

Perceptions and Impact of Oral Conditions on Children and Families

Dr Georgios Tsakos
University College London

UNIVERSITY OF
BIRMINGHAM

CARDIFF
UNIVERSITY
PRIFYSGOL
CAERDYDD

KING'S
College
LONDON

 Newcastle
University

 UCL

Outline

- Perceptions of dental health and appearance
 - Self rated dental and general health
 - Satisfaction with appearance of teeth
 - Perceived need for teeth to be straightened
- Oral health problems and Impacts
 - Oral health problems: children self-reports and parental proxy reports
 - Impact of oral health on the Quality of Life of children
 - Impact of child's oral health on the family life
- Associations between Subjective Oral Health outcomes and Behaviours

Methodology

- Questionnaire based data
- Parental questionnaire (all age groups)
- Pupil questionnaire (12 & 15 year olds) – NEW to CDHS 2013
- Varying Response Rate:
 - Pupil Q: 99.6% of those clinically examined
 - Parental Q: 43% overall; higher among parents of 5- and 8-year-olds
- Analysis by age and focus on differences by gender and SES (free school meals eligibility)

Perceptions of dental and general health

- Global item questions - Overall assessment
- Wording:
 - How would you rate your dental health?
 - How would rate your general health?
- Answers:
 - Very good Very poor

How do children rate their dental and general health?

England, Wales and Northern Ireland 2013			Percentages		
Children aged 12,15	12 years	15 years		12 years	15 years
Dental Health			General Health		
Male	60	68	Male	83	90
Female	72	81	Female	87	87
FSM eligible	59	64	FSM eligible	83	83
Not eligible	67	77	Not eligible	86	90
% Total	66	74	% Total	85	88

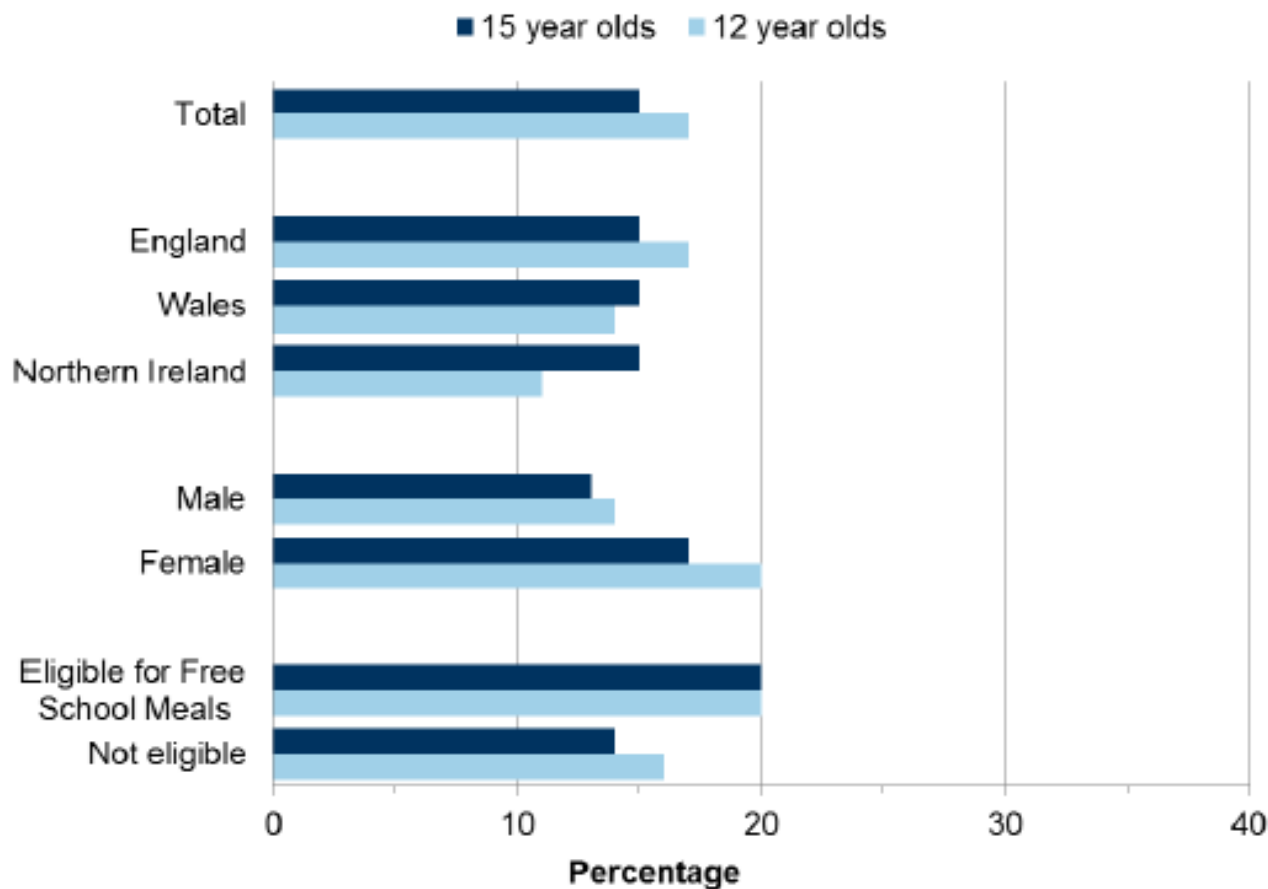
Gender and SES matter...

- Overall positive perceptions
- Better ratings for general (rather than dental) health
- Strong association of self-rated dental (but not general) health with gender: girls had better ratings than boys
- FSM eligibility associated with worse dental and general health ratings

Appearance of teeth

- Self-reports (aged 12 & 15) and Parental proxy reports (all 4 ages)
- Satisfaction with appearance of teeth
 - 5 point scale: Very satisfied... satisfied... neither satisfied nor dissatisfied... dissatisfied... very dissatisfied
- Perceived need for orthodontic treatment
 - “teeth are all right” ... “would prefer them straightened” ... “already in treatment”

Percentage of 12 and 15 years-old children reporting dissatisfaction with the appearance of their teeth, 2013



- About 1 in 6 dissatisfied with the appearance of their teeth
- FSM eligibility – higher % of dissatisfaction at age 15

Perceived need for treatment

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15		12 years	15 years
Male	Prefer teeth straightened	41	23
	Already in treatment	7	12
Female	Prefer teeth straightened	48	35
	Already in treatment	14	17
Eligible for free school meals	Prefer teeth straightened	58	36
	Already in treatment	5	13
Not eligible	Prefer teeth straightened	40	25
	Already in treatment	12	15
% Total	Prefer teeth straightened	44	29
	Already in treatment	11	15

- Girls more likely to pursue orthodontic treatment at age 12 and higher % of perceived need at 15
- FSM eligibility associated with higher perceived need (at both ages) and lower uptake of treatment at age 12

And what do parents think?

England, Wales and Northern Ireland 2013		Percentages			
All parents		5 years	8 years	12 years	15 years
Total	Prefer teeth straightened	6	26	26	14
	Already in treatment	*	3	21	16

- Concerned even when child is 8 years-old!
- Different estimates compared to children, even for being in orthodontic treatment...
- Remember, samples are not the same; RR of parental Q makes direct comparisons in the whole samples questionable...

Are children's perceptions different from those of their parents?

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15 with a parent assessment		12 years	15 years
Self Assessment	Parent Assessment		
My teeth are all right	Their teeth are all right	86	88
	Would prefer them straightened	7	5
	Child in treatment	7	7
Would prefer them straightened	Their teeth are all right	35	50
	Would prefer them straightened	46	42
	Child in treatment	18	8

Subjective vs Clinical perceptions of orthodontic treatment need

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15		12 years	15 years
My teeth are all right			
	Treatment needed	20	9
	No treatment needed	80	91
Prefer to have them straightened			
	Treatment needed	45	33
	No treatment needed	55	67

- Different standpoints
- Subjective perceptions and clinical assessments are both important for determining treatment need

Oral health problems and Impact

- Self-reported oral health problems (children aged 12 and 15)
- Parental proxy reports of children's oral health problems (children aged 5 and 8)
- Impact of oral health on the quality of life of children (aged 12 and 15)
- Impact of child's oral health on the family life (parental reports – all 4 ages)

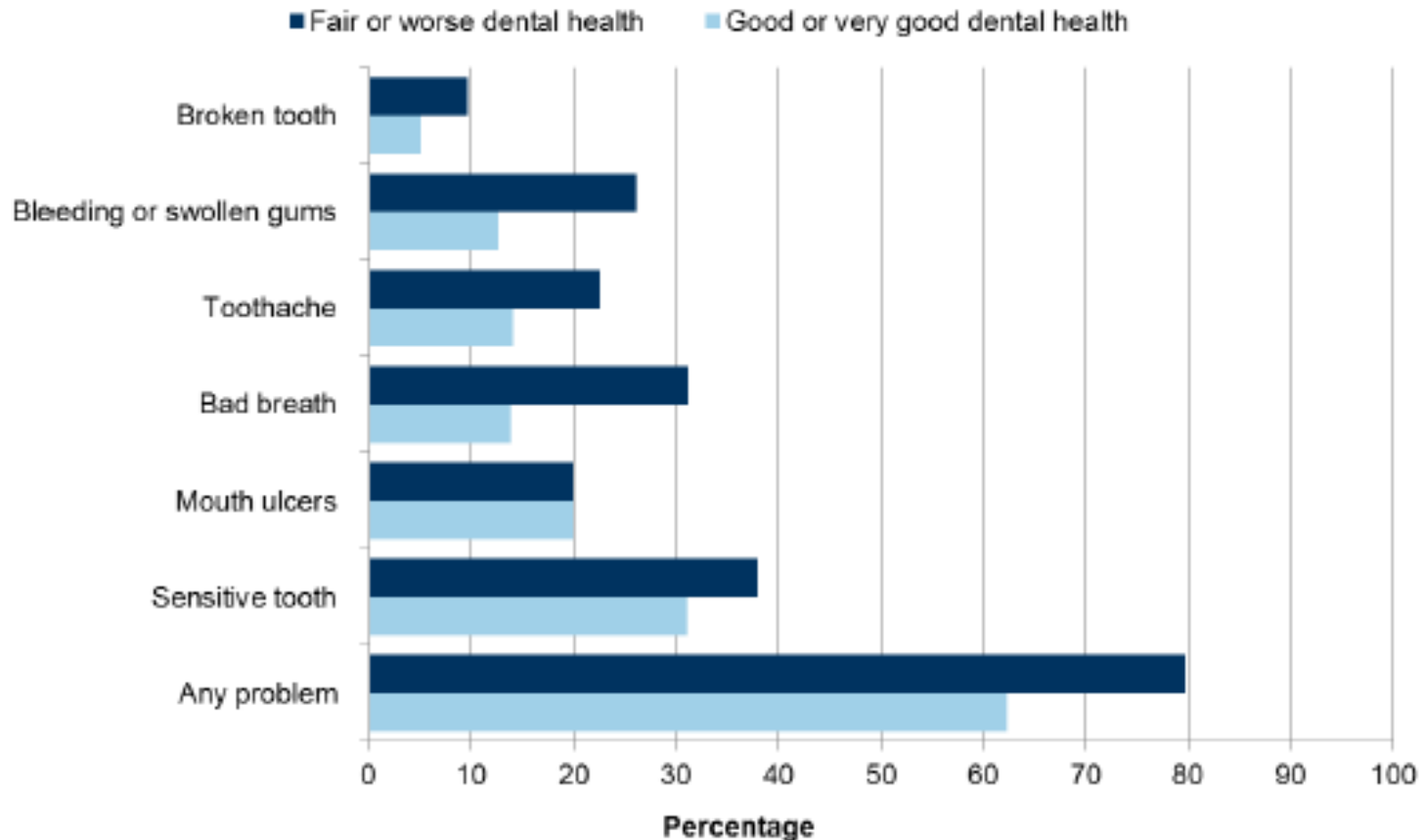
Self-perceived oral health problems

England, Wales and Northern Ireland 2013	Percentages	
Children aged 12,15		
Problems	12 years	15 years
Sensitive mouth	32	34
Mouth ulcers	20	20
Bad breath	20	18
Toothache	18	15
Bleeding or swollen gums	16	17
Broken tooth	8	5
Any problem	68	66

High prevalence even for severe oral health problems

- Large parts of the population are affected
- Sensitive teeth is very common; others are also common: mouth ulcers, bad breath, bleeding gums, even toothache in past 3 months!
- Gender differences: toothache (girls), bad breath (boys)
- SES differences: toothache and bleeding gums (FSM eligible), mouth ulcers (FSM non-eligible)

Oral health problems in the last 3 months, by self-rated dental health: 12 and 15 year-olds



- Associations with self-rated dental health
- ... but still high prevalence of reported problems even among those with good self-rated dental health

Parental reports of child's oral health problems

England, Wales and Northern Ireland 2013	Percentages	
Children aged 12,15	5 year olds	8 year olds
Toothache	14	20
Other pain in mouth	13	18
Bad breath	13	18
Broken tooth	5	15
Problems with appearance	5	11
Bleeding or swollen gums	3	10
Any problem	37	55

- Toothache, other pain and bad breath **from very young age**
- Very clear **social inequalities**: 49% of FSM eligible and 34% of non-eligible with oral health problems

Oral Impacts

- To what extent the mouth affects the Quality of Life of the child
- Child-OIDP
 - 8 key aspects of daily life
 - How much the teeth and mouth affect them?... “not at all” ... “a little” ... “a fair amount” ... “a lot”
 - Prevalence by impact; overall; extent (number of impacts reported)

Oral Impacts on daily life

England, Wales and Northern Ireland 2013	Percentages	
Children aged 12,15	12 year olds	15 year olds
Any difficulty in last 3 months	58	45
Difficulty eating	22	19
Difficult speaking	9	8
Difficulty cleaning teeth	22	14
Difficulty relaxing	10	9
Felt different	14	10
Felt embarrassed smiling or laughing	35	28
Difficulty doing schoolwork	6	3
Difficulty enjoying being with people	9	8

CDHS 2013 key finding



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More than a third of 12-year-olds embarrassed to smile because of their teeth

19 March 2015

More than a third (35%) of 12-year-olds and 28% of 15-year-olds say they have been embarrassed to smile or laugh due to how they felt about their teeth, finds a new UCL-led report commissioned by the Health and Social Care Information Centre.

The new report, Attitudes, Behaviours and Children's Dental Health, reveals for the first time how children aged 12 and 15 feel about their dental health. It was written by Dr George Tsakos (UCL Epidemiology & Public Health) in collaboration with colleagues at the Universities of Birmingham, Cardiff and the Office of National Statistics.

58% of children aged 12 and 45% of those aged 15 reported that their daily life had been affected in some way by oral problems in the last three months. This was most commonly experienced as embarrassment when smiling, laughing or showing teeth, followed by difficulty eating, and difficulty cleaning teeth.

"Oral conditions can affect children's quality of life in many different ways, not just with physical impacts such as eating but also psychologically and socially," says Dr Tsakos. "We found that problems were much worse in those eligible for free school meals, with 33% of 15 year olds eligible and 22% of those not eligible (for free school meals) saying that their oral health made their everyday life more difficult. This highlights the extent of social inequalities in oral health and quality of life among adolescents and the need for preventive strategies to improve oral health particularly for the more deprived children in the population."

Other key findings from the report include:

- › 44% of 12 year olds and 28% of 15 year olds reported that they would like to have their teeth straightened. Children eligible for free school meals were more likely to want their teeth straightened, but started treatment much later than children not eligible.
- › Two thirds of 12 and 15 year olds reported a problem with their dental health in the last three months. The most prevalent problem was sensitive teeth, reported by 32% of 12 year olds and 34% of 15 year olds, followed by mouth ulcers, bad breath, toothache and bleeding gums.
- › 71% of 12 year olds eligible for free school meals reported brushing their teeth twice daily, compared with 78% of those not eligible.



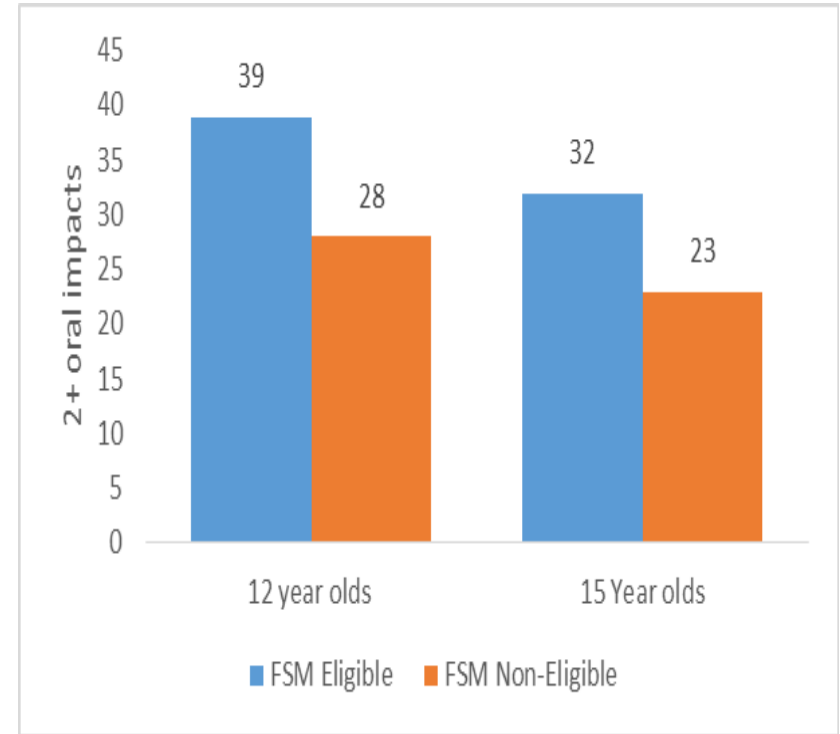
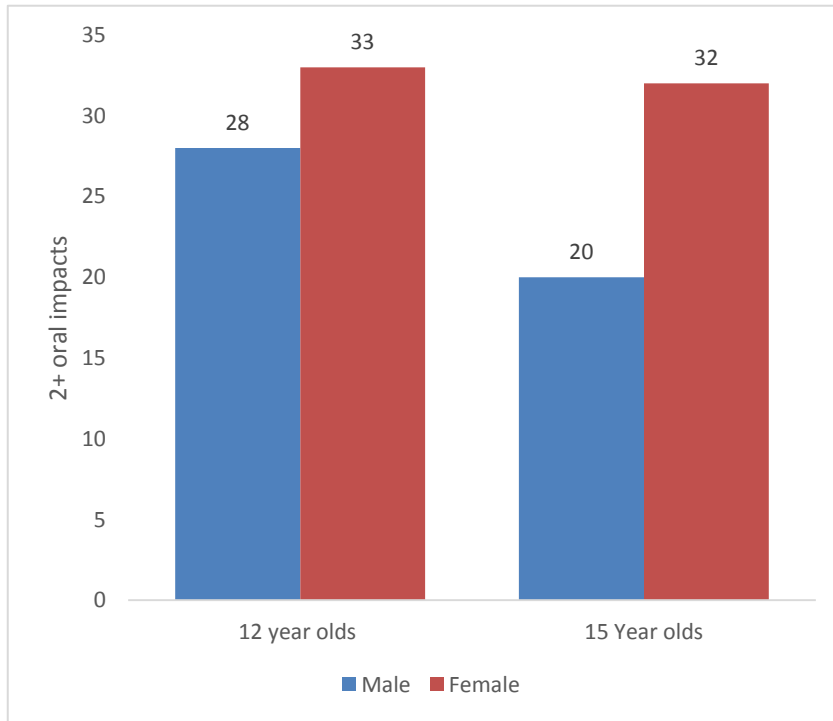
“

Urgent action is needed to tackle oral health inequalities. It is simply unfair and unjust that children from deprived households suffer so much from dental diseases that are largely preventable. Organisations such as Public Health England have a key role in addressing this problem.

”

Professor Richard Watt

Variation by gender and SES



- FSM eligibility does not fit well with good QoL, ... more deprived children are particularly vulnerable for high levels of impacts

Impact on family life

England, Wales and Northern Ireland 2013 Children aged 5, 8, 12,15	5 years	8 years	12 years	15 years
Time off work	7	12	19	23
Child needed more attention	11	16	14	15
Parent felt stressed or anxious	11	18	15	13
Parent felt guilty	8	13	11	11
Family activities interrupted	5	5	6	8
Parent's sleep disrupted	7	10	7	6
Financial difficulties	2	2	3	4
Any Family Impact	21	32	32	35

Subjective oral health outcomes: associated with behaviours?

- 3 key subjective outcomes
 - Self-rated dental health
 - Toothache in the last 3 months
 - Any oral impact in the last 3 months
- Health behaviours
 - Dental attendance
 - Tooth brushing frequency
 - Sugary drinks
 - Smoking

Subjective oral health outcomes by dental attendance pattern

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15		12 years	15 years
Self-rated dental health – fair / worse	Check-up	30	20
	Not for a check-up	52	46
Toothache in the last 3 months	Check-up	17	13
	Not for a check-up	22	24
Oral impacts in last 3 months	Check-up	55	44
	Not for a check-up	70	54

- Going for a check-up.... Better perceptions and quality of life

Subjective oral health outcomes by tooth brushing frequency

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15		12 years	15 years
Self-rated dental health - fair / worse	Twice or more a day	28	20
	Once a day or less	56	47
Toothache in the last 3 months	Twice or more a day	17	14
	Once a day or less	21	21
Any oral impact in last 3 months	Twice or more a day	55	45
	Once a day or less	66	48

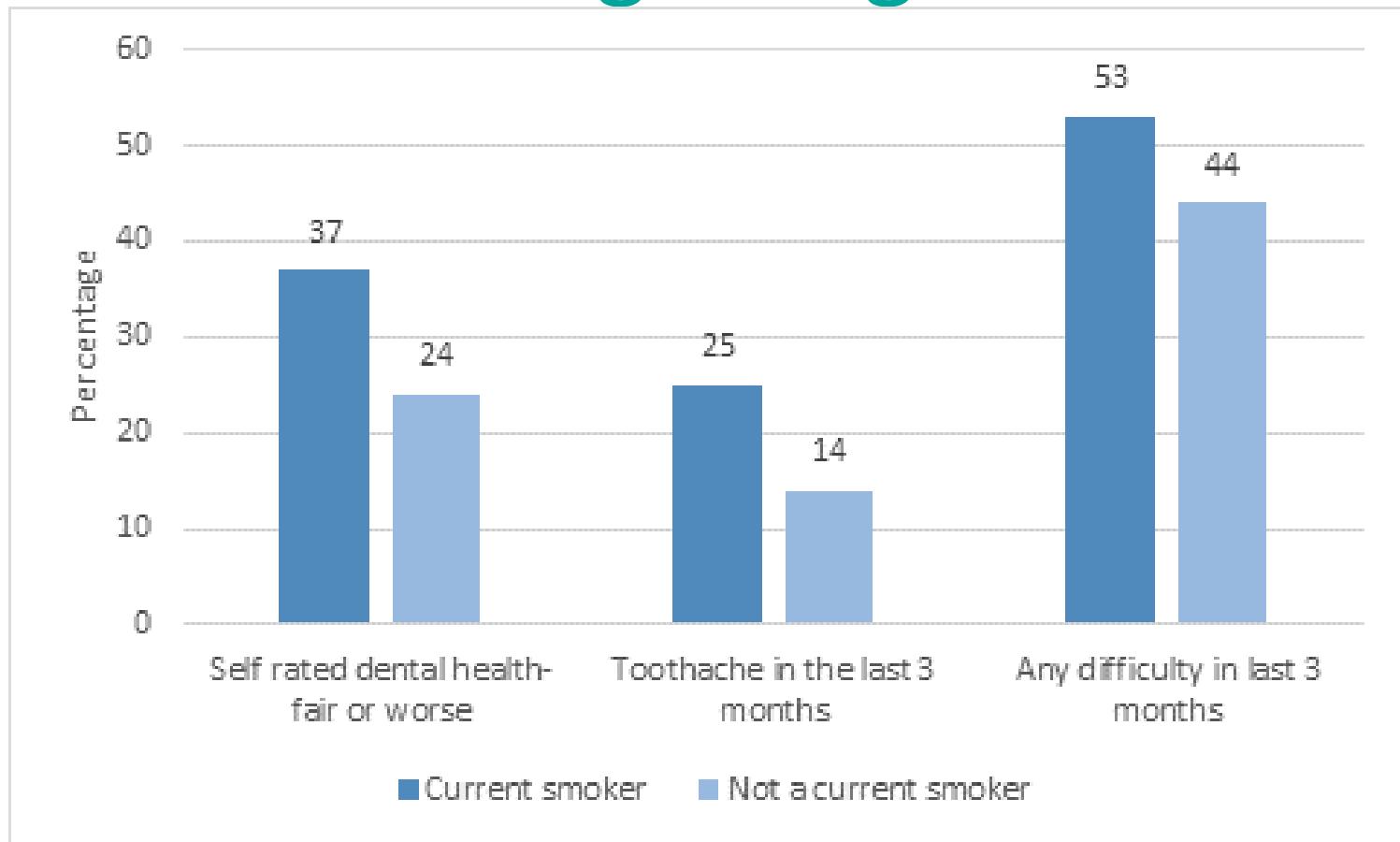
- ... and it is also good to brush...

Subjective oral health outcomes by sugary drinks consumption

England, Wales and Northern Ireland 2013		Percentages	
Children aged 12,15		12 years	15 years
Self-rated dental health - fair / worse	Four or more times a day	37	38
	Less often	33	24
Toothache in the last 3 months	Four or more times a day	29	21
	Less often	16	14
Oral impacts in last 3 months	Four or more times a day	66	54
	Less often	56	44

- High sugar consumption ... toothache and worse QoL

Subjective oral health outcomes by smoking at age 15



- Smoking associated with worse perceptions for all outcomes
- “Gateway” behaviour for clustering of risk

Conclusions

- Majority had positive overall perceptions of their dental health... BUT...
- ... a considerable part of the population experienced oral problems, including toothache
- A large proportion (about half) reported their **quality of life was negatively affected** by their oral health (smiling, eating, cleaning teeth)

Conclusions

- **Clear social inequalities** across a range of subjective oral health outcomes
 - Worse perceptions
 - More oral health problems
 - Higher impact on quality of life
- Risk **behaviours linked** with worse perceptions and impact
- Public health action on determinants of health

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Child Dental Health Survey 2013

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