Children's Oral Health Improvement Strategy

2019-2024

CITY OF
YORK
COUNCIL

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Introduction

In recent years there have been significant improvements in oral health for children; however, the prevalence of dental decay in children in the UK remains at 25 percent (PHE, 2018), despite it being almost entirely preventable. A clear social gradient exists, with children in lower socioeconomic groups being disproportionately affected and this national picture is reflected in York, with under-5s experiencing unacceptable levels of dental decay.

Decay can be prevented through regular brushing, adequate exposure to fluoride and reducing sugar consumption. Establishing an oral health improvement programme for children under 5 years old in York, consisting of both universal and targeted initiatives is likely to improve this picture and subsequent outcomes.

Purpose of the Strategy

This strategy presents the first strategic approach to oral health improvement within the City of York, supporting prevention and promotion of good oral health in children and young people.

The following oral health strategy is aimed at improving the oral health of all children in York, with a particular focus on those children who are most vulnerable by addressing inequalities in oral health which were identified in the Oral Health Needs Assessment of Children in York 2018.

The implementation of this strategy will assist in ensuring that all children establish a solid foundation for good oral health in the early years, which it is hoped will continue into adulthood and throughout the life course. Establishing good oral health behaviours early in life can reduce the burden of restored or treated teeth into adulthood and minimise the number of adults recalling negative childhood dental experiences. Individuals who are willing to seek treatment will reduce the lost productivity in the workforce due to days off as a result of dental pain.

This strategy has been developed using an evidence base toolkit: Local Authorities Improving Oral Health: Commissioning Better Oral Health for Children and Young People (CBOH) (PHE, 2014) which outlines the efficacy and cost effectiveness of evidence based oral health interventions. Interventions which the CBOH toolkit outlines to be of limited value or would be discouraged have been included at the end of the document for information.

Aims and Objectives

- Promote oral health in children and young people;
- Strengthen community actions that will support improved oral health;
- Ensure the reorienting of health services for prevention;
- Develop the oral health knowledge base of the professional workforce;
- Create environments that support individuals with good oral health;
- Integration of oral health policy into wider strategic priorities.

Background

What is oral health?

The World Health Organisation defines oral health as "a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing" (World Health Organisation. 2018).

The prevalence of dental decay in children in the UK remains at 25 percent (PHE, 2018), despite it being almost entirely preventable. Dental decay occurs as a result of the interaction between bacteria on the surface of the tooth, the metabolism of sugars and formation of acids, creating a cavity. Once a cavity is present decay will continue, causing pain and will require treatment in the form of restoration or extraction. Once decay has affected the tooth structure, the burden of restoration and maintenance will be felt across the life-course.

The impacts of poor oral health

The risk of developing caries starts from birth and there are a set of unique risk factors for children due to parents dictating the nutritional practices. A poor diet coupled with sub-optimal tooth-brushing habits increase the risk of the disease, for example many parents are unaware of the risks posed to first teeth from regular exposure of sugar, especially in feeding bottles.

The effects of decay are wide reaching, affecting a child's cognitive and physical development and their quality of life. Children living in deprived areas are disproportionately affected and as a result their daily activities are restricted 12 times more, with many children missing education as a result.

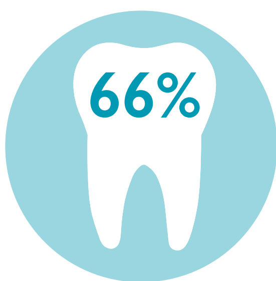
Dental decay is the number one reason for children being admitted to hospital in England (PHE, 2017) with poorer children twice as likely to require tooth extraction under general anaesthetic. Recent data in the UK shows there were 7,926 admissions for tooth extractions as a result of decay costing approximately £7.8 million (PHE, 2017).

The prevention of dental decay in children, especially for those most at risk, will not only positively affect the early years but will set the foundation for a healthy adulthood. Addressing this chronic disease now will reduce the burden placed on health and social care, at a time when ambitions have been set to boost 'out-of-hospital care', put prevention at the heart of the agenda and help people have greater control of their own health (NHS England, 2019).

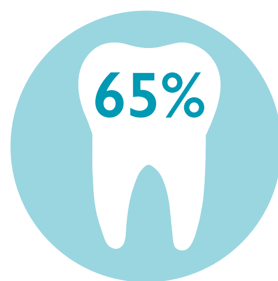
Populations at risk of poor oral health

Tooth decay is almost entirely preventable; however, those individuals that are unable to brush their teeth without supervision, frequently intake a high sugar diet, have a dry mouth and/or have poor access to regular dental care are more susceptible to dental decay. Those most at risk include children of all ages, particularly younger children and infants, those with severe disabilities and medical problems, those from deprived communities, those attending special support schools and looked after children.

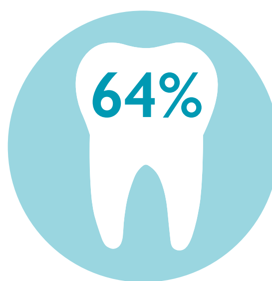
There are inequalities for children aged 0-15 years associated with accessing NHS dental care. At ward level access rates range from 55% in Guildhall to 85% in Heworth without. Those areas with less than 70% access were as follows:



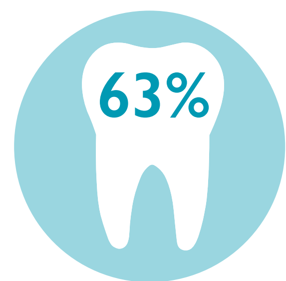
Fishergate



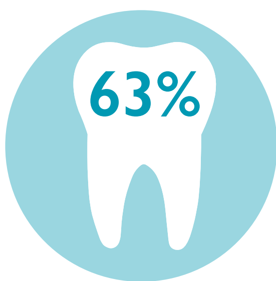
Fulford and Heslington



Holgate



Clifton



Micklegate

Guildhall

Individuals from more deprived communities are more likely to have poorer oral health. It is therefore important to identify areas within the City of York where there are the greatest levels of deprivation as this would help to identify areas where limited resources to improve oral health could be targeted.

Local Picture

York is predominantly an affluent city, with good outcomes for its residents (CYC, 2016); however, there are pockets of significant deprivation which are hidden by the overall positive picture. 9.7% of children in the city live in poverty (PHE, 2019) and 60 percent of this is concentrated in five wards (CYC, 2011). Dental extraction rates (0-4 age range) have been consistently higher than the national average over the past four years (PHE, 2019) indicating a lack of prevention, especially for those children in the deprived wards, as indicated by Figure 1.

Reducing admissions to hospital for dental extraction and tackling inequalities are key deliverables in York's Joint Health and Wellbeing Strategy (CYC, 2017), demonstrating a strategic commitment to addressing these issues.

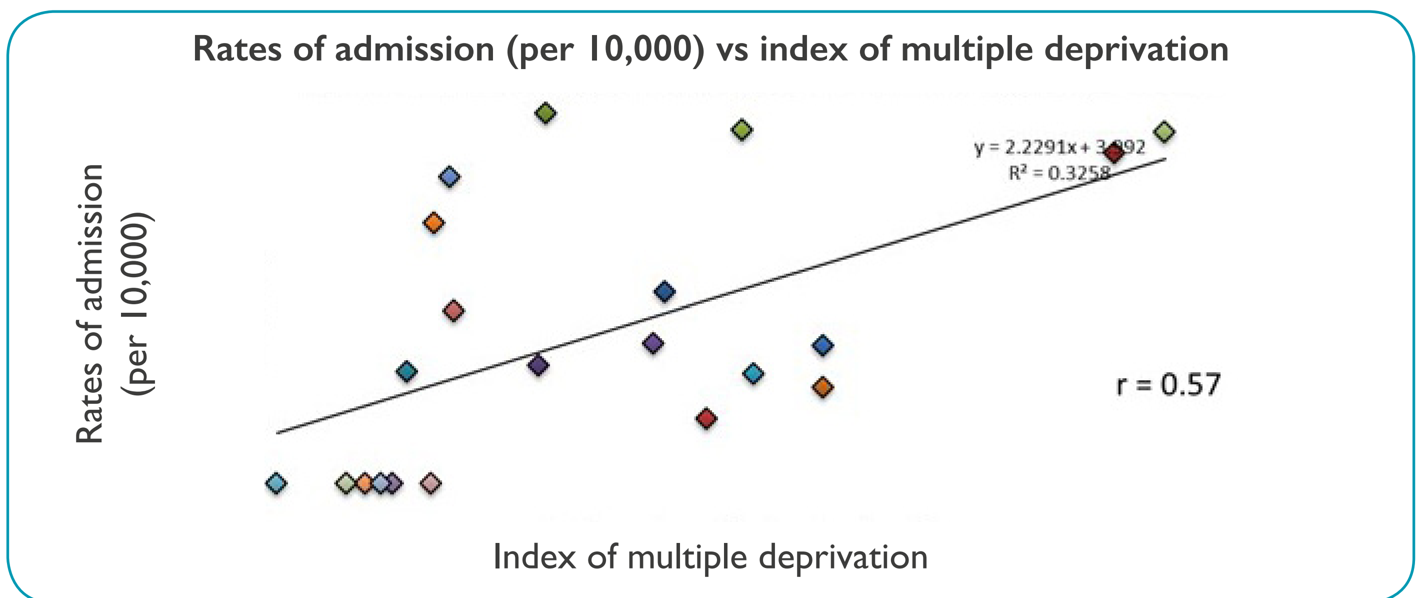


Figure 1
Rates of admission to hospital for extraction due to dental decay versus level of deprivation in York (2016/17)

Access to NHS dental services in York

The majority of NHS dental care is provided by general dental practitioners for both adults and children. There are currently 18 dental practices providing NHS dental services within City of York Council (CYC) boundaries and one Community Dental Service facility (NHS England. 2018).

From the data provided by NHS England (NHS England. 2018) NHS dental access for children aged 3-17 years of age for York in 2016/17 ranged from between 82-93% with slightly lower figures for 2017/18 (ranging from between 81-91%). For all age groups between 0-17 years of age, access to NHS dental services in York was better for both 2016/17 and 2017/18 when compared with Yorkshire and the Humber.

However, despite NHS dental access for children in York aged 0-2 years being higher than the regional values, reported NHS dental access for this age group is poor (38% for 2016/17 and 2017/18). Whilst this is disappointing, poor dental access for this particular age group is relatively common, and there are various national initiatives which are being used to increase the numbers of very young children accessing NHS dental care.

Current oral health statistics – Tooth decay

A national oral health survey of 5 year old children in England (Public Health England. 2018), which is conducted every 2 years, identified that in the 2016/17 school year that 84.1% of 5 year old children in York that were surveyed (273) had no experience of dental decay. York also had the highest percentage of 5 year olds with no experience of dental decay compared with all other areas of Yorkshire and the Humber that participated in the survey. However, this means that 15.6% did have experience of dental decay and those children that are affected will have almost 4 teeth either decayed, extracted or filled by the time they reach 5 years of age. It is the most vulnerable and poorest in society who will have the worst oral health and the impacts of this have been outlined above.

Current oral health statistics – Tooth Extraction

Tooth extractions due to decay was the most common reason nationally for elective hospital admissions in children aged 5-9 years old. Dental treatment under general anaesthesia (GA), presents a small but real risk of life threatening complications for children. Tooth extractions under GA are not only potentially avoidable for most children but also costly. Extracting multiple teeth in children in hospitals in 2015/16 represented a total NHS cost of nearly £50.5 million.

Attempts to reduce the numbers of hospital episodes for the extraction of teeth needs to address several areas including (Public Health England. 2019):

- Engagement of primary and secondary care providers;
- Establishment of clear acceptance criteria and triage of referrals;
- Enquiry into reasons for admission for extraction where caries is not present.
- Provision of training for primary care teams in the management of dental decay among children in acute and chronic stages.
- Commissioning and Implementation of oral health improvement interventions with the local authority.
- Clear agreement about the provision of support for families before and after hospital in an effort to avoid repeat episodes in the future.

Current oral health statistics – Fluoride varnish application

Application of fluoride varnish has been shown to be effective in increasing the levels of available fluoride topically within the mouth regardless of the fluoride content in the water supply.

Fluoride varnish is well accepted and safe and requires minimal training to apply. Fluoride varnish is mostly applied by dentists though dental nurses can undergo training to enable them to apply varnish and provide preventive message to patients. This increases the skill mix of a dental practice and makes it more orientated towards prevention.

Recent figures from NHS England (NHS England. 2018) (using total child population aged 0-17 from NHS England 2018 and ONS population data) revealed that 53.5% of children in York of those aged between 0-17 years of age in 2016/17 and 64% in 2017/18 received fluoride application.

Implementing the Strategy

Oral health improvement requires a system wide approach, as one organisation alone cannot tackle this issue. CYC have developed a multi-agency Oral Health Improvement and Advisory Group (OHIAG) bringing together key stakeholders from across the city in order to achieve positive oral health outcomes and undertake future oral health development work.

The OHIAG will lead the implementation of this strategy and ensure engagement with other partners as required and in line with any actions undertaken as part of the strategy.

An action plan will be created, to sit alongside the strategy, which will translate the following improvement principles into tangible actions.

Strengthening community actions

Targeted peer (lay) support group/peer oral health champions

- Explore opportunities where targeted support via community champions could deliver oral health messages, particularly in the most deprived wards of the city.

School or community food cooperatives

- Explore opportunities for working with voluntary groups involved with food banks to see whether there could be opportunities for oral health promotion.

Reorienting health services for prevention

Targeted community-based fluoride varnish programmes

- Monitor NHS Fluoride varnish uptake yearly through analysis of NHS Digital data by the Business Intelligence Team.
- Explore how oral health promotion services are commissioned particularly for vulnerable groups.

Developing personal skills

Oral health training for the wider professional workforce (e.g. health education)

- Explore how oral health promotion training can be provided to the wider health and social care workforce, including those that work and look after vulnerable groups.
- Promotion of appropriate and consistent oral health messages

Integration of oral health into targeted home visits by health/social care workers

- Explore opportunities for services focused around the 'early years' (including LATs and Healthy Child Service) can deliver oral health promotion at key contact points.
- Explore feasibility of integration of oral health promotion as part of every contact counts, for example via contact with school nurses, midwives and social care.
- Oral health improvement should be an integral part of the work of health visitors and schools nurses and should be included in the service specification for these services in the CYC linking in with the messages that are given by health visitors, for example in relation to breastfeeding.
- Explore opportunities where oral health promotion could be delivered for vulnerable children including those with special educational needs.

Create Supportive Environments

Healthy food and drink policies in childhood settings

- Explore healthy food and drink policies in early years, schools and workplace settings, through links with other strategies, such as The Healthy Weight Strategy

Safeguarding Children

- Advocate for the training of dental teams to flag early markers of dental neglect, which could be a proxy measure of general neglect to implement supportive services.

Fluoridation of public water supplies

- Explore the political and feasibility of water fluoridation for York, initially through informal discussions and then following the statutory process if appropriate.

Public Health Policy

Influencing local policies

- Integrate oral health into wider strategies, for example the Healthy Weight Strategy and the Infant Feeding Strategy.
- Explore integration of oral health improvement into existing policies and programmes such as the Healthy Child Service.

Infant feeding policies to promote breastfeeding and appropriate complementary feeding practices

- Support the Healthy Child Service and Midwifery services with promotion of breast feeding and appropriate complementary feeding practices aligned with national guidance.

Interventions with Limited Value

The following interventions outlined below have been evaluated in the CBOH Children and Young People toolkit to have limited value (due to one or more of the following reasons; limited evidence basis, limited impact on reducing inequalities, costly, implementation challenges) or would be discouraged. Due to limited resources the following would not be recommended. These have been aligned with the relevant Ottawa principles below:

Reorienting health services for prevention
- Targeted community-based fissure sealant programmes
- Targeted community-based fluoride mouth rinse programmes
- Using mouth guards in contact sports

Developing personal skills
- Social marketing programmes to promote oral health and uptake of dental services by children.
- Person-centred (one-to-one) counselling based on motivational interviewing outside of dental practice settings.
- One off dental health education by dental workforce targeting the general population.

Create supportive environments
- Provision of fluoridated milk in school settings.

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