Community Dental Health (2020) **37,** 108–109

doi:10.1922/CDH_RavaghiJune20editorial02

Editorial

Child oral health; is there anything more to know?

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It seems a strange thing to be writing about child oral health in the middle of a virus pandemic that has, in the UK at least, paused all routine dental care. Perhaps not; as thoughts turn to the return of "normal" operation there are concerns over potential ongoing impacts from COVID-19 on health services including stricter infection-control requirements and economic impacts from the lockdown. It invites ridicule to try and predict what will happen in the coming years, but the economic and social impacts are likely to increase vulnerability among the already vulnerable and the delivery of dental care is likely to be more problematic and more expensive. More than ever we need to reduce the burden of avoidable dental disease.

Our research group has two papers in this issue of *Community Dental Health*, which are part of a series in which we explore contemporary manifestations of child oral health inequality in England. We are certainly not the first to do this, but we have tried to cast a fresh eye on the issue, either by looking at new markers or using newer methods with familiar datasets.

Since it became evident from the early 1980s that dental caries prevalence was falling in England (Anderson *et al.,* 1982) and the UK (Murray *et al.,* 2015) there has been an increasing focus on oral health inequalities. While we have witnessed a promising decline in child caries over the past 40-50 years, the rate of reduction in 5-year-olds has slowed and in England it has, unfortunately, reached a plateau with a quarter of children affected, according to the last survey of 5 year old children (Public Health England, 2020). There is also no promising news regarding child dental health inequalities; despite lower level of dental caries in England, child oral health inequalities seem to be greater in England than in Wales and Northern Ireland. (Sofi-Mahmudi *et al.*, 2020). Further, there is no clear indication of reduction in inequalities in England at local authority level (Ravaghi *et al*., 2019 and updated analysis in figure 1). Improvements have stalled; is that acceptable?

Child oral health in the UK has been the subject of much attention in recent years, including regular mention in both houses of parliament, national initiatives such as Childsmile, Designed to Smile, Starting Well and BSPD's Dental Check by One campaign. The welcome collective interest creates a climate to address the problem further; what then should we do?

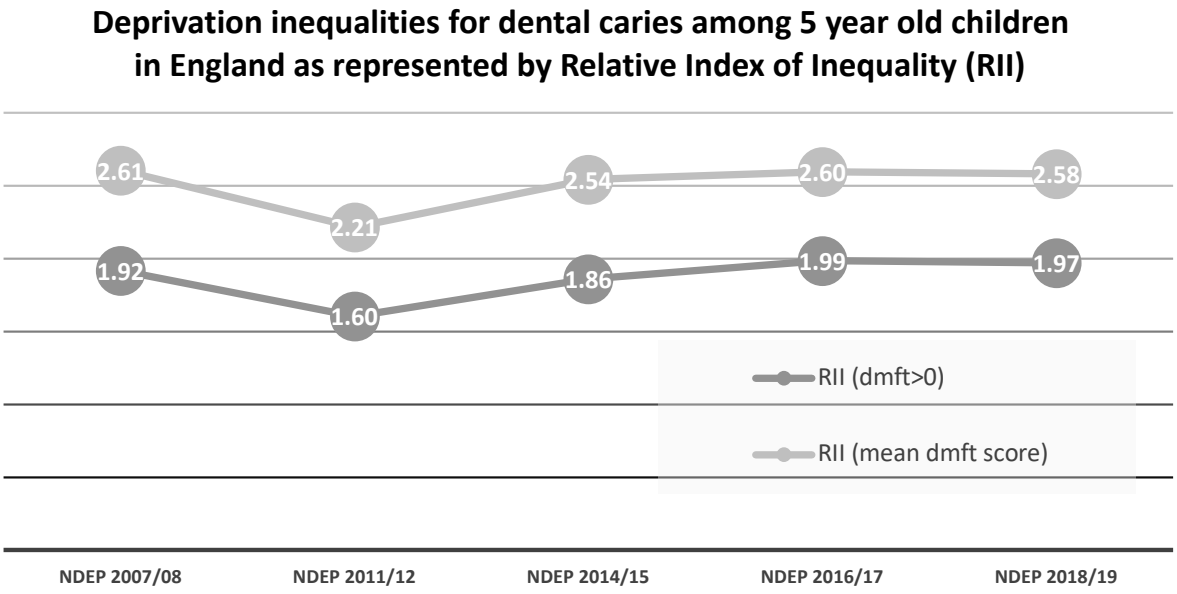

Figure 1. The magnitude of dental health inequalities over time in England. Except the interval between 2007/08 and 2011/12, relative inequalities have not decreased noticeably.

It is worth observing that whilst much local oral health policy is informed by caries data for 5-year-olds as the only measure regularly available at small area level, the decennial surveys of child and adult oral health show a much wider distribution of disease experience in older children and young adults with nearly two-thirds of children aged 15 in England, Wales and Northern Ireland showing signs of clinical disease experience and an average of 4 teeth affected (Health & Social Care Information Centre, 2015). In 2009 over half of adults aged 16-24 in those countries had filled permanent teeth (NHS Information Centre, 2011a) and nearly a third visually evident unrestored carious lesions (NHSIC, 2011b), though these data are over a decade old (cue nudge to Department of Health!). Areas of England with lower levels of caries in 5-year-old children might have, conversely, greater oral health inequality and local planners might be lulled into assuming that the prevalence of caries at five is representative of the wider population.

Public health interventions that require behavioural change, whilst an easy sell to policy makers and the public, are problematic through their unequal impact (Baum and Fisher, 2014; Qadri *et al.,* 2018). Apart from their victim blaming nature, policies focusing merely on behavioural changes have been labelled as 'lifestyle drift'; a term that describes "the tendency for policy to start off recognizing the need for action on upstream social determinants of health inequalities only to drift downstream to focus largely on individual lifestyle factors" (Popay, 2010). Targeted interventions face challenges of accurate identification of the risk population. Whole population measures such as water fluoridation will both reduce overall prevalence and inequalities, as might national policies on sugar reduction. Alongside this there will always be the need for dental care, though the benefits of operative care for primary teeth are uncertain (Innes *et al.*, 2020) there are aspects of prevention that require professional support.

Despite the laudable ambition to have children see a dentist before their first birthday there is a troubling picture of low child attendance by this group across both affluent and deprived areas (Salomon-Ibarra *et al*., 2019) and whilst there is some apparent deprivation-linked variation in attendance by young children at area level it is not as marked as for oral health, though the association between dental attendance and deprivation at area level appears to be moderated by the effect of other factors such as socio-demographics and dental disease levels (Salomon-Ibarra *et al*., 2020). All that said, the readily available data on attendance probably mask underlying inequalities that are harder to discern such as attendance for preventive interventions rather than relief of symptoms. We don't fully understand the nature of the problem and evidence on effective interventions to promote dental attendance by children is lacking.

We find ourselves re-iterating the issues raised in Sarah Baker's editorial last March; the issues are complex and there is a daunting research agenda (Weyant *et al.*, 2015). Bold decisions on policy are needed, not more exhortations to the public to "do better" or to dental teams to "see more young children".

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