

EVIDENCE SUMMARY

What is the effectiveness of alternative approaches for increasing dental attendance by poor families or families from deprived areas?

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Key Terms:

Deprived: a characteristic of areas or households which denotes low socio-economic status or relative material or social deprivation (incl. low social class, low income, non-affluent, poor/in poverty).

Dental attendance: a frequency, or proportions visiting a dentist within a particular period; or attending the dentist within a given period after being exposed to a new programme or changed service; registration rate.

Families: households with children and/or poor/deprived households in general.

Effective: some increase in a measure of dental attendance (or proxy, such as dental registration).

Background

Socioeconomic factors are key determinants of oral health inequalities⁸. Children from low socioeconomic status families in the UK show higher caries prevalence, fewer caries-free teeth, fewer sealants and more untreated lesions^{9,10}. Regular dental attendance is associated with better oral health¹¹ and quality of life (QoL)¹². 59% of adults (1998)¹³, and 62% of children (8 years old, 2003)¹⁴ regularly attend the dentist, with 26% of the latter only attending when in trouble. Regular dental attendance is more prevalent in high socio-economic groups^{7,15}.

The Department of Health's Dental Access Programme¹⁶ aims to address perceived and actual barriers to NHS dental care by 2011. The Steele Review¹⁷ raises the prospect of a fundamental re-orientation of NHS dentistry to an oral health service. Future NHS Primary Care Trust commissioning of dental services may increasingly extend beyond the dental surgery, customised to meet local population need¹⁸.

Aim

This review aimed to identify and summarise primary research studies which evaluate the effectiveness of different approaches for increasing dental attendance by families from deprived areas in the UK.

Review Method

Ovid MEDLINE (1950 – wk4 September 2009) using search terms attendance/health services accessibility, socioeconomic factors/poverty/deprivation, combined with dentist. Limited to dental journals and UK. 116 papers identified. 110 excluded. Further searches included CEED, Cochrane Oral Health Group, CRD, ADA, National Library for Public Health. Six studies reviewed either contained explicit change in service provision/approach targeting lower socioeconomic/deprived areas/areas with treatment need, or a more general attempt to increase use of dental services/registration by people who need care, but where the take up of the service from people of different socioeconomic backgrounds is reported. Literature searches were complemented by contact with the Department of Health Dental Access Programme.

Findings

There was only one reported study relating to approaches used by traditional general dental practices to increase dental attendance. The studies found evaluated school dental screening (2)^{3,4}, a Health Visitors and GPs collaborative², a mobile dental clinic on school premises as part of school dental screening⁵, a dental health promotion display in a shopping centre⁶ and a Dental Access Centre¹.

Within these UK studies, the quality of evidence was low, with observational approaches dominating and methodological or analytical limitations being identified in each study, weakening the conclusions made.

Advice provided by Health Visitors to mothers of new infants in areas of high social deprivation led to a sustained increase in dental registration, although the effect did not extend to older pre-school children in the household. Three studies in children were all focused upon school dental screening. A 'New model' of dental screening with specific referral criteria led to reduced referral rates in both affluent and non-affluent children, but children with a high IMD were more likely to be referred (23% vs 9%). Of those referred, high IMD children were less likely to attend (39% vs 62%) and were less likely to receive treatment for caries in permanent dentition (16% vs 34%).

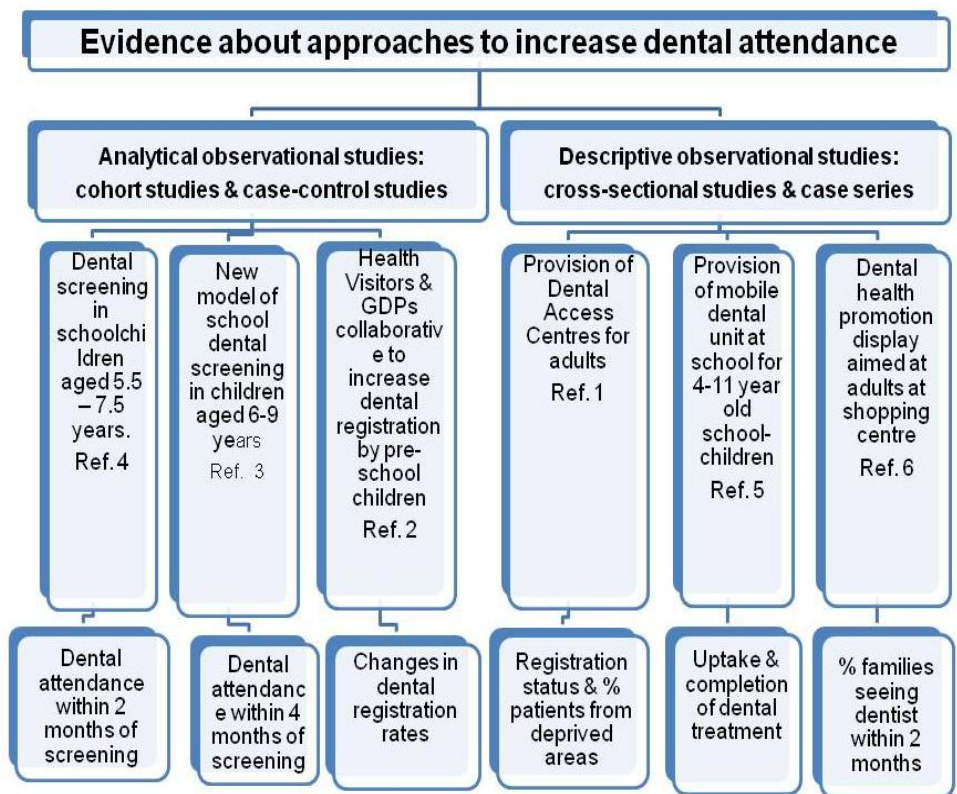
In the second screening study, an increase in dental attendance was reported across all social classes in the intervention group (45% in intervention group vs. 27% in control), and especially in the higher employed group.

The children-focused approach perceived in this review to be most effective in increasing acceptance of treatment¹⁸, increasing attendance

and completing treatment was in the use of a mobile dental unit in school grounds. Half of these primary school pupils from a deprived area had not previously seen a dentist. Testing the actual effectiveness of this approach would require a larger scale study.

Provision of a dental health display targeted at adults in the shopping centre serving a deprived area produced a statistically significant increase in the number of parents taking their children to the dentist.

Dental Access Centres (DACs) were found to provide treatment to more adults from a disadvantaged background (IMD mean score 38 vs. 23), were more likely to be smokers, to have worse oral health, to be more likely to attend only when in pain, to be less likely to view dental attendance as important, to be under 35 years old and to be dental charge-exempt.



In summary, the two approaches that appeared to be most effective in increasing dental attendance in families from deprived areas were the mobile dental unit at school premises and the Dental Access Centre. Both responded to the particular attendance preferences of the populations served, which may have implications for PCT service commissioning. However, there is a need for more high quality research to determine the best ways to address the widely-acknowledged unmet treatment need of children and families in lower socioeconomic groups.

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