend; there may be a lack of awareness regarding orthodontic services; more orthodontic practices are located in more affluent areas so accessibility could be a problem.

The next step will be to do further research to find out the reasons why individual patients and their families do not receive or seek out the care that they are entitled to and need. What the study clearly indicates is that more work is required to stop this trend. The offer of free services alone just isn't working.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 213 issue 4.

Ruth Doherty
Managing Editor

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IN BRIEF

- Highlights that equity of access to health services is a key marker of quality healthcare services.
- Notifies that this is the first assessment of the delivery of primary care NHS orthodontic services across Scotland in relation to area deprivation.
- Informs that patients from most deprived areas are less likely to receive orthodontic treatment in the NHS primary care setting in Scotland.

RESEARCH

COMMENTARY

The Scottish Government's 2007 health action plan[1] set out a programme for a healthier Scotland by '*helping people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to healthcare*'. Whilst there is no doubt that progress is being made towards the goal of improved health overall (especially in children's dental health where there is high quality epidemiological data to support this), the authors of this paper have identified a common challenge in delivering healthcare – the inverse care law.

Dr Tudor Hart, a general medical practitioner in Wales, first proposed in 1971 that the availability of good medical care tends to vary inversely with the need for it in the population served[2] and the inverse care law has subsequently become a frequently identified phenomenon.

Two issues stand out for me. First, the evidence that patients from more deprived areas of Scotland are less likely to receive the orthodontic treatment for which they may have a clinical need. Although the authors rightly recognise that the reasons for this are complex, the fact remains that they have identified an inequality which sits uncomfortably with the policy intention to '*sustain and improve health, especially in disadvantaged communities*'. The second issue concerns the availability and distribution of financial resources. The fact that 65% of the average costs for items of service of a child's NHS dental care in Scotland is attributed to orthodontics raises an issue of principle which others may wish to debate further. This, coupled with the evidence that patients from affluent areas are more likely to receive those orthodontic services, seems like a double setback for children from more deprived communities where dental disease is higher and where the need for orthodontic care is no less. The decision to move to an orthodontic needs-based service in Scotland took place after these data were collected and is therefore welcome. More may need to be done if the issues identified in this helpful paper are to be fully addressed.

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1. The Scottish Government. *Better health, better care : action plan.* Edinburgh: NHS Scotland, 2007.
2. Tudor Hart J. The inverse care law. *Lancet* 1971; **297:** 405–412.

AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research?

The Scottish Government has highlighted that a quality health service must be accessible to everyone. Inequity of access to orthodontic services has been reported previously in the UK, though hitherto there has been no data published in relation to NHS orthodontic services in Scotland. We wanted to examine orthodontic activity in relation to socioeconomic deprivation.

2. What would you like to do next in this area to follow on from this work?

We would like to see these data used to inform policy in terms of developing orthodontic services and referral pathways in Scotland. We would be interested in exploring the explanations for this strong relationship between socioeconomic determinants and access to orthodontic treatment.