Inequalities in oral health for deprived multiethnic communities

Changes in oral health over ten years amongst UK children aged 4–5 years living in a deprived multiethnic area by R. Bedi, J. D. Lewsey, and M. S. Gilthorpe Br Dent J 2000; 189: 88–92

Objective

To examine the changes over a decade in caries experience amongst children aged 4–5 years living in a deprived multiethnic community in the United Kingdom.

Design

Cross-sectional surveys.

Setting

Schools and nurseries in the Old Trafford area, Manchester, England, 1989, 1990, 1991 and 1998.

Main outcome measures

Mean dmft, oral cleanliness and proportion of children with rampant caries.

Results

The unadjusted Odds Ratio for caries free children examined in 1998 compared with children examined prior to 1998, was only significant amongst the white group. White children examined in 1998 were over three times more likely to be caries free than white children examined previously. South Asian children whose mothers were non English speaking examined in 1998 were almost twice as likely to have good/fair oral cleanliness than those

examined prior to 1998. Moreover, South Asian children whose mothers were non-English speaking in 1998 were over three times more likely not to have rampant caries than their counterparts in the earlier years.

Conclusion

There were significant improvements in caries and oral health amongst white children over the decade, and although less marked these were mirrored amongst South Asian children.

In Brief

- Significant improvements in caries and oral cleanliness among white children attending inner city schools during the 1990s.
- Asian children whose mothers are non-English speaking showed least improvements in oral health.
- Linguistic ability of mothers appear to be associated with poorer oral health of their young children.
- Inequalities in oral health still apparent at the end of the century.

Comment

The aim of this study was to examine the changes over 10 years in caries experience among children aged 4–5 years in a deprived multiethnic community in Old Trafford, Manchester. The authors also compare the caries experiences among the ethnic groups: white, black, Asian with English speaking mothers (ESM) and Asian with non-English speaking mothers (NESM). The results of the survey carried out in 1998 were compared with those carried out in a three year's period (1989 to 1991). Detailed discussion was given for the reason to analyse the data with dmft $\neq$ 0 and caries free children separately, thus, statistical tests that rely on the erroneous assumption of the Normal distribution of

responses were avoided. Rampant caries was defined in two ways: children with caries experiences in their upper incisors and children whose dmft $\geq$ 8. Logistic regression was used to calculate the unadjusted odds ratios for age, gender, ethnic groups and year of examination.

Eight hundred and eighty three children were examined in 1998. The results showed that there was a general trend that oral health has improved over the decade (significantly better oral cleanliness and more caries free children). Among the ethnic groups, only the white had a significant increase in number of caries free children: the white children in 1998 was three times more likely to be caries free in 1998 than

those in 1989–90. However, for NESM Asians, although their oral cleanliness has improved slightly, they are three times more likely to have rampant caries in 1998 than in the previous years. Within 1998, the ethnic inequality in oral health was more marked. The Afro-Caribbean had the best oral health. Apart from oral cleanliness, the oral health for ESM Asian was comparable to the white. However, the NESM Asian had significantly poorer than the white.

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