BDA Wales 2016 Manifesto
Policy Briefing: The Sugar Levy

Introduction

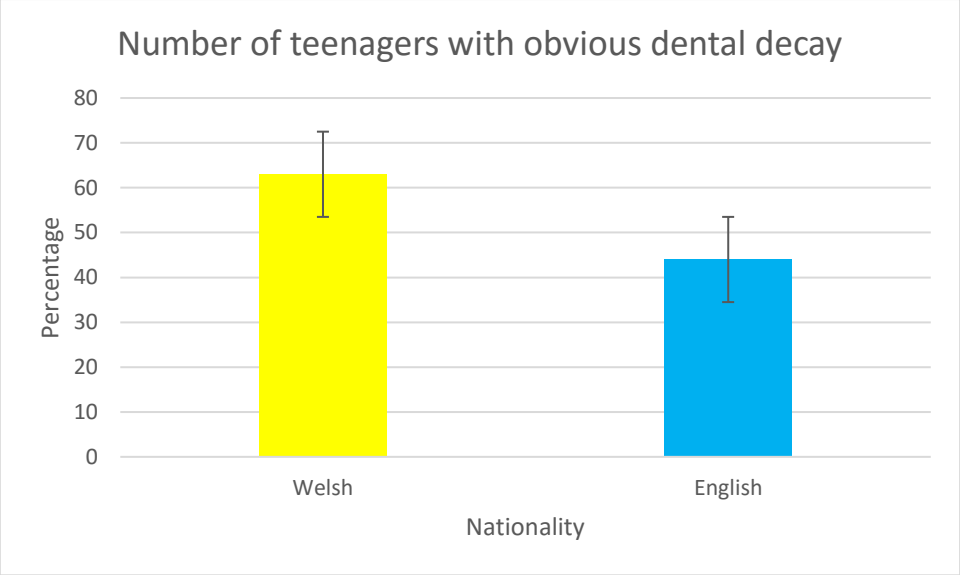
The sugar levy, which will come into force UK wide in April 2018, will be a tax on soft drinks such as carbonated drinks, dilutables and still drinks that contain high levels of added sugar. The levy will tax 18p per litre on soft drinks containing 5g of sugar per 100ml and 24p per litre on soft drinks containing 8g of sugar per 100ml. This will incentivise soft drinks manufacturers to reduce the sugar content of their products to avoid the tax, which may disincentivise the public from buying high sugar soft drinks. This was the case in Mexico where a 10% sugar tax resulted in a 6% drop in sales in the first year[1]. Sugar is the culprit of many health problems, including poor oral health and obesity.

In England, only 19% of children[2] are meeting the recommended activity level, leading Parliament to propose investing the sugar levy revenue in sporting activities for children. In Wales however, 36% of children[3] are reaching the recommended activity level, putting Welsh children at an advantage in tackling obesity. However, the oral health of Welsh children is worse than the oral health of English children, with Welsh teenagers 60% more likely to have dental decay than their English counterparts[4]. The sugar levy creates an opportunity for the Welsh government, to invest in preventing tooth decay[5] - the number one reason why 5 to 9 year old children are admitted to hospital.

The picture of children's oral health in Wales

In 2014 alone, almost 26,000 children in the UK were admitted to hospital for dental extractions under general anaesthesia[5], 8,904 of those children were in Wales[4]. The NHS spent £30 million on hospital-based extractions for children in 2012/2013[6]. The fact that most tooth extractions are completed by a high street NHS dentist, makes this figure even more alarming. The Welsh government needs to further invest in children's teeth to stop this climbing figure.

Obvious dental decay is present in 41% of 5 year olds and 22 per cent of Welsh children aged between five and 15 show severe or extensive decay – 10 per cent more than English children in the same age bracket[4]. However, older children are also suffering dental problems. There has been no significant change between 2003 and 2013 in the proportion of 12 and 15 year old children with good overall oral health. Less than a quarter of 15 year olds can be described as having good oral health, and 63% have obvious dental decay. In comparison, 44% of English 15 year olds had obvious dental decay. This means that Welsh teenagers are at a significant disadvantage, they are 60% more likely to have dental decay than their English counterparts[4].



63% of Welsh teenagers have obvious dental decay
44% of English teenagers have obvious dental decay

The impact of poor oral health on children's lives

The poor dental health of 12 to 15 year olds affects their daily life with 54% reporting they had daily problems with their teeth and mouths including issues such as difficulty eating and difficulty cleaning teeth. Dental health problems affect Welsh 12-15 year olds psychologically and socially[4]. The most common daily problem for this age group is that they feel embarrassed to smile or laugh. Smiling and laughing are proven to be important to mental health and well-being, and being prevented from doing so due to embarrassment can be significantly impacting or damaging[7].

Welsh Children and sugary drink consumption

Children in Wales consume high levels of sugary drinks. 18% of 12 year olds, and almost a quarter of male twelve year olds, drink sugary drinks four or more times a day. When you consider that one can of Coca-Cola contains 35g of sugar and a 12 year olds daily allowance of sugar should be 30g, 18% of twelve year olds are consuming over four and a half times as much sugar as the recommended amount, without even taking the sugar in their food into account. This habit extends into adulthood, making it unsurprising that Wales has the highest sugar consumption from fizzy drinks in the UK[8]. The average Welsh person will consume 856 Kg of sugar in their lifetime from fizzy drinks alone[8].

Sugar levy to improve children's oral health

The tax levy could raise a figure in the region of £52,542,000 (see Appendix 1) in Wales alone. This tax should be invested into improving the oral health of wales. Existing programmes, such as Designed to Smile, have proved successful, but need to go further.

Creating healthy habits, particularly in children, can have a huge pay off for the future of not only their oral health, but the oral health of future generations. Oral health continues to show its importance, from pneumonia[9] prevention to its links to heart disease[10]. It is time that oral health became recognised as an important investment in preventative health care. Sugary drinks have negatively affected Welsh oral health for years; the sugar levy can be used to combat the caries epidemic in Welsh children. BDA Wales has been considering the ways in which the levy could be expended in order to meet these goals.

Extend Designed to Smile for children aged under three

The instilling of healthy oral habits is vital at an early age. As previously stated, 41% of Welsh children already have obvious dental decay by the age of five[4]. This percentage only increases with age. It is therefore important for children to learn about dental decay prevention as early as possible. One way to improve the oral health of young children in Wales, and thus improve the future of oral health in Wales, would be to use some of the sugar levy revenue to extend the designed to smile programme to nurseries that care for children aged 3 and under.

Since its creation in 2008, the Designed to Smile programme has proven successful, reducing the number of 5 year olds with tooth decay by 6%[11]. Currently the Designed to Smile programme runs in schools/nurseries for children aged 3-5. If Designed to Smile were to work with children under 3 it would help develop healthy habits from a younger age.

Disclosing tablets for improving oral health education in Primary School

Currently, primary school children receive little guidance within the curriculum on how to practice good dental habits and oral care. This is likely why tooth decay is the number one reason 5 to 9 year old children are admitted to hospital[5]. Yet, around three quarters of children self-report brushing their teeth twice a day[4], which is recommended for good oral health. However, it is a lack of engagement with primary school children that means that this brushing falls short of being effective in many cases.

Many children do not understand that the tooth decay-causing bacteria on their teeth is white, and therefore, hard to see. Children then are unsure how long to brush their teeth for, or what technique to use. This is clearly a problem as by the time Welsh children are twelve years old, over half of them have experienced obvious tooth decay and over a quarter have had fillings[1]. An easy way to teach children how to brush their teeth effectively is the introduction of disclosing tablets. Children would be able to see where they have residual plaque and clean it off easily. This could be repeated once a week for a month. As the children see how easy it is to remove the plaque they will becoming better at brushing their teeth as they will learn where they miss. This could then be reduced to once a month after establishing a good oral health routine.

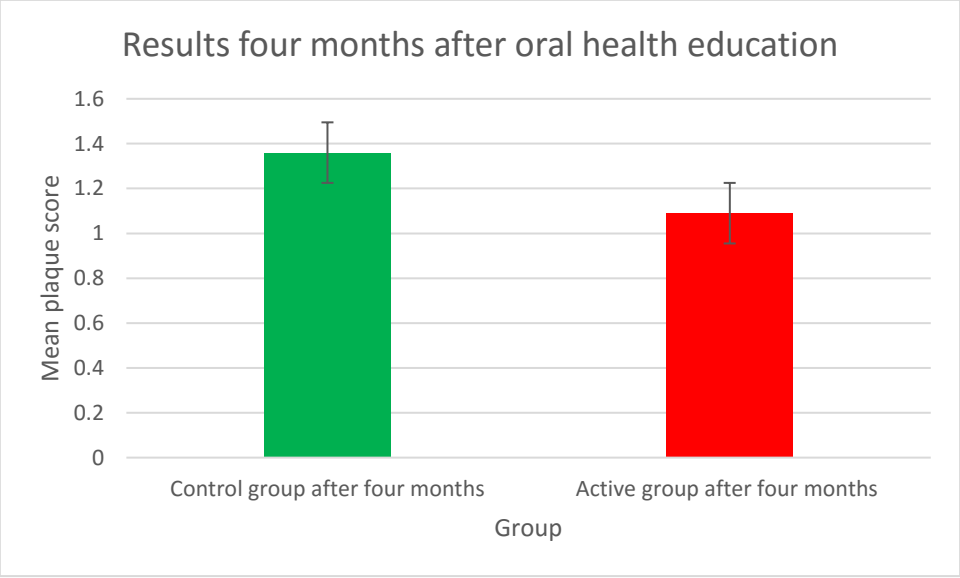
Studies have shown that the use of disclosure tablets is effective, particularly in children. Many organisations recommend their use, including dental advice organisation Dental

Care Matters[12], which argues that disclosing tablets are particularly beneficial to children, as they improve brushing techniques and learn a healthy habit that will improve their oral health for the rest of their lives.

The Use of Oral Health Educators in primary schools

A further way to improve the oral health in children of primary school age is the introduction of talks given by oral health educators. This would allow children to learn about the different aspects of oral hygiene, including frequency of sugar consumption, effective tooth brushing and identifying sugary foods. Studies have proven this to be very effective.

One study (Worthington, et al, 2001) engaged 32 primary schools to be randomly allocated into active and control groups. The active groups were given 4 one hour lessons on oral health, they used disclosing tablets and tooth brushes. The control groups did not. Four months later, the active groups had a greater knowledge of oral health and had significantly lower mean plaque scores than the control group (20%) [13]. In this study, the oral health educator was a qualified dental nurse who received one day of training on how to use the programme and the importance of group work. The children worked in groups to harness peer group pressure.



The Active group's mean plaque score was 20% lower than the control group's mean plaque score.

Impact of children's oral health on educational attainment

Primary school aged children in Wales are experiencing substantial oral health disparities; failure to address this can lead to further inequalities and negative impacts. Studies show primary school aged children with poor oral health are more likely to have problems at school, fail to complete all required homework, and miss 1 day of school a year more than children with good oral health[14]. Further research is needed to strengthen this evidence.

Educating children about oral health could see far reaching benefits. Children, like many adults, are unaware of the sugar content of what they eat. Children of primary school age also receive little education in oral health maintenance. Primary school is a key time for oral health development as permanent teeth come through. Investing in primary school oral education could improve their oral health for the rest of their lives.

Oral Health Educator Talks targeted at adolescents

Children of comprehensive school age receive very little guidance on oral health, plus many are suffering many years of bad habits as there is hardly any oral health intervention from the age of 6. Currently, many adolescents feel their daily life is impacted by their oral health, with 54% reporting they had daily problems[5], the most common being that they are embarrassed to smile or laugh. This is a very significant issue. Increased feelings of worthlessness and inferiority are twice as likely among adolescence with dental problems[14]. They are also more likely to feel unhappy and show reduced friendliness.

Poor oral health is leading adolescents to feel shyer and preventing them from getting involved[13]. Children of comprehensive school age will then face new oral health challenges; many of them will have braces, making oral health trickier to maintain, and wisdom teeth will start to come through. Many adolescents struggle to clean their wisdom as they are unaware of how and when to do so. They are also unaware of the benefits of mouth wash to wisdom teeth, particularly as pain relief. Adolescence with braces are often unaware of the importance of maintain good oral health to avoid staining teeth while wearing braces. This advice could discuss brushing techniques, foods and drinks to avoid and tips such as drinking drinks known to stain teeth through a straw. An oral health educator could greatly improve the oral health of children aged 11-17 and also improve their mental health.

Conclusion

In conclusion, the Welsh government has an opportunity to greatly improve the oral health of children in Wales. Investing a proportion of revenue raised by the sugar levy in children's oral health will help to stop Welsh children from suffering oral health inequalities and associated disadvantages. Oral health problems have been described as an epidemic in Wales and this needs to be addressed. Sugary drinks contribute to obesity and dental caries. Parliament is focussing solely on the recommended amount of exercise by proposing spending levy revenue on sports activities. However, the number of Welsh children meeting the required physical activity levels is double that of children in England. Therefore, the Welsh government should also address the area of children's oral health. The Welsh Government has made some successful steps for children's oral health, such as Designed to Smile. Revenue from the sugar levy provides an opportunity to make an impactful, lasting improvement to children's oral health in Wales.

Appendix 1: Financial Calculations

Sugar levy:

- 18p per litre on drinks with a sugar content of 5g per 100ml or higher.
- 24p per litre on drinks with a sugar content of 8g per 100ml or higher.

Type of Drink	Consumption in UK (litres per head)	Total Consumption in Wales (litres)
Carbonates	63	162,600,000
Dilutables	12	31,500,000
Still Drinks	13	33,100,000

Based on 2012 Figures, The 2013 Soft Drinks Report[15].

Dilutables, such as Ribena, and Carbonates, such as cola have over 8g per 100ml of sugar in them, making them subject to the 24p levy.

Carbonates: 24p per litre for 162,600,000= £39,024,000

Dilutables: 24p per litre for 31,500,000= £7,560,000

Still drinks vary in sugar content, so as the figure is an estimate it is logical to estimate using the lower sugar levy of 18p per litre.

Still drinks: 18p per litre for 33,100,000= £5,958,000

These figures are equal to the sum of £52,542,000.

This figure is a minimal figure as energy drinks will also be subject to the levy. These energy drinks include Lucozade Energy, Red Bull and Relentless, which all have a sugar content significantly higher than 8g per 100ml so will be subject to the 24p levy. As there is no data on the consumption in Wales of said specific energy drinks, it is not possible to estimate the figure.

This means the revenue the levy will raise will likely be higher than £52,542,000, even with companies choosing to lower sugar contents to avoid the tax.

These figures were also used to inform Plaid Cymru's 2014 research note which called for a 20p per litre tax on sugary drinks[16].

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