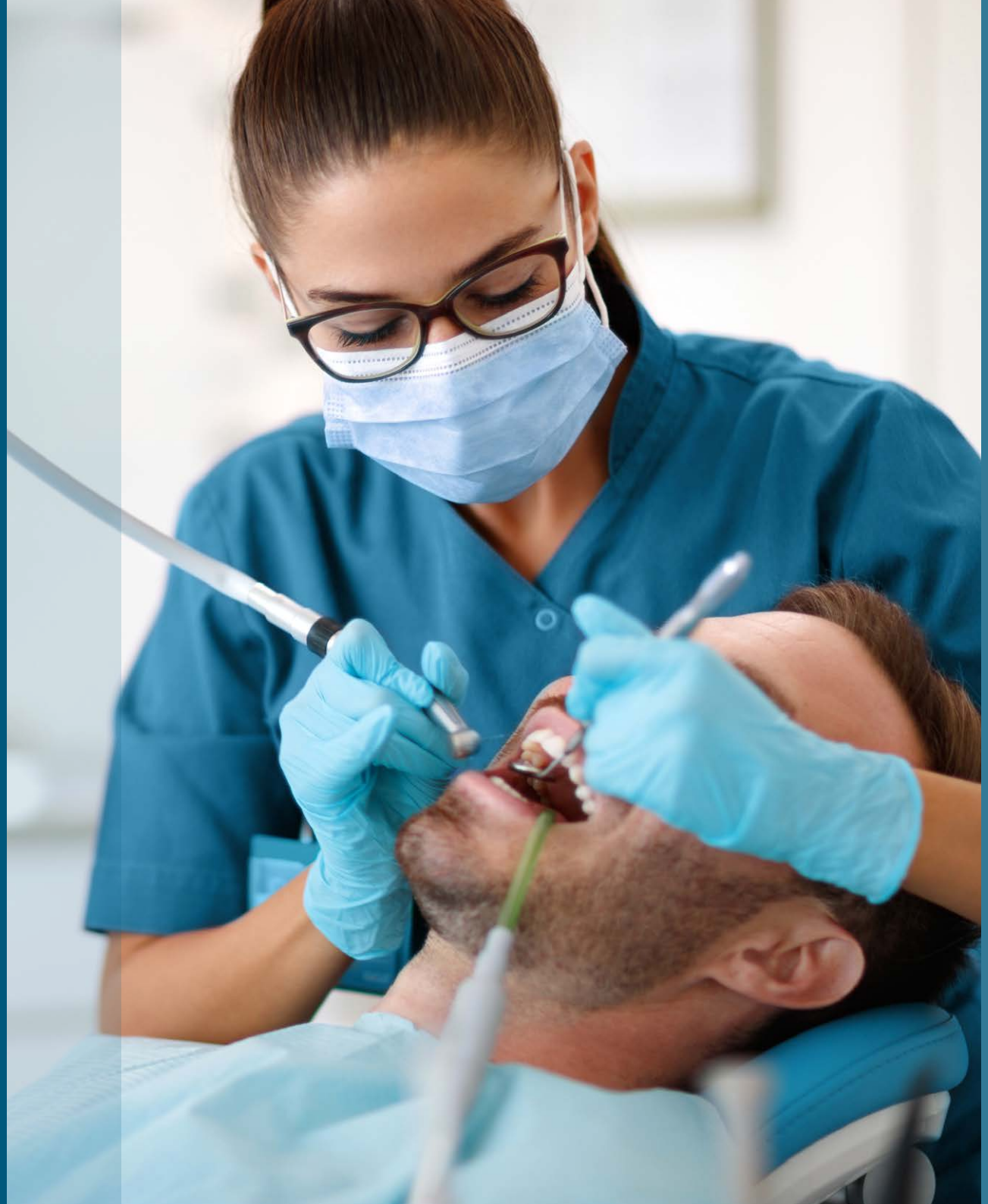

SUNSTAR

Global Healthy Thinking Report

2021 Oral Health Awareness Survey
A worldwide consumer study of oral health and dental care

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Introduction

One of the outstanding conclusions to emerge from Sunstar's global consumer awareness survey of oral health and dental care is the worldwide value attached to a healthy mouth. The largest survey of its kind seeking views in 15 countries worldwide, the findings reveal that significant numbers of consumers are investing in their oral health and are committed to improving their smile.

Equal numbers of men and women aged 18 to 65 in countries across Europe, Asia and North and South America were asked for their views on oral health issues including their dental care routine.

The answers provided by the 15,000 respondents to questions on dental habits paint a detailed and fascinating picture. Outstandingly, **53% of people say they keep their mouth healthy and fresh by brushing their teeth twice a day while 35% brush with fluoride toothpaste for around two minutes and 39% brush their tongue regularly**. This reflects a high level of attention to oral hygiene worldwide.

While many of those surveyed invest in their oral health and the toothbrush and mouthwash are widely used, individual dental health is variable. 50% of the total worldwide have between 1-10 fillings. At local level, this may be explained by country specific factors, such as the dental system or the extent of water fluoridation or, at individual level, the routine use of fluoride toothpaste or fluoride mouthwash. Levels of dental decay and gum disease are most certainly associated with cultural practices and lifestyle choices, such as diet, alcohol consumption, smoking or use of smokeless tobacco products.

More than 1000 people were questioned from each of the 15 countries and one fifth of the total confirm they have a bad habit of one kind or another which impact their oral health. 20% like eating sweets, 20% like smoking and 18% consume drinks which stain their teeth.

Around the world, **many people admit to not brushing their teeth, the most common excuse being that they forget**. Indonesians rank the highest with 45% admitting they forget while as many as a third of respondents in the UK, Italy and Argentina say they never forget to brush their teeth.

Asked how they would describe their oral health, 28% of the total said they had no problems, with the UK ranking highest at 40% contrasting with Thailand where only 10% say they have no problems.

The oral health issue which troubles the highest number of respondents is tooth sensitivity – 30% of the total – while tooth decay is ranked third at 28% and gum disease (22%) ranked fourth. Bad breath, tooth erosion and mouth ulcers or sores each ranked much lower and combined together accounted for 34% of oral health issues globally.

Among the divergences in attitudes and practices around the world:

- Asian peoples are more conscious of having bad breath, possibly due to mask wearing or greater exposure to advertising directed at fresh breath
- Countries where implants are more likely to be placed include Singapore, France, the Netherlands, Spain, Italy and Germany
- Tongue cleaning is far higher in some countries such as Brazil, while mouthwash use and chewing sugar-free gum is higher in China than elsewhere
- While 52% of the total support the idea that basic health checks could take place in dental practices, some populations – in Indonesia and Thailand - were positive and some were opposed to this new concept, such as in Germany, France and Japan

Interestingly, **the COVID-19 pandemic has had an effect on lifestyle and oral hygiene habits**. 27% of the global total said they were brushing their teeth more and 22% said they were using mouthwash more regularly. The outlier is Japan, where 47% of respondents said their oral care habits had not changed.

There is a striking consistency in answers relating to the appearance of the smile. Asked if they could do anything to improve their smile, 41% say they would whiten their teeth. They opted for tooth-whitening in preference to having straighter teeth or other cosmetic interventions. Only 9% of the total are happy with their teeth and would not want any cosmetic improvements.

Overall, this survey provides fascinating insights into the oral health of populations around the world as well as consumer priorities. In conclusion:

- Good personal oral hygiene needs to be consistent and go hand in hand with lifestyle changes, such as reducing sugar consumption and smoking
- The dental practice has the potential to be developed as a centre where health-related tests can be undertaken
- A healthy mouth and a whiter smile are aspirational the world over

We believe these findings should positively underpin approaches to oral health provision and advice as well as influence consumer habits in a future which should be bright for manufacturers of oral healthcare products, such as Sunstar.

By Caroline Holland.
Caroline Holland is a UK based writer specialising in dentistry. She has written for the Scientific American, the FDI, the British Dental Journal and contributed to multiple dental journals in the UK; she was the founder editor of the UK title Dental Nursing.

Summary overview

When Sunstar commissioned its worldwide consumer awareness survey of oral health and dental care it wanted to create a current global snapshot of the state of consumers' oral health across the world and many of the countries it operates in across its oral care brands including GUM, Butler and Ora2. The company also wanted to understand on a global scale how the Covid-19 pandemic has affected consumers' overall oral health.

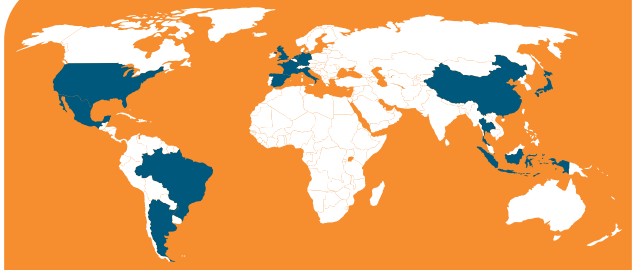
The results really do give an amazing indepth picture of the state of much of the world's oral health, our habits, concerns and desires – and show that overall **as a global population we really do care about a healthy mouth**, although individual dental health does vary, along with oral health priorities.

Along with the introduction which provides a comprehensive snapshot overview of the survey results by specialist dental writer, Caroline Holland, who has spent her career in the field, the coming pages offer full depth analysis of the survey results, individual country oral care profiles and articles exploring the themes. To begin, some initial summary facts and figures from the Sunstar Global Healthy Thinking Report 2021.

Numbers surveyed/split

Minimum **1,000** respondents per country
= **15,000** worldwide

18-65 years old, equal gender split



Countries surveyed

Argentina, Brazil, China, France, Germany, Indonesia, Italy, Japan, Mexico, Netherlands, Singapore, Spain, Thailand, UK, and US

The worldwide consumer oral health and dental care survey questioned consumers on:

- Condition of their teeth
- How they describe their oral health
- How they look after their oral health/ any bad habits
- When they skip brushing their teeth
- Where they go for advice on keeping teeth healthy
- How people would like to improve their smile
- Whether they have ever attempted any DIY dental treatments at home?
- How the pandemic has affected overall oral health
- Whether they think their dental practice could help with other health checks and knowledge of dental health and other conditions
- Whether their communication habits have changed since the pandemic began

Key findings

Best country for brushing teeth twice a day - and most likely to report that they have no issues with dental and oral health

The UK (40% no issues).

63% of Britons brush teeth twice a day and have the highest figure globally for brushing with fluoride toothpaste, **47%**. **14%** are happy with their teeth.

But tied with Japan for the highest percentage of people with one to five fillings at **47%**.

Which country most regularly visits the dentist?

Germany scored the highest for regularly visiting the Dentist with **45%** of people going twice a year.

31% have no problems with their oral health. After the Netherlands, Germany and Brazil scored the lowest for tooth decay, **21%** and **20%**.

Surprisingly, Germany also scored the highest **24%** for not believing the dental practice is also a convenient place for other health checks.

The country which has the sweetest tooth – and most fillings?

Just **7% of Japanese** avoid sugary snacks and drinks – the lowest worldwide and the Japanese also report the most fillings – over **two-thirds** had at least one filling and **20%** had five or more fillings.

Japan also scored the highest numbers for not seeking dental advice at all, **19%**.

Which countries are best at never forgetting to brush their teeth?

33% of Italians, Argentinians, Britons said they never forget to brush their teeth, followed by **32%** of Spaniards.

Singaporeans scored the lowest worldwide with **19%** saying they never forgot to brush their teeth.

Best for interdental cleaning and understanding of links between oral health and general health

52% of Brazilians clean between their teeth regularly, on the contrary, Indonesians are the worst at cleaning between their teeth at just **12%**, followed by France, **16%**.

Brazilians also have a good understanding of the links between oral health and general health – just **6%** (the lowest worldwide) said there was no link. Just **2%** also the lowest worldwide said they never seek advice from a dentist.

Which country is the best for taking dental advice from a dentist?

81% of Mexicans take dental advice from their dentist – the highest worldwide. Just **3%** say they do not seek any dental advice. This also maybe why Mexico has one of the best understandings of the link between oral health and smoking.

Which one treatment across all countries was the most popular option if people could improve their smile?

Tooth whitening was by far the most popular option worldwide if people were to choose one treatment to improve their smile – **47%** of Italians, Mexicans and Spanish chose this, closely followed by **46%** of Chinese.

13% favoured dental implants in France, Germany and Spain as their first choice, while **11%** of Thai would choose dental veneers as their favoured treatment to improve their smile.

Which country does the least DIY dentistry?

82% of the Japanese said they had never attempted any DIY dentistry followed by **81% of Britons, 80% of Spanish and 76% Argentinians**.

Which countries are the Top DIY dentistry home bleachers?

Worryingly, **28% of Mexicans** said they had done home teeth bleaching using household bleach, **26%** of Italians and **24%** of Chinese – all risking burning their mouth or being poisoned by the toxic ingredients and doing irreversible damage to their mouth and teeth.

The countries least likely to attempt this are the Spanish and the Japanese at **3%** followed by French and Britons at **5%**.

DIY dentistry is never recommended and it is strongly advised that dental procedures are only ever carried out by qualified dental professionals.

Sunstar Global Healthy Thinking Report Analysis

Here we report the overall key findings from the consumer awareness survey along with our analysis of the results incorporating country specific factors such as the dental system and cultural/lifestyle choices. All the consumer findings are self-reported.

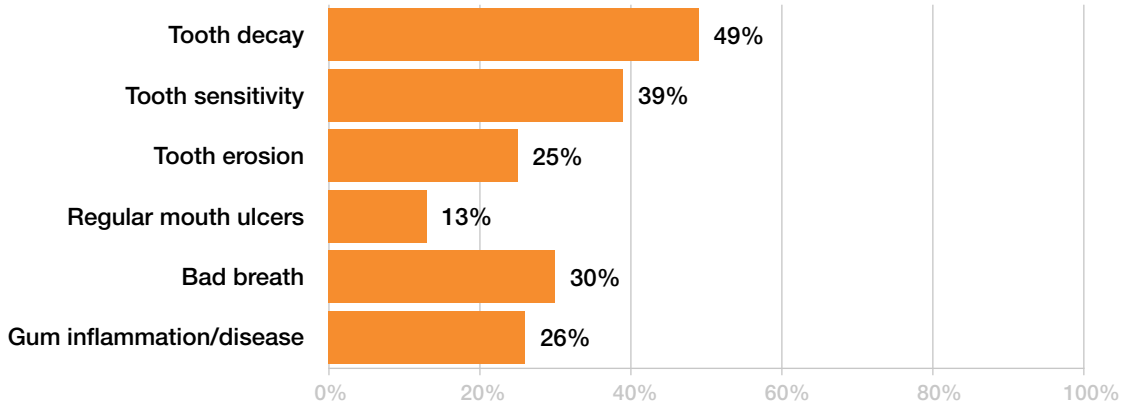
Which country reports the most oral health issues?

People in Thailand report the most and worst problems with their oral health.

Only 1 in 10 Thai respondents say they have no problems. **Just 5% are happy with their teeth**.

This is despite the fact that Thailand is amongst the top countries for:

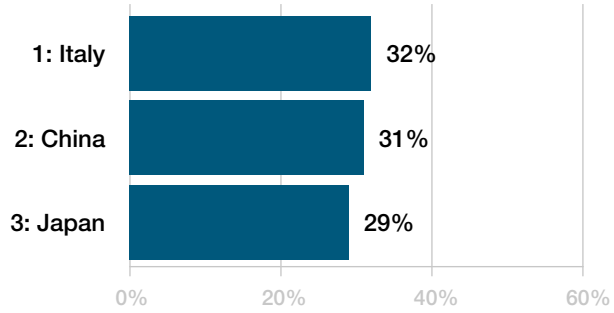
- Brushing their teeth regularly
- Brushing for two minutes with fluoride toothpaste
- Mouth washing daily/twice daily



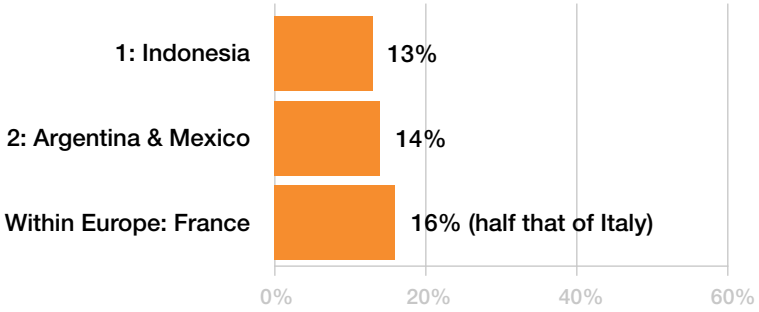
How would you best describe your oral health? (self-reported)		Overall	Argentina	Brazil	China	France	Germany	Indonesia	Italy	Japan	Mexico	Netherlands	Singapore	Spain	Thailand	UK	US
1st	I have tooth sensitivity	30%	33%	37%	27%	28%	33%	27%	30%	19%	28%	27%	29%	32%	39%	31%	34%
2nd	I don't have any problems	28%	30%	32%	25%	33%	31%	23%	23%	27%	35%	31%	22%	26%	10%	40%	27%
3rd	I have tooth decay	28%	30%	20%	32%	23%	21%	48%	30%	25%	27%	13%	26%	28%	49%	22%	26%
4th	I have gum inflammation/gum disease/gingivitis	22%	14%	17%	31%	16%	23%	13%	32%	29%	14%	26%	23%	26%	26%	19%	24%
5th	I have bad breath (halitosis)	17%	13%	8%	26%	11%	12%	17%	15%	34%	9%	14%	23%	11%	30%	10%	16%
6th	I have tooth erosion	11%	7%	5%	9%	9%	9%	12%	10%	4%	4%	10%	19%	12%	25%	14%	16%
7th	I have regular mouth ulcers/sores	6%	4%	2%	11%	4%	3%	12%	2%	11%	2%	8%	7%	4%	13%	5%	6%

Which country has the most gum inflammation/gum disease according to the survey? (self-reported)

The most



The least

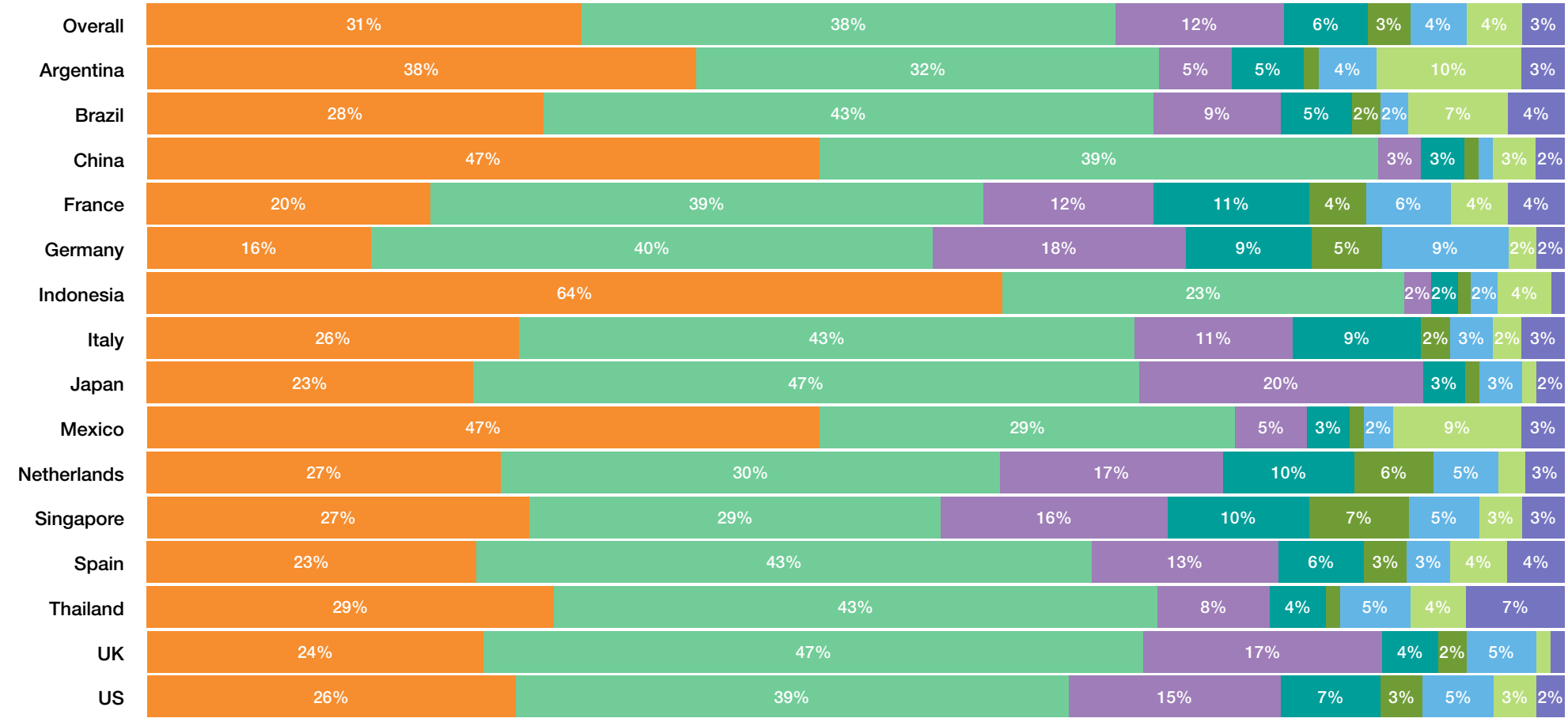


NB Tooth decay and periodontal disease should be diagnosed by a dentist. Periodontal disease is often called the 'silent disease'. By the time you realise it, it is often too late.

It is surprising that Indonesians report the least gum inflammation/gum disease, as they are also the worst for cleaning between their teeth (**12% regularly floss**). Based on the result, Indonesia ranks lowest for regular dentist visits, so it is possible many Indonesians do not recognise it or have not had periodontal disease officially diagnosed by a dentist.

Comparatively, Argentinians and Mexicans are both better than average at interdental cleaning. (**32% and 33% respectively**).

Which country has all their own teeth, with no fillings or implants?



Indonesia – 64% of survey respondents have all their own teeth, with no fillings or implants

- People in Indonesia report the lowest level of dental work, this maybe because only **48%** of Indonesians visit their dentist to get advice - the lowest in this 15-nation survey.
- Just **1 in 4** have one or more fillings.

Germany – 16% of respondents have all their own teeth, with no fillings or implants

- Over half (**58%**) have one or more fillings.
- Almost **1 in 10** have dentures or a plate.
- Only **5%** of German 56-65 year-olds have their own teeth and no fillings/implants.

Why does dental health vary so widely between these two countries?

This could be because:

- Germany ranks highest for regular dentist visits.
- **45%** of Germans normally visit the dentist twice a year.
- Only **21%** of Germans have tooth decay (one of the lowest figures in Europe, after the Netherlands).

Whereas Indonesia ranks lowest

- Only **21%** of Indonesians normally visit the dentist twice a year.
- They are the worst for cleaning between their teeth regularly - only **12%** do so.
- Indonesians have the second-highest level of tooth decay (**48%**) after Thailand (**49%**).

Yet they are the best out of all the survey markets for brushing their teeth twice a day (**64%** do so).

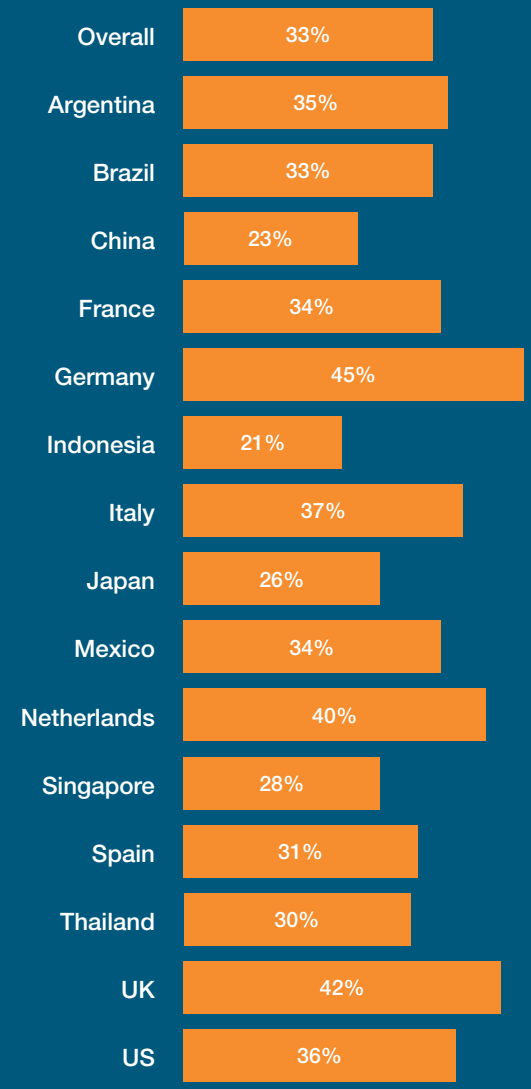
How could dental care in Indonesia impact levels of tooth decay?

"Underprovided and underutilized"-The Republic of Indonesia Health System Review, World Health Organization, 2017

- Inequality of access to dental care exists for rural vs urban communities.
- Public sector dental care is available at puskemas (community health clinics) and hospitals.
- The private sector provides most dental care. Unlicensed dental practitioners conduct most of this work.
- Service use is concentrated in people of higher SES – access is linked to ability to pay.

WHO, 2017

I visit the dentist twice a year (in normal years)



How do dental care systems vary across different regions worldwide?

Germany

“Germany has more dentists, dental technicians and dental nurses than any other EU member state.”

Ziller, Eaton & Widström, 2015

Care is semi-privatised. There is a statutory health insurance system (the world’s first) that covers dental check-ups and basic care. Private insurance is available and covers more extensive treatment.

US

“Many people living in the United States have poor oral health due to lack of access to care”

U.S. Department of Health and Human Services Oral Health Coordinating Committee, 2016

Dental care is seen as separate to healthcare, so is not well integrated. Most state Medicaid (public health insurance) programmes do not cover adult dental care.

Japan

A universal health insurance system offers everyone access to most dental checks and treatment at a low cost, through both public and private providers.

Dental care is highly regulated.

Every public school is allocated a school dentist who provides check-ups and education.

Zaitsu, Saito & Kawaguchi, 2018

Which countries say they have the worst breath?

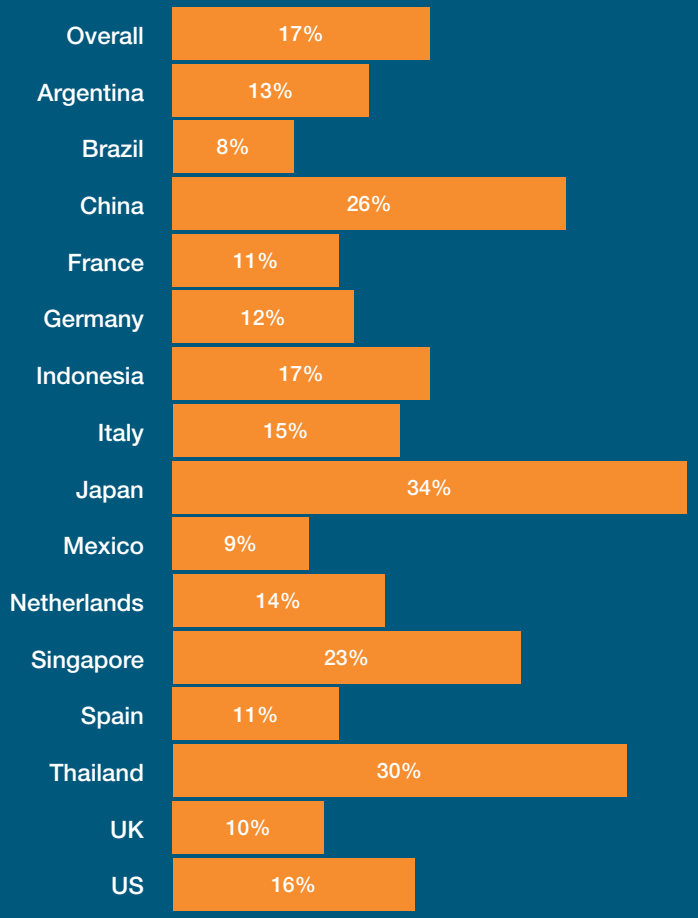
The Asian markets all report bad breath more commonly than elsewhere.

The worst is Japan, where over a third (**34%**) say they have bad breath... Interestingly, Japan also is the lowest user of mouthwash.

Less than 1 in 10 Mexicans (**9%**) and Brazilians (**8%**) report bad breath. Brazilians brush their tongue the most (**59%**) and also regularly clean between their teeth (**52%**).

Within Europe, bad breath is most common in Italy (**15%**) and least common in the UK (**10%**).

How would you describe your oral health? "I have bad breath" (halitosis)



Which countries are the worst for attempting DIY Dentistry at home?

While globally **63%** of survey respondents said they had not attempted any DIY dental treatment at home without a dentist, responses did vary greatly according to the country – with home treatments varying, including own attempts at teeth-whitening, teeth-straightening, pulling out a tooth, own scale/polish, homemade dental implants and DIY veneers and white fillings – none of which are recommended due to serious damage and harm it could cause.

- **21%** of Indonesians and **25%** of Singaporeans have had to pull out their own tooth.
- More than one in four (**28%**) Mexicans have bleached their own teeth with household bleach – which risks burn the mouth and tissues and causing possible irreversible damage.

(Indonesia and Singapore have the lowest percentage of people who say they have not attempted an at-home dental treatment, 42%).

- Across Germany, US, and Japan, men were more likely to have pulled out their own tooth.

– The divide is widest in the US, where double the percentage of men have done so (24%, compared to 12% of women).

- DIY dentistry on the whole was **least common amongst 56-65 year olds** (the oldest cohort).

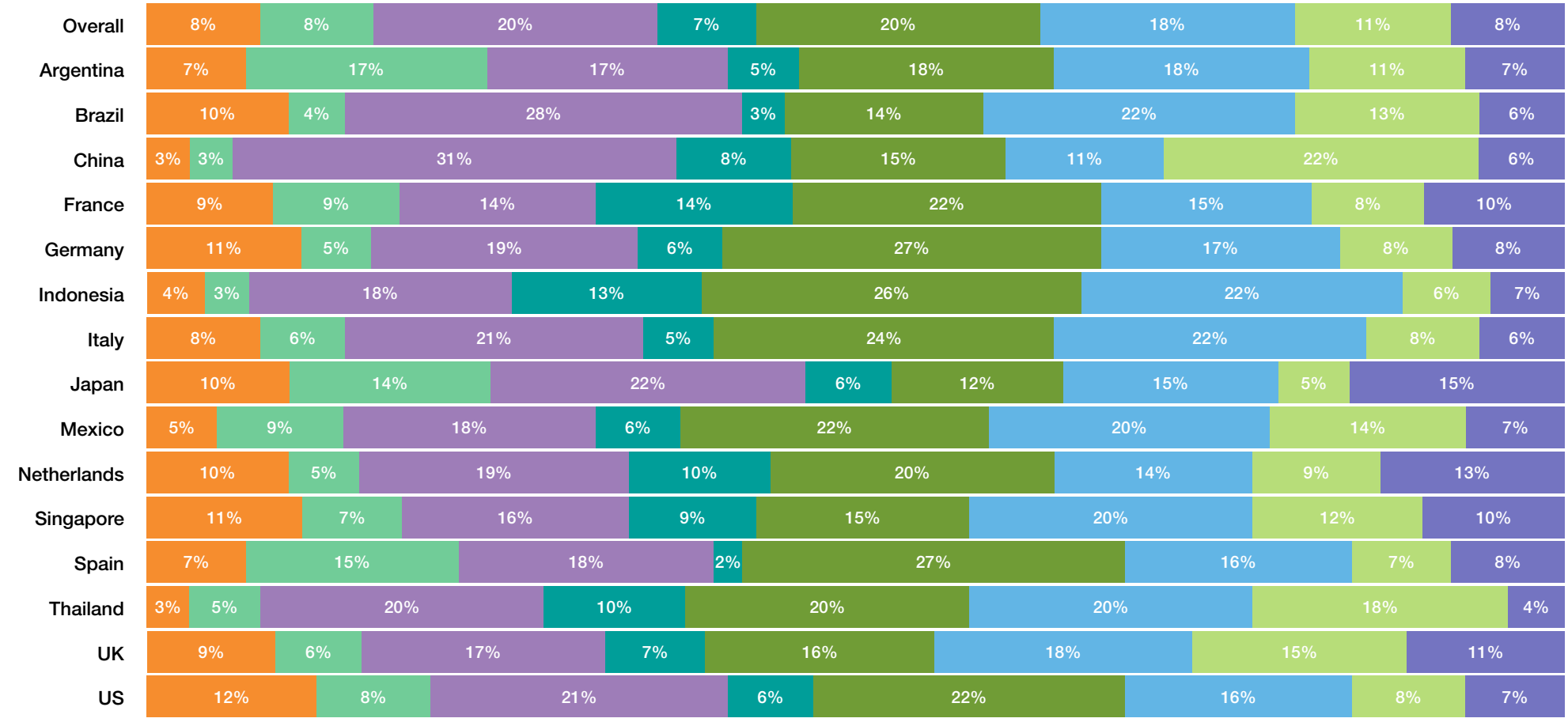
What are the dangers of any DIY dentistry?

"DIY home dentistry is a terrible idea and should be avoided at all costs," adds Dr Carter. "Home treatments in untrained hands often comprise of shortcuts that come with added dangers and **can lead to permanent damage to your health**."

Chief Executive of the Oral Health Foundation, Nigel Carter OBE, on DIY dentistry, January 2021.

As an adult, have you ever attempted any DIY dental treatment at home without a dentist		Overall	Argentina	Brazil	China	France	Germany	Indonesia	Italy	Japan	Mexico	Netherlands	Singapore	Spain	Thailand	UK	US
1st	No	63%	76%	69%	60%	67%	62%	42%	59%	82%	60%	56%	42%	80%	48%	81%	60%
2nd	Yes, bleaching using household bleach	14%	10%	15%	24%	5%	11%	17%	26%	3%	28%	10%	15%	3%	16%	5%	15%
3rd	Yes, pulled out own tooth	13%	8%	11%	10%	11%	11%	21%	9%	5%	8%	15%	25%	9%	19%	8%	17%
4th	Yes, scale/polish	12%	7%	4%	10%	15%	16%	28%	9%	9%	6%	15%	19%	6%	23%	6%	9%
5th	Yes, made own denture/prosthetic tooth	4%	1%	2%	5%	4%	5%	2%	3%	2%	1%	7%	15%	3%	3%	2%	9%
6th	Yes, made own plate/false teeth	2%	1%	2%	3%	2%	3%	1%	3%	1%	1%	5%	5%	2%	3%	1%	5%
7th	Yes, made own brace/retainer	2%	1%	1%	2%	2%	2%	2%	1%	1%	1%	3%	3%	1%	3%	1%	4%

What is your worst bad habit harmful to your dental health that you would like to give up?



Top three worst habits

3 ‘S’s what is your worst bad habit harmful to your dental health that you would like to give up?

Sweets

20% of all respondents.

China has the sweetest tooth: **31%** admit that this is their worst habit.

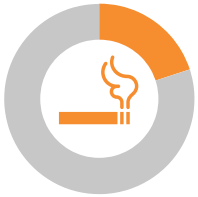
Only **16%** of Singaporeans said this was their worst habit (although it was the second worst habit nationally).

Staining drinks

18% of all respondents.

This peaks in Italy, Indonesia, and Brazil at **22%**.

The lowest incidence is in China, at **11%**.



Smoking

20% of all respondents.

This peaks in Germany and Spain (**27%**).

Only **12%** of Japanese respondents admitted to smoking.

What do you do to keep your mouth healthy and breath fresh?

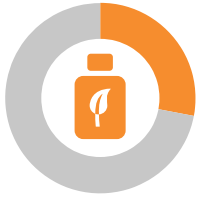
		Overall	Argentina	Brazil	China	France	Germany	Indonesia	Italy	Japan	Mexico	Netherlands	Singapore	Spain	Thailand	UK	US
1st	I brush my teeth twice a day	53%	53%	40%	59%	50%	56%	64%	51%	56%	45%	50%	48%	47%	57%	63%	54%
2nd	I brush my tongue	39%	53%	59%	20%	33%	35%	29%	28%	27%	54%	34%	33%	41%	46%	43%	54%
3rd	I brush my teeth with a fluoride toothpaste for around two minutes	35%	39%	38%	24%	32%	36%	33%	35%	25%	23%	35%	30%	39%	40%	47%	40%
4th	I visit the dentist twice a year (in normal years)	33%	35%	33%	23%	34%	45%	21%	37%	26%	34%	40%	28%	31%	30%	42%	36%
5th	I use a mouthwash daily or twice daily	33%	29%	39%	31%	26%	31%	33%	32%	21%	37%	22%	31%	41%	41%	36%	38%
6th	I brush my teeth immediately after every main meal and rinse my mouth with water	31%	44%	44%	28%	28%	17%	39%	42%	22%	48%	18%	24%	39%	33%	10%	21%
7th	I floss my teeth regularly	29%	32%	52%	22%	16%	29%	12%	29%	23%	33%	35%	29%	31%	25%	28%	40%
8th	I use an electric toothbrush	23%	5%	5%	35%	29%	39%	6%	33%	16%	7%	38%	17%	33%	10%	39%	27%
9th	I gargle with a mouthwash when I return home	20%	18%	22%	28%	13%	21%	22%	23%	8%	23%	13%	24%	23%	23%	15%	24%
10th	I avoid sugary snacks and drinks	16%	11%	10%	24%	19%	15%	17%	15%	7%	13%	15%	22%	13%	23%	13%	16%
11th	I chew sugar-free gum	16%	10%	7%	27%	18%	22%	12%	17%	12%	10%	16%	13%	17%	15%	17%	20%
12th	I use an electric airflosser/floss/use an interdental cleaner	13%	11%	8%	21%	16%	11%	7%	20%	10%	14%	12%	15%	18%	14%	10%	13%
13th	Something else	1%	1%	*%	0%	*%	1%	*%	*%	1%	*%	1%	*%	1%	*%	1%	1%

So which countries in the survey are looking after their oral health best?

Most countries are inconsistent with their dental care habits – doing well on some things, and poorly on others.

Brazil is top for tongue-brushing and cleaning between teeth but bottom for regular tooth-brushing, electric toothbrush use, and chewing sugar free-gum.

France is the worst European for cleaning between their teeth, but the **best for avoiding sugary snacks and drinks**.



China leads on several metrics:

- **28%** gargle with mouthwash when they arrive home.
- **27%** chew sugar-free gum.
- **24%** avoid sugary snacks and drinks.
- **21%** use an electric air flosser or interdental cleaner.

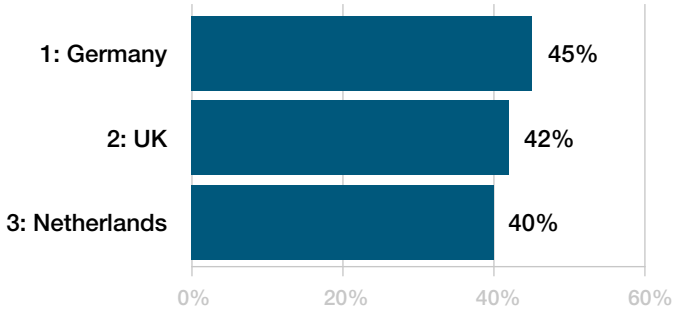
Yet is the worst by far for tongue-brushing (only 20%) and second-worst for regularly visiting the dentist.

The **UK** is one of the most consistent:

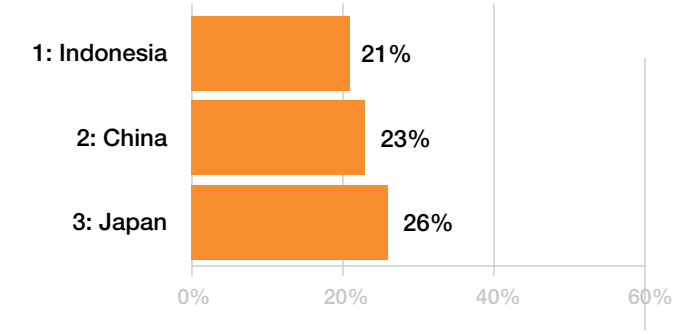
- Second best for regular brushing.
- **Best for brushing for 2 mins with fluoride**.
- Second best in Europe for mouth-washing.
- Equal best with Germany for electric toothbrush use.
- Second best for dentist visits.
- Smallest percentage of people who brush straight after eating.

Which countries are visiting the dentist twice a year?

The top three



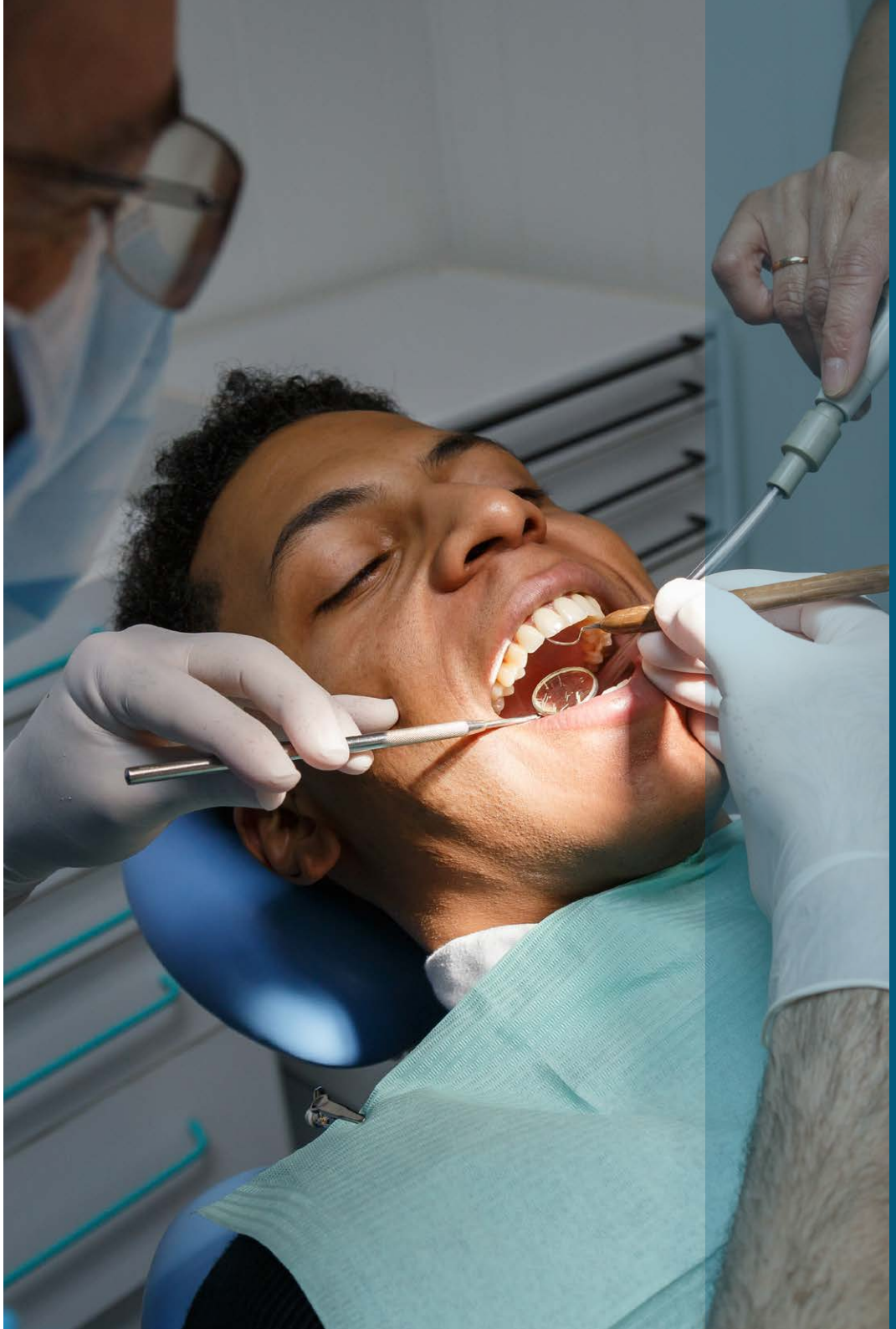
The bottom three



Across Germany, US, and Japan

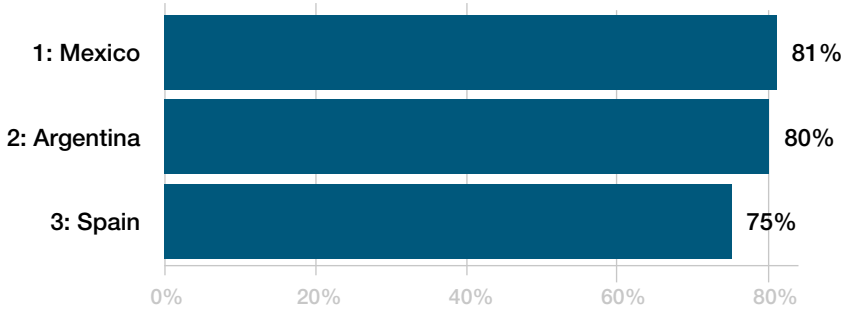
56-65s are the best for visiting regularly

18-25s and 26-35s are the worst

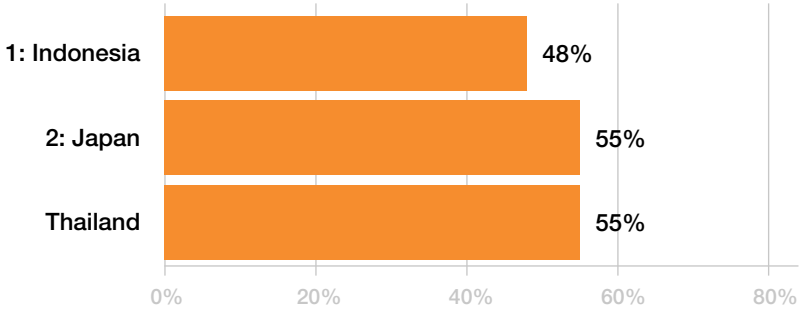


Best countries for getting their dental advice from a dentist?

The top three



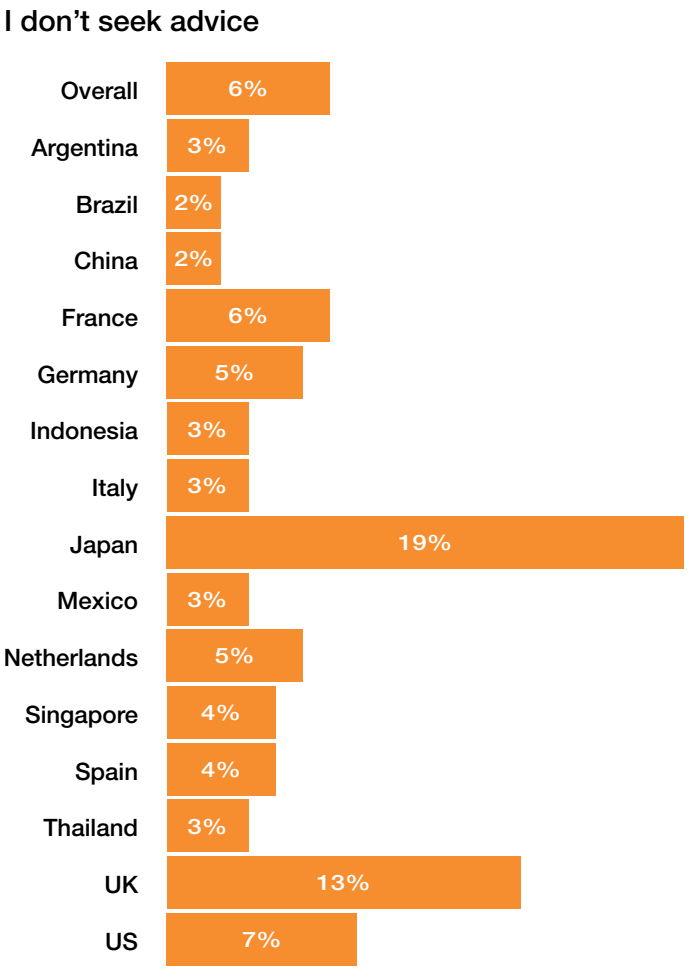
The bottom three

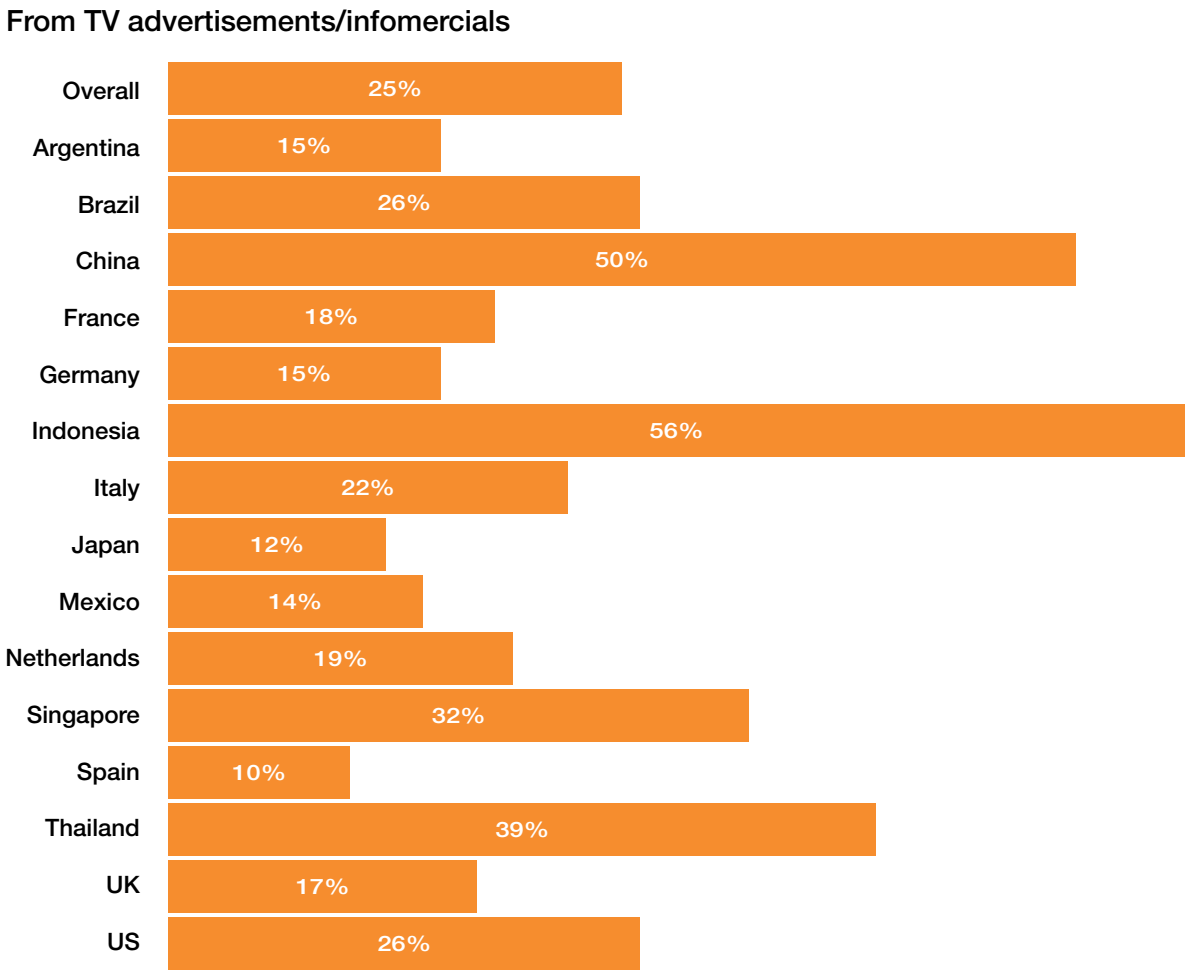


People in Indonesia get more advice from TV commercials (**56%**) than their dental practice, while in Thailand **39%** get advice from TV commercials and **12%** in Japan.

While some respondents said they **do not seek advice** about keeping their teeth healthy.

Where do you get advice on keeping your teeth healthy?





Would your dentist be a good place for general health checks, such as for diabetes or blood pressure?

61% of people in Thailand and Indonesia think that their dental practice would be a convenient place for basic health checks.

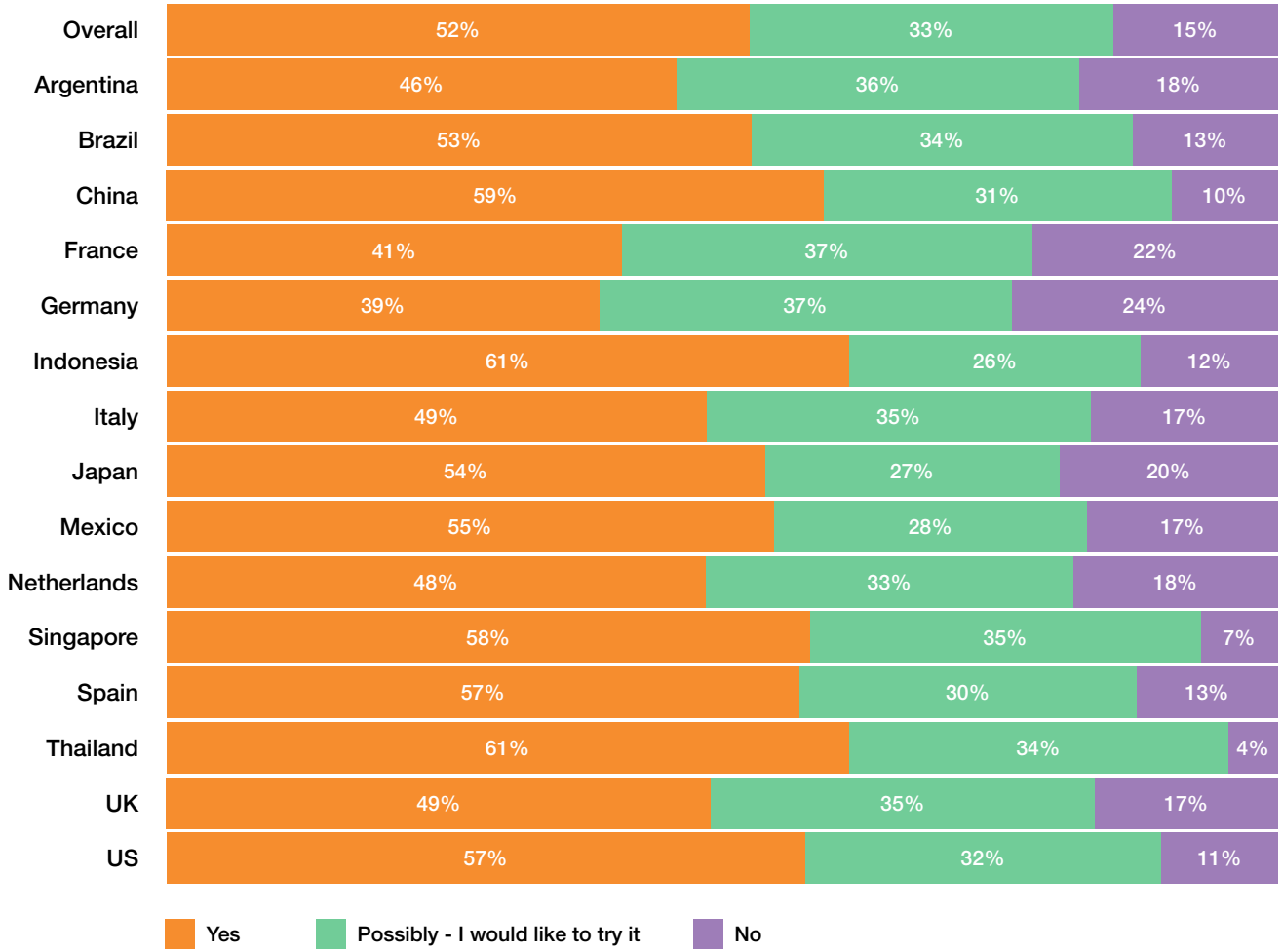
Only **4%** of Thai respondents are not open to the idea.

Within Europe, the Spanish are the most open to the idea (**57%** say yes, and **30%** say possibly).

Globally, **52%** say yes, and a further **33%** would like to try it.

Germans are the least open to this idea. Almost one quarter (**24%**) say no.

They are followed by France, **22%** and Japan, **20%**.



Do you think there is any link between dental health and health conditions?

Surprisingly, globally only 21% on average thought there was a link between overall life expectancy and dental health.

The best understanding was **38%** of Japanese understood there was a link, the lowest understanding of this connection was the UK at just **12%**. This shows there is a lot of education needed worldwide to understand that your **oral health is a window to your overall health**.

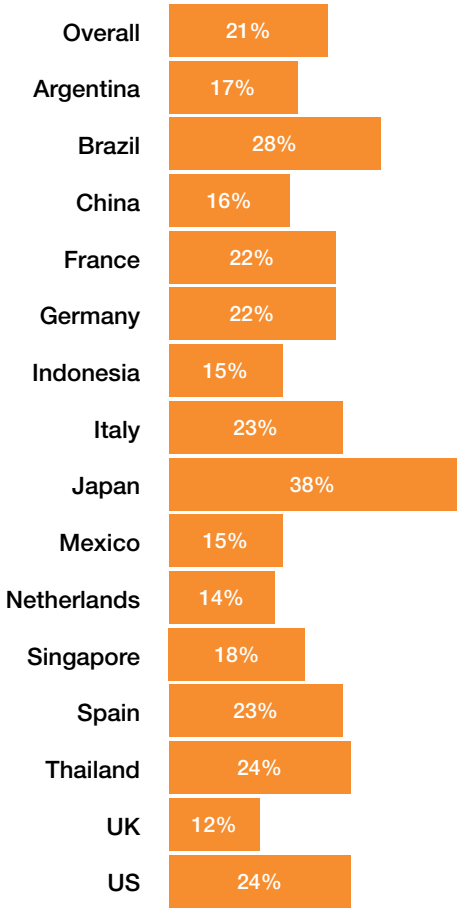
76% of Argentinians, **73%** of Mexicans and **71%** Brazilians understand the **link between smoking and quality of oral health**. **54%** of Brazilians thought there was a link with oral cancer (the highest rating).

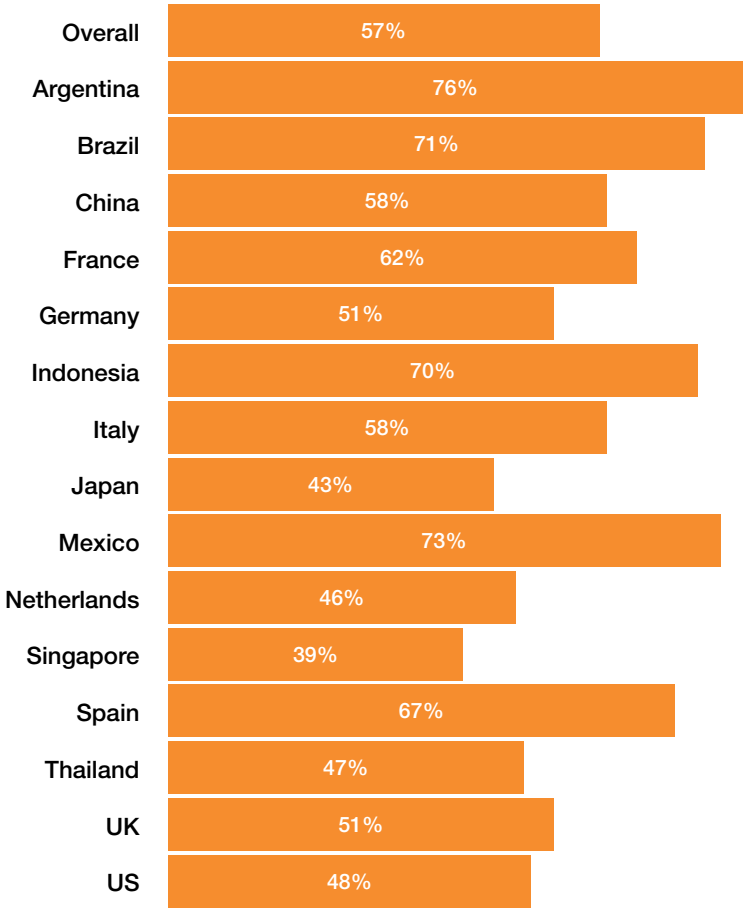
Smoking is also the most common bad habit that Indonesians would like to give up (**26%**).

However, Germans also most want to give up smoking – in fact, it is more common there than any other market (other than Spain).

51% of Germans think smoking affects your dental health.

Do you think there is any link between dental health and overall life expectancy?





Why is this important? The DiabetRisk study

The findings of the pioneering recent DiabetRisk study of 1,143 adult patients at 41 dental practices across Spain concluded that a simple screening protocol combining a FINDRISC questionnaire and HbA1c blood test **identified patients with undiagnosed diabetes or prediabetes during a dental visit with an accuracy of 96%**. The study was commissioned by the SEPA Research Network of Dental Clinics from the ETEP Research Group at Complutense University of Madrid.

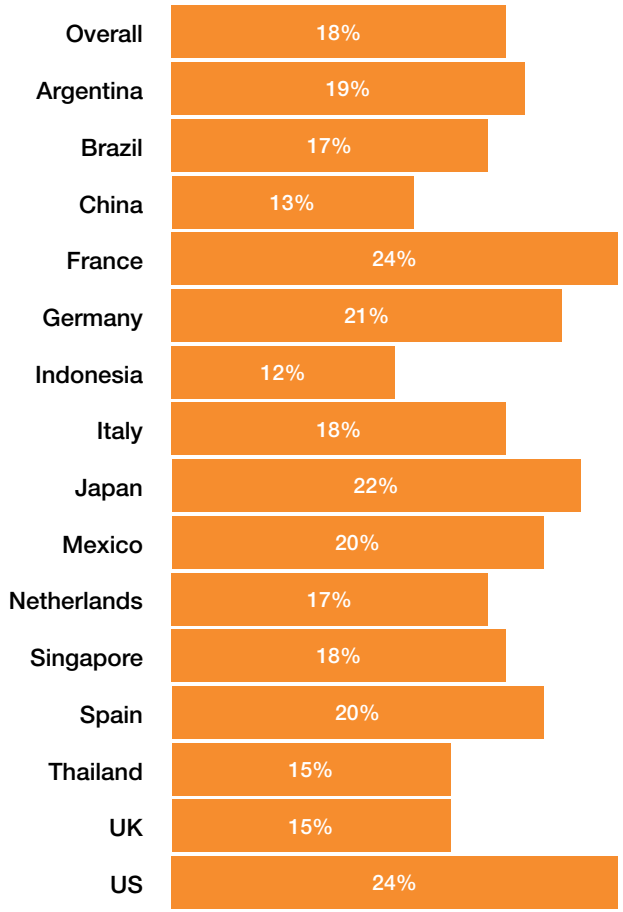
In the study **"Over 8% of patients were identified with undiagnosed diabetes or pre-diabetes at dental practices"**.

The study showed the key role dental practices could play in the early detection of diabetes for thousands of dental patients each year - and in every country worldwide according to its researchers.

"Patients with the worst cases of periodontal disease are **more likely to have prediabetes or diabetes**" - the two conditions are linked via inflammation.

- Indonesians have the worst understanding of the inflammation link between dental health and diabetes (only **12%** think there is a link).
- Even in the countries with the best understanding of the inflammation link (US and France), less than a quarter of people (**24%**) think there is a link.

Do you think there is a link between dental health and diabetes?



Implications of the DiabetRisk study for Indonesians

Percentage of those who think **there is a link between dental health and diabetes** – **12%**.

Percentage open to the idea of basic health checks at their dental practice - **61%**.

Clinical incidence of gingivitis* - **55.25%**

** Susanto A, Carolina DN, AmaliyaA, Setia PribadiIM, Miranda A. Periodontal health status and treatment needs of the community in Indonesia: A cross sectional study.*

Self-reported incidence of gum inflammation/disease – **13%**.

People in Indonesia have a poor understanding of the wider health implications of poor oral health, and there is a significant discordance between self-reported gum inflammation and disease, and rates reported in a recent medical study.

However, Indonesians are receptive to the idea of receiving basic health checks through their dentist, and so there is an opportunity to educate on the link, and **prevent and diagnose diabetes through the simple protocol** outlined in the DiabetRisk study. The next barrier is the low rate of dental check-ups amongst Indonesians.

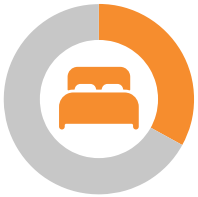
https://onlinelibrary.wiley.com/doi/10.1111/jcpe.13408

Top excuses for not brushing

When I forget

32% globally admit to this.

- Indonesians forget the most (**45%**).
- Germans forget the least (**20%**).



When I just want to go straight to bed

24% globally admit to this.

- Singaporeans do this the most (**31%**).
- Spaniards do this the least (**17%**).

If I'm in a rush in the morning

19% globally admit to this.

- Americans do this the most (**26%**).
- Brazilians do this the least (**12%**).

How would you best describe your oral health?		Overall	Argentina	Brazil	China	France	Germany	Indonesia	Italy	Japan	Mexico	Netherlands	Singapore	Spain	Thailand	UK	US
1st	When I forget	32%	37%	40%	31%	32%	20%	45%	27%	22%	38%	31%	29%	35%	32%	28%	37%
2nd	When I just want to go straight to bed	24%	22%	23%	28%	21%	24%	26%	18%	23%	20%	24%	31%	17%	23%	23%	33%
3rd	If I'm in a rush in the morning	19%	20%	12%	23%	18%	16%	19%	15%	13%	25%	22%	24%	19%	16%	13%	26%
4th	When I'm ill	18%	5%	13%	28%	17%	24%	24%	20%	17%	8%	19%	24%	7%	25%	22%	25%
5th	When I can't be bothered	15%	15%	9%	14%	16%	16%	9%	15%	26%	7%	19%	20%	17%	16%	18%	13%
6th	When I've had an alcoholic drink	10%	6%	9%	17%	9%	11%	4%	7%	14%	6%	12%	15%	5%	13%	11%	11%
7th	When I'm making sure my children's teeth are properly brushed instead	8%	6%	4%	13%	7%	7%	6%	6%	3%	7%	10%	17%	7%	8%	4%	13%
8th	Something else	1%	*%	1%	*%	1%	*%	1%	1%	1%	1%	1%	*%	2%	1%	1%	1%
9th	I never forget to brush my teeth	27%	33%	27%	28%	23%	31%	21%	33%	30%	30%	22%	19%	32%	26%	33%	18%

Top and bottom excuse makers

The least motivated

26% of Japanese respondents say they skip brushing when they can't be bothered.

This is compared to only **7% of Mexicans**.

The worst for drinking

17% of Chinese respondents say they skip brushing when they've been drinking.

This is compared to **4% of Indonesians**.

Worth remembering that Indonesia is a Muslim country.

Most child-focused

17% of Singaporean respondents skip brushing when they are making sure their children's teeth are properly brushed instead.

This is compared to **3% of Japanese** repondents.

Most diligent

One-third (33%) of the repondents in the UK, Argentina and Italy say they never forget to brush their teeth.

Only **18% of Americans** can say the same.

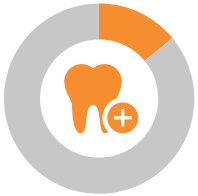
Is it true that Americans have better teeth than the Brits?

Despite the perception of Americans having better teeth than Britons, the US reported more issues than UK respondents. People in the UK are the most likely to report that they have no issues with their dental and oral health (40%).

The most common issue was tooth sensitivity, reported by over one third (**34%**). Tooth decay is reported by over one quarter (**26%**).

The US is the third worst country for tooth erosion (**16%**), after Thailand and Singapore.

The percentage of reported bad breath (**16%**) was double that of Brazil, but less than half that of Japan.



People in the UK are twice as happy with their teeth as Americans (**14% vs 7%**).

And is the US the busiest and most stressed-out nation?

- **12%** of Americans said that they grind their teeth.
- **16%** of Americans have fractured a tooth during the Covid-19 pandemic.
- **26%** of Americans said they skip brushing if they are in a rush in the morning.

These figures are higher than all other countries.

- **8%** also admit to habitual jaw-clenching (not the highest, but high compared to most European markets).

White teeth or straight teeth?

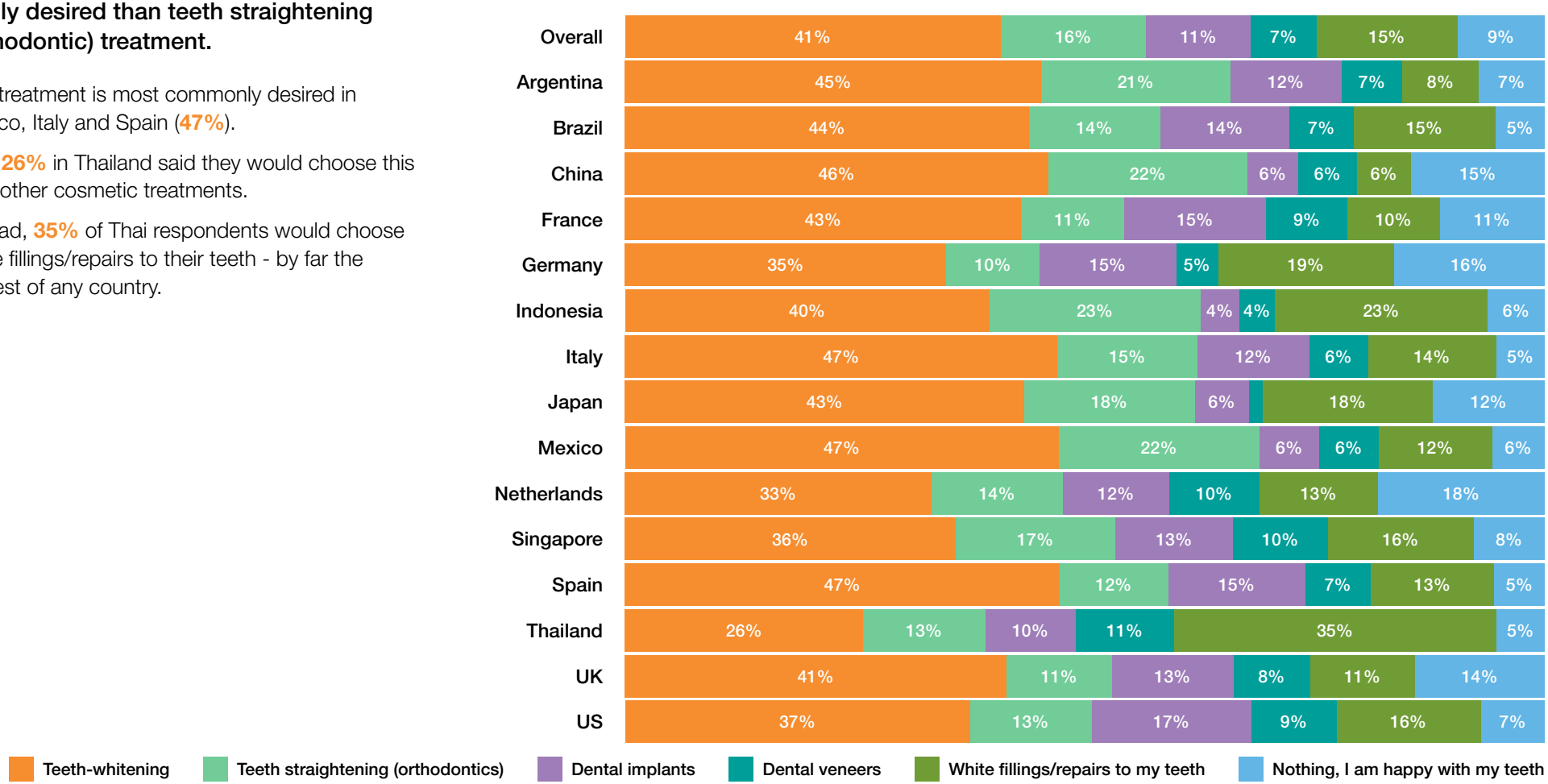
Across all markets, teeth whitening is more highly desired than teeth straightening (orthodontic) treatment.

This treatment is most commonly desired in Mexico, Italy and Spain (**47%**).

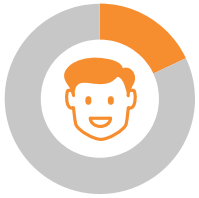
Only **26%** in Thailand said they would choose this over other cosmetic treatments.

Instead, **35%** of Thai respondents would choose white fillings/repairs to their teeth - by far the highest of any country.

If you could have one new dental treatment to improve your smile what would it be?



Smile satisfaction



People in the Netherlands are the happiest with their teeth; 18% would not want any cosmetic treatment.

- People in Thailand, Spain, Italy, and Brazil are the least happy with their teeth – only **5%** in each of those countries would choose no cosmetic treatment.
- The global total of people who are happy with their teeth and would not want any cosmetic improvements is **9%**.
- People aged **56-65** (oldest cohort surveyed) are happiest with their teeth as they are, and wouldn't want any cosmetic treatment.
- However, Germans aged 56-65 are more than twice as happy with their smiles as American (**13%**) and Japanese (**15%**) people of the same age.

Which countries have seen the worst oral health impact during the pandemic?

Argentinians have missed the most dental appointments – 44%

- Japan has missed the least – **12%**.
- France has missed the least within Europe – **21%**.

“Mask breath” is the most common in Thailand – 33%

- It is the least common in the UK – **12%**.

One-quarter (25%) of Americans have experienced more tooth sensitivity

- Only **6%** of people in Japan say the same.

Only 11% of Thai respondents haven’t noticed changes

- **47%** of Japanese respondents say they haven’t noticed changes.

1 in 10 Brits have fractured a tooth, and 1 in 3 have missed dental appointments

In what ways has the pandemic/ any lockdowns affected your overall oral health?		Overall	Argentina	Brazil	China	France	Germany	Indonesia	Italy	Japan	Mexico	Netherlands	Singapore	Spain	Thailand	UK	US
1st	I've missed dental/hygienist appointments	28%	44%	41%	22%	21%	22%	18%	31%	12%	43%	23%	27%	32%	22%	32%	32%
2nd	I like to clean my teeth more regularly	27%	22%	21%	38%	25%	27%	45%	32%	15%	23%	23%	28%	23%	34%	16%	29%
3rd	I like to use mouthwash more regularly	22%	16%	18%	30%	20%	24%	30%	25%	10%	17%	18%	25%	21%	34%	15%	23%

Which countries are taking better care of their teeth since the pandemic?

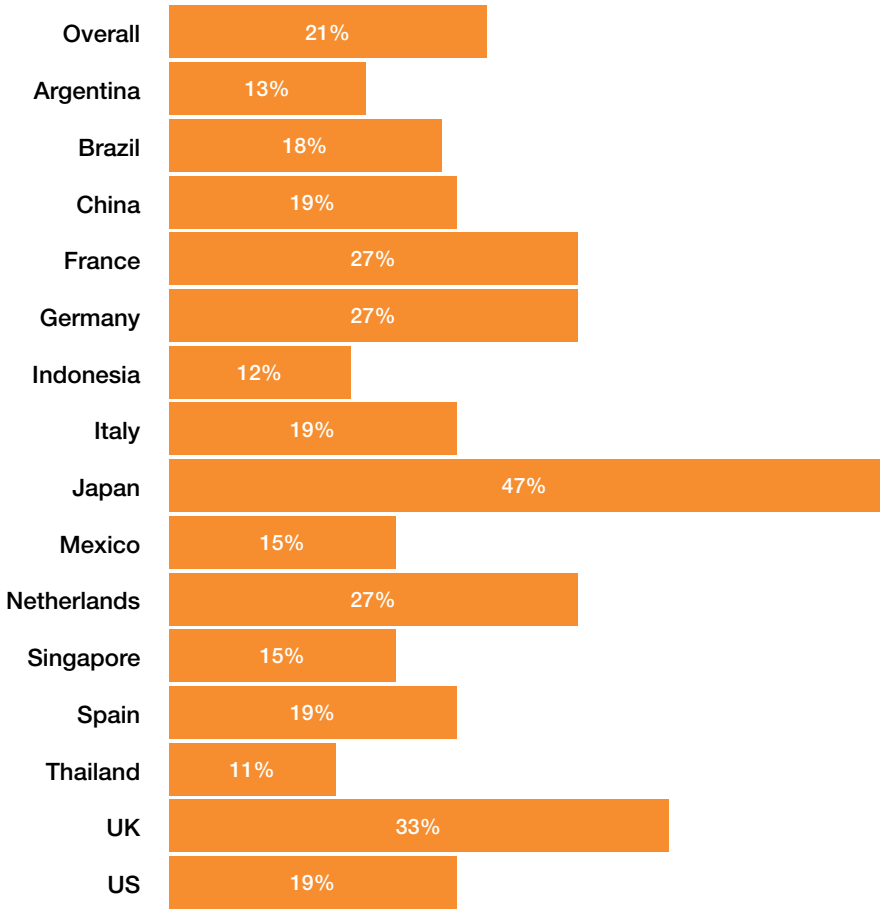
45% of Indonesians are now cleaning their teeth more regularly

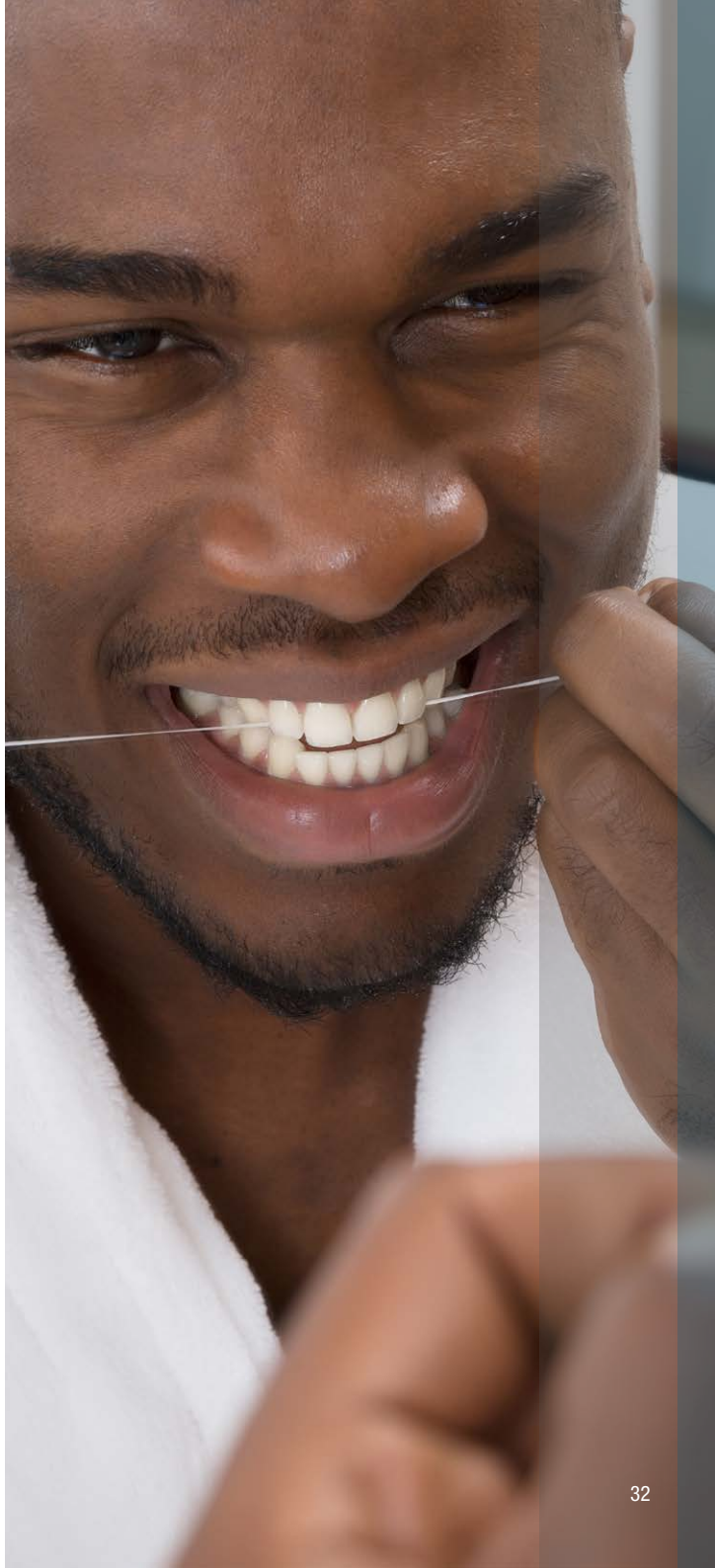
- Only **15%** of people in Japan say the same.

34% of Thai people are now mouth-washing more regularly

- Only **10%** of people in Japan say the same.

I haven't noticed any changes/ effects to my oral health



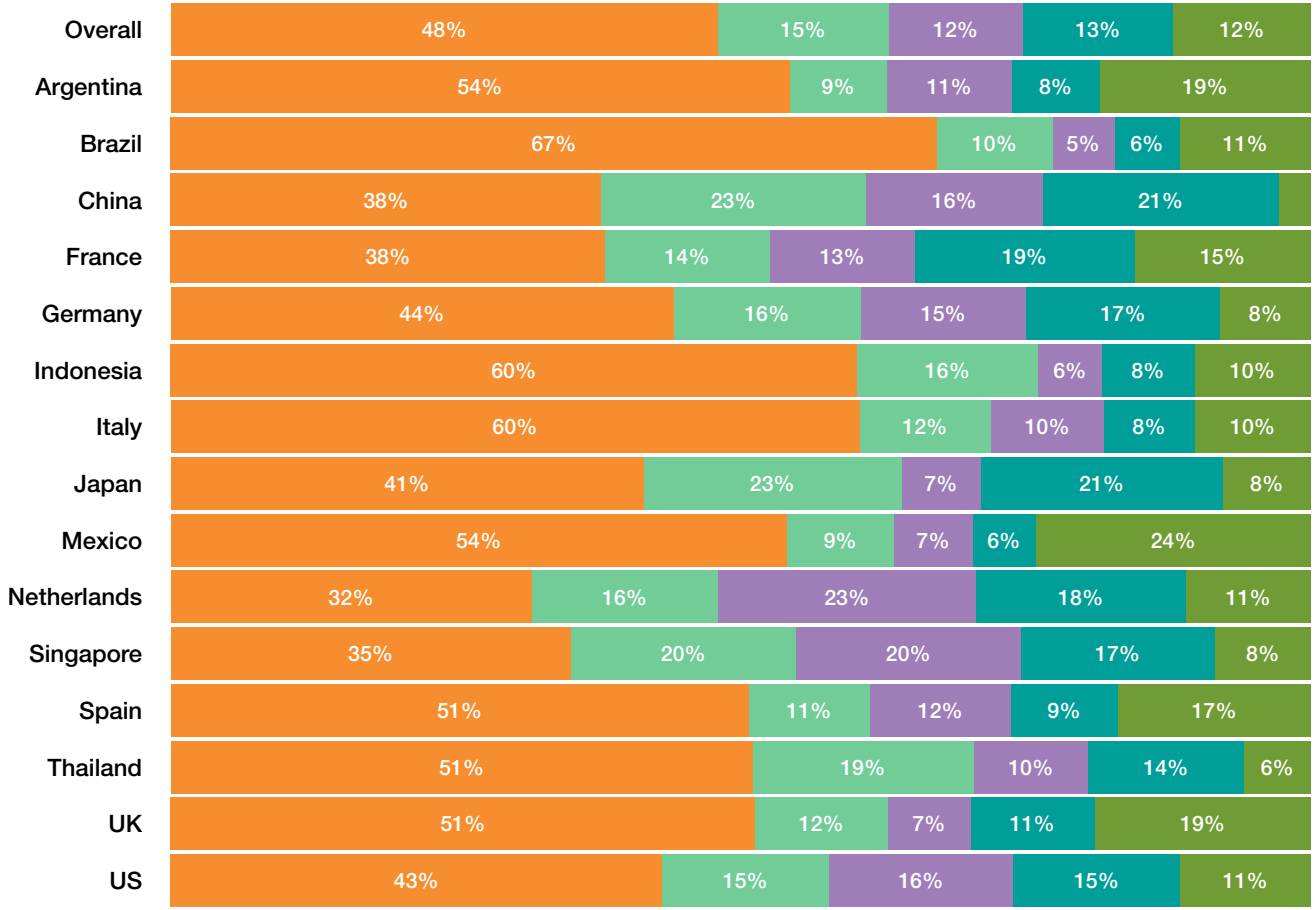


Communication changes during the pandemic?

Mexico has the highest percentage of those having no face-to-face conversations (24%).

- Mexico also has the greatest percentage of people spending more time speaking on the phone/video call (**73%**) and more time on social media (**82%**).
- In Japan, **23%** only have full conversations for work.
- In Brazil, **67%** only have full conversations with household/family.

Face-to-face conversations in person in general: Since the Covid-19 pandemic began, how if at all have your communication habits changed?



I now only have full face-to-face conversations with my own household/family

I now only have full face-to-face conversations for work

I now only have full face-to-face conversations with friends

I now have full face-to-face conversations with everyone

I don't have any full face-to-face conversations at the moment

Most and least isolated countries?

“I don't have any full face-to-face conversations at the moment”

Most isolated

- Mexico – **24%**, Argentina & UK – **19%**, Spain – **17%**.
- **77%** of Italians and Indonesians say they are **speaking to people in person less**.

Least isolated

- China – **3%**, Thailand – **6%**.
- There is a large gap between the European countries surveyed – people in the Netherlands, France, and Germany were largely **less affected by changes in face-to-face communication** than people in the UK, Spain, and Italy.
- Only **45%** of Dutch respondents say they spend less time speaking to people in person, and **27%** are **speaking to people in person more**.

Why is communication important to understanding oral health?

Social isolation and lack of oral communication is a factor in poor oral health and can contribute to oral frailty as we become older, the reduction in oral function.

To prevent “oral frailty” It’s important to 1: constantly maintain a clean oral environment, and 2: maintain your oral functions.

This means removing dental plaque via appropriate brushing and periodic dental examinations, and adopting positive habits like determining a set time every day to conduct oral mouth exercises, such as while bathing or after brushing teeth.

But a lack of face-to-face communication also has a large and direct impact on quality of life. These social interactions - having healthy relationships with family and friends are arguably even the most important thing to maintain a good quality of life.

Countries that have seen a major impact on the ability to have verbal conversations throughout the pandemic could be at risk of greater oral frailty, amongst the older generations particularly.

Improving oral function with exercises and chewing gum

A recent study found that a protocol involving simple mouth exercises to improve mastication (chewing), salivation, and swallowing function improved oral function in older adults (aged over 65).

Adding chewing gum exercises improved oral function even further.

Alongside the documented benefits of chewing gum in preventing dental cavities, this research suggests it could also have a positive impact on combatting oral frailty.

The survey shows that many factors contribute to poor oral health– from personal and interpersonal, to education and government policy.

New survey provides first global snapshot of oral health attitudes and practices

Around the world countries diverge dramatically on culture, colour, language, dress, diet and more. But, according to the largest global consumer awareness study of oral health and dental care (1), a healthy mouth and an attractive smile are priorities shared around the world.

More than 15,000 people in countries across Europe, North and South America and Asia were interviewed on their oral care. Divided equally between men and women aged 18-65 and chosen to provide a nationally representative sample, the responses provide a fascinating perspective on oral hygiene attitudes and practices.

With so many different countries under scrutiny, each with its own healthcare system, and with differing lifestyles and cultures, conclusions should be drawn with caution. However, there appears to be interesting common ground in a variety of findings:

- More than half of people keep their mouth healthy and fresh by brushing their teeth twice a day while more than a third brush their teeth with a fluoride toothpaste for two minutes
- Tooth sensitivity is the oral issue troubling most people in most countries
- Tooth whitening is the most popular cosmetic treatment - in preference to straighter teeth or white fillings
- Halitosis is a concern for nearly one fifth of respondents
- More than a third (**39%**) brush their tongue regularly to keep their mouth healthy and fresh
- Around a fifth of people in all countries have a bad habit that they want to give up - such as eating sweets, smoking or consuming staining drinks
- The majority (**85%**) support, or are open to the idea, that basic health checks could take place in a dental practice when questioned
- **21%** say the pandemic affected their oral health

Oral health attitudes and aspirations

The survey spanned questions on oral health attitudes and aspirations as well as treatments. Around the world, populations report varying dental interventions, mostly fillings, but veneers and implants too. Prevalence of disease is high. As many as half the respondents have between 1-10 fillings and **22%** were aware that they have gum disease.

Among the over-arching conclusions that can be drawn from the wealth of data is that regular visits to a dental practice tend to result in a more positive attitude to oral health.

Germany ranks the highest (at **45%**) for twice yearly dental appointments followed by the UK (level pegging with the Netherlands). All three are also among the top countries for people reporting they have no problems with their teeth; the Netherlands leads the way when it comes to healthy teeth with only **13%** saying they have tooth decay and, of all populations in the survey, the Dutch are happiest with their teeth.

Also near the top of the leader board for regular visits to the dentist, as well as reporting no problems with their teeth or oral health, are Mexico (**35%**), Brazil (**32%**) and Argentina (**30%**).

By contrast, responses from Indonesia, where the dentist to population ratio is 1:6750, reveals the second highest level of tooth decay at **48%**, compared to a global average of **28%**. Only **21%** of Indonesians visit the dentist twice a year, the same figure for the number who say they have taken out their own teeth. The countries least likely to have attempted DIY dentistry are Japan, the UK and Spain.

Not surprisingly, there is a correlation between regular dental attendance and higher numbers of fillings and implants. In Germany for instance, only **5%** of those aged 56-65 have their own teeth with no fillings or implants.

British politician and wartime leader Sir Winston Churchill allegedly said the United States and the UK are 'divided by a common language'; it would seem the two countries are also divided by their attitudes to oral hygiene. In the UK we are twice as happy with our teeth as the Americans (**14%** compared to **7%**). Meanwhile, one third of people in the UK never forget to brush their teeth compared to **18%** in the United States, which is bottom of the league for tooth erosion.

In addition to the Netherlands and Germany, other European countries included in the survey were France, Spain and Italy whose responses revealed some surprising variations:

Italy is second to the Netherlands in people having all their own teeth (with no fillings or implants) but has the highest levels of self-reported gum diseases of all countries. While scoring well for oral hygiene, Italians are the Europeans least satisfied with their smiles (just **5%**).

Spain, here only **47%** brush their teeth twice daily, the lowest figure across these European countries, and **43%** have 1-5 fillings.

France has a higher than average implant placement with **11%** of people having between 1-5 implants.

By contrast, the three Americas countries included in the survey – Argentina, Brazil and Mexico - enjoy some common factors in their responses:

- The populations of Mexico and Argentina are in the top three for taking advice from their dentist, they rate tooth whitening most highly and are better than average flossers
- Veneers are relatively common in these Americas countries and more common in Argentina than anywhere else in the world
- More than **50%** of respondents from all three countries brush their tongues

The countries in Asia that were surveyed -Thailand, Indonesia, Singapore, China and Japan - are more likely to report bad breath – **34%** of Japanese say they have halitosis - and their populations are least likely to visit the dentist regularly or take advice from their dental practice. The Japanese like sweet treats, sitting at the bottom of the list for avoiding sugary snacks and drinks. Not surprisingly, Japan (ranking equally with the UK) has the highest percentage of people with one to five fillings (**47%**).

In **Singapore**, the people have higher than average tooth erosion and report higher than average gum disease but, with a government-run publicly-funded universal healthcare system, generally Singaporean oral health appears better than other countries in the region.

The **Chinese** appear to take great care of their oral health: the electric toothbrush is more widely used than anywhere else in Asia, there is widespread use of air-flossers and interdental cleaners and many respondents say they avoid sugary snacks and drinks.

The survey, commissioned by global oral healthcare brand Sunstar, is timely; oral diseases are recognised as a major global public health problem affecting over 3.5 billion people and yet are largely preventable. The Alliance for a Cavity-Free Future (ACFF)[2] is campaigning to ensure that every child born after 2026 lives a life free of cavities whilst the World Health Organisation (WHO) has passed a new resolution on oral health[3] designed to set a new global agenda.

Critical to that agenda is the recognition that oral diseases are linked to other non-communicable diseases (NCDs), such as diabetes and heart disease. By addressing the shared risk factors and integrating oral health within universal healthcare programmes, there is greater potential for positive change.

Martijn Verhulst, Medical Liaison Manager for Sunstar Scientific Affairs, welcomes the WHO resolution which he believes should have a big influence on policy-makers. “I would like to see oral health integrated into healthcare so that it is part of a universal system and either state funded or reimbursed by insurers. It’s our ultimate goal that oral health is included with other general health conditions that are preventable.”

“Chronic diseases such as periodontal disease and diabetes are diseases that progress painlessly and unnoticeably. Periodontal disease and diabetes, in particular, have a negative impact on each other and accelerate the deterioration of each other’s condition. We need to help people better understand these chronic diseases (or NCDs as they are also known) including periodontal disease, and promote preventive health habits among them.”

There is growing recognition of the link between gum disease and other chronic diseases in particular, a wealth of evidence for a bi-directional relationship between periodontal diseases and diabetes. The inflammatory response triggered by periodontal disease affects regulation of blood sugar while diabetes can contribute to the deterioration of a person’s periodontal status.

Sunstar’s founder, Kunio Kaneda died from diabetes-related complications, which makes the company particularly open to early diagnosis of the condition. Sunstar commissioned a study in Spain where adult patients visiting a dental practice were asked a set of questions and given an HbA1c blood test. Of the 1,143 adult patients, 97 were found to have undiagnosed diabetes or pre-diabetes. This demonstrates that a simple screening protocol is a simple and efficient way to identify patients with undiagnosed diabetes or pre-diabetes. The fact that such a high number of respondents - **85%** - support or are open to the idea that a dental practice can be used for basic health checks is of great interest to Sunstar and potentially healthcare policy-makers around the world.

The results of the Sunstar survey provide a valuable global picture of oral hygiene attitudes and practices worldwide. The data suggests there is no shortage of challenges for dental professionals: treatment of disease, patient education, prevention, and, with only **9%** of people saying they are happy with their teeth, providing cosmetic dental treatments to inspire healthy smiles the world over.

References

(1) Link to Sunstar Global Oral Health Statistics findings

(2) https://www.acffglobal.org/making-cavities-history/

(3) https://www.who.int/news/item/27-05-2021-update-from-the-seventy-fourth-world-health-assembly-27-may-2021

https://www.fdiworlddental.org/who-world-health-assembly-approves-historic-resolution-oral-health

By Caroline Holland.
Caroline Holland is a UK based writer specialising in dentistry. She has written for the Scientific American, the FDI, the British Dental Journal and contributed to multiple dental journals in the UK; she was the founder editor of the UK title Dental Nursing.

Summary country profiles

Argentina Oral Care Profile

Tooth sensitivity affects a third of Argentinians, and tooth decay affects 30%.

Over half of respondents (53%) brush their teeth twice a day, and the same percentage brush their tongue (a higher percentage than most countries on this metric). Only 5% of respondents say they skip brushing when they are ill.

Veneers are more common in Argentina than anywhere else, with 13% reporting that they have veneers with their natural teeth or fillings. Outside of Asia, Argentina is the country with the second-highest percentage of people that have all their own teeth with no fillings or implants. It has the third-lowest percentage of people with at least one filling (37%).

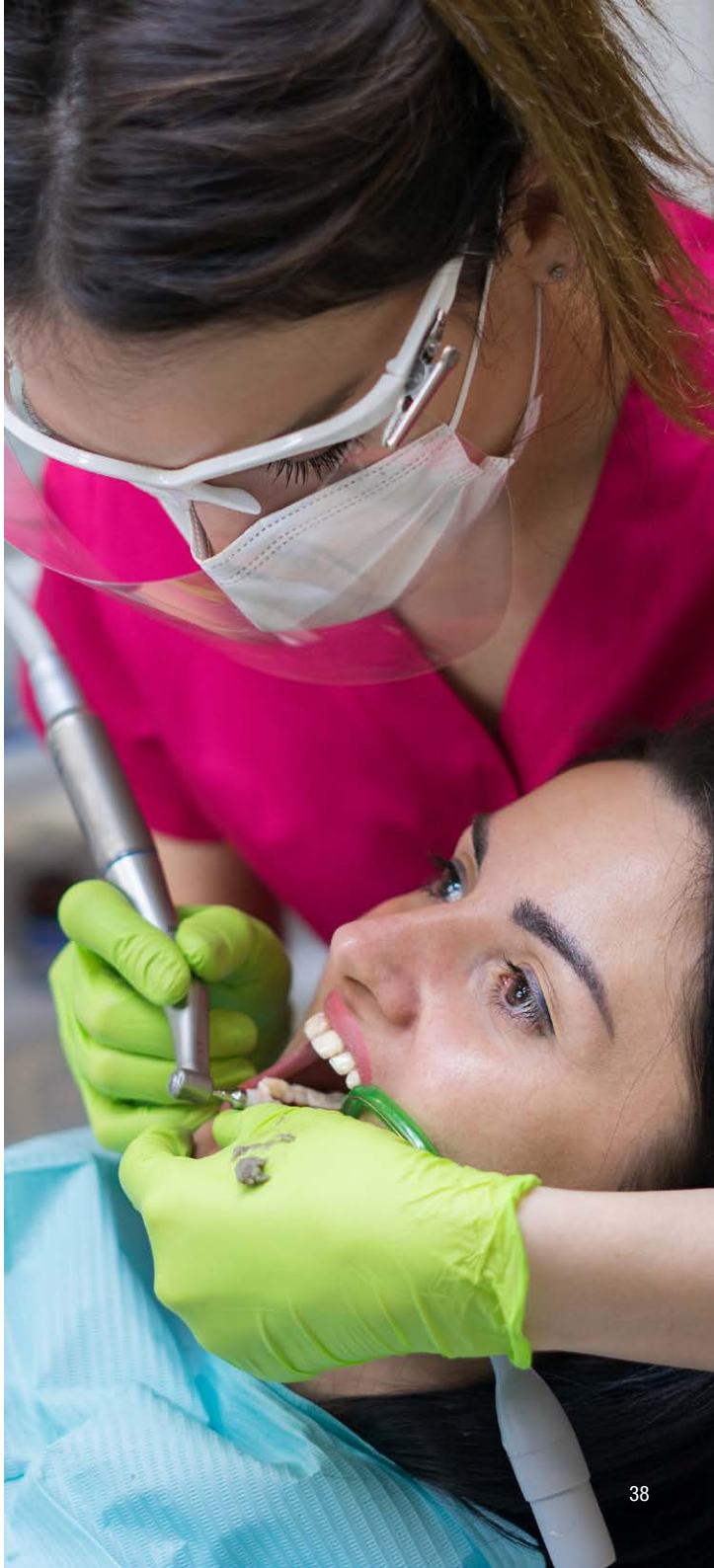
80% of Argentinians get their dental advice from their dental practice, the second highest rate after Mexico. One in five take advice from their family, which is fairly low. Overall understanding of the links between oral health and general health is good, with over three-quarters (76%) recognising that smoking can impact your oral health, and just 9% thinking there is no proven link between dental health and overall health/ life expectancy.

- Argentina has a universal health care system.
- Public sector dental care is free of charge/heavily subsidised.
- Inequality of access exists for some of the poorest communities.

https://www.expatassure.com/argentina/

https://internationalliving.com/countries/argentina/health-care-in-argentina/

https://www.expatfocus.com/argentina/health/dental-and-ophthalmic-care-in-argentina-how-to-find-the-right-options-for-you-6144



Brazil
Oral Care Profile

28% of Brazilians have all their own teeth, no fillings or implants. 43% have 1-5 fillings.

Dentures/plates are relatively uncommon, at 2% (the global total is 4%). Veneers are relatively common, with 7% of respondents having veneers with their natural teeth. The only other countries where this was more common were the other two Latin American markets (Mexico and Argentina).

People in Brazil have an overall better understanding of the links between oral health and general health. Only 6% believe there is no link – a lower rate than any other market. Over half of respondents think there is a link to oral cancer – a higher rate than elsewhere, and the only market where more than half thought this.

Brazil has the lowest percentage of people who say they do not seek dental advice. A high proportion of respondents (71%) say they seek advice from their dental practice, and a relatively high percentage say they normally visit the dentist twice a year (42%, the second best after Germany).

- "Brazil is the only country in the world to propose a universal health care system with the aim of guaranteeing delivery of all levels of health care, free of charge, to a population of over 200 million inhabitants by means of a unified health system ("Sistema Único de Saúde" [SUS]). The national policy of oral health, also known as Smiling Brazil ("Brasil Sorridente"), was implemented in 2004."

https://www.researchgate.net/publication/281337481_Ten_Years_of_a_National_Oral_Health_Policy_in_Brazil_Innovation_Boldness_and_Numerous_Challenges

- Brazil has a strong, competitive oral care market and the highest level of dentists in the world (2014).

https://www.bbc.co.uk/news/business-30416226

China
Oral Care Profile

China avoids sugary snacks and drinks more than all other countries (24%), and chews sugar-free gum more (27%).

Use of electric airflossers and interdental cleaners peaks in China (21%), although it is the third-worst country for regularly cleaning between teeth (22%). Electric toothbrush use is much more common than elsewhere in Asia (35%). China is one of the top three countries for teeth-brushing twice a day (59%), but the bottom for tongue-brushing (20%) and the second from bottom for brushing with fluoride toothpaste for two minutes (24%).

China is the third-worst country for tooth decay (32%), although still much lower than Thailand and Indonesia. It is the second-worst for gum inflammation and the third-worst for bad breath. Mouth ulcers and sores are a common issue, reported by 11% of respondents – about equal with Japan.

47% report that they have all their own teeth, with no fillings or dental implants. This is much higher than the average. 42% have at least one filling, but only 3% report having five or more. Dental implants are not common – only 4% report having one or more. China is where dentures are the least common.

Respondents in China were the worst for not brushing their teeth when they have an alcoholic drink (17% say they do this), and when they are ill (28%).

63% of people in China say they get their dental advice from the internet, and 44% from their family. Both of these figures are the highest of all countries and in stark contrast to Japan, where only 21% take advice from the internet and 14% from family – the lowest figures of all markets on these metrics.

- Relatively recent legislation mandates oral health education in primary schools, and requires topical fluoridation and pit and fissure sealing for children and other groups at high risk of dental cavities.
- Dental care has traditionally not been well-integrated into overall healthcare and wellbeing.
- Private dental care started to become available around 25 years ago.
- Most dental care is provided by the public sector.
- There is a shortage of dentists, especially in the private sector.

https://www.nature.com/articles/s41368-017-0006-6

https://www.natureasia.com/en/nindia/article/10.1038/nindia.2017.27

https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2016/10/commercial-opportunities-in-the-dental-care-market-in-china.pdf

France
Oral Care Profile

More than one in ten respondents (11%) in France have 1-5 dental implants.

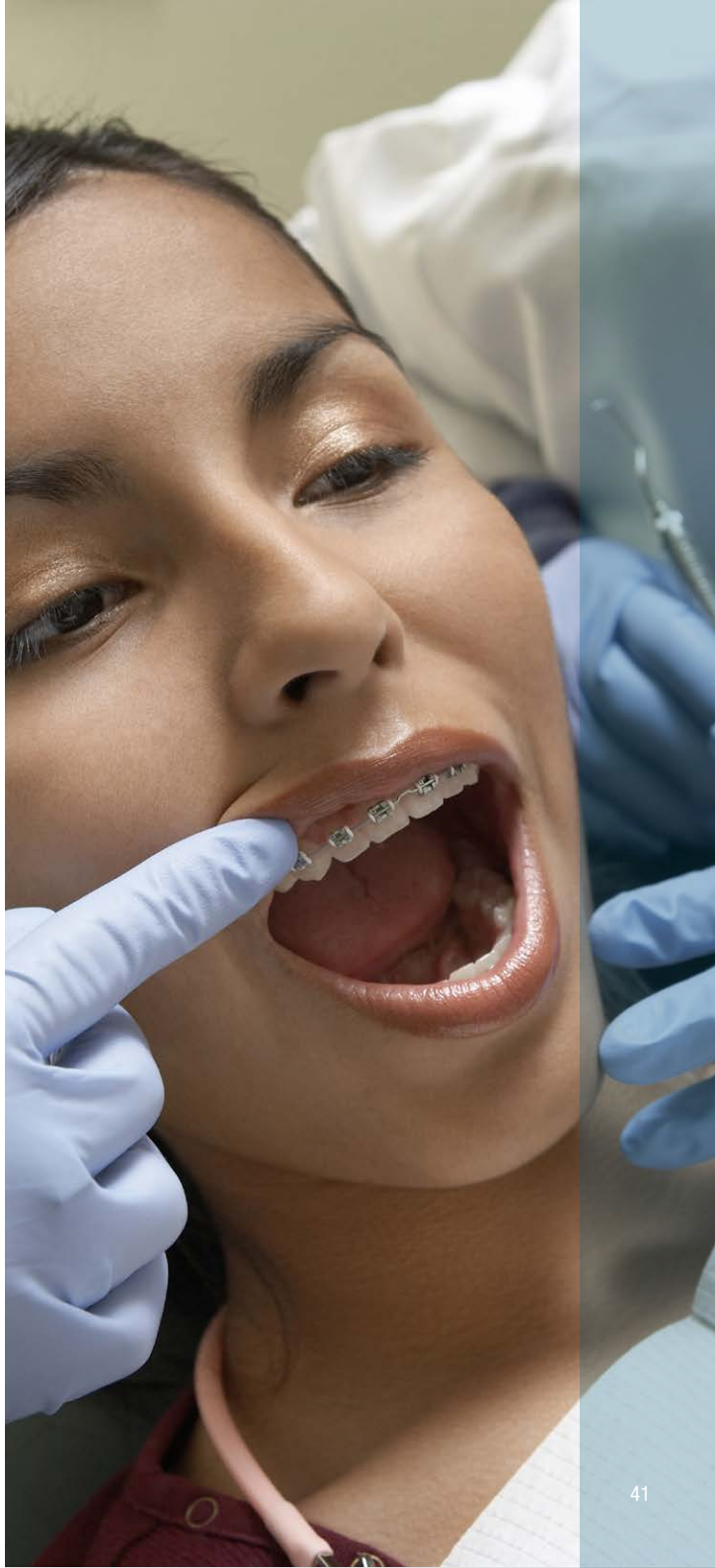
A relatively high percentage have 5-10 (4%). Over half of the population has at least one filling (51%). After Germany, it has the second lowest percentage of people with all their own teeth (20%). Within Europe, it is the country with the lowest incidence of gum inflammation/disease. 23% report tooth decay, which is 10% higher than the Netherlands but 5% lower than their neighbours in Spain.

Only 50% of people say they brush their teeth twice daily, and less than a third (32%) brush with fluoride toothpaste for two minutes. 28% of people say they brush their teeth immediately after every main meal and rinse their mouth with water, which is a higher percentage than elsewhere in Western Europe, but lower than the Southern European markets.

18% of respondents admit that they skip brushing their teeth when they are in a rush, and 32% say they skip brushing when they forget.

- "The French oral health system is based on the provision of dental treatment and is organised around a fee-per-item model. The system is funded by a complex mix of public and complementary health insurance schemes. The system is successful in that it provides access to affordable dental treatment to the majority of the French population. However, France had the highest health expenditure as a share of gross domestic product (GDP) of all European Union countries in 2008 and rising oral health inequalities may be exacerbated by the manner in which oral health care is provided and funded. In addition, there is no organised national strategy for the prevention of oral diseases or for oral health promotion."

https://pubmed.ncbi.nlm.nih.gov/26917309/



Germany
Oral Care Profile

Germans are the best for regularly visiting the dentist, with 45% saying they go twice a year.

Over half (56%) brush their teeth twice a day, and alongside the UK, they are the best for using electric toothbrushes.

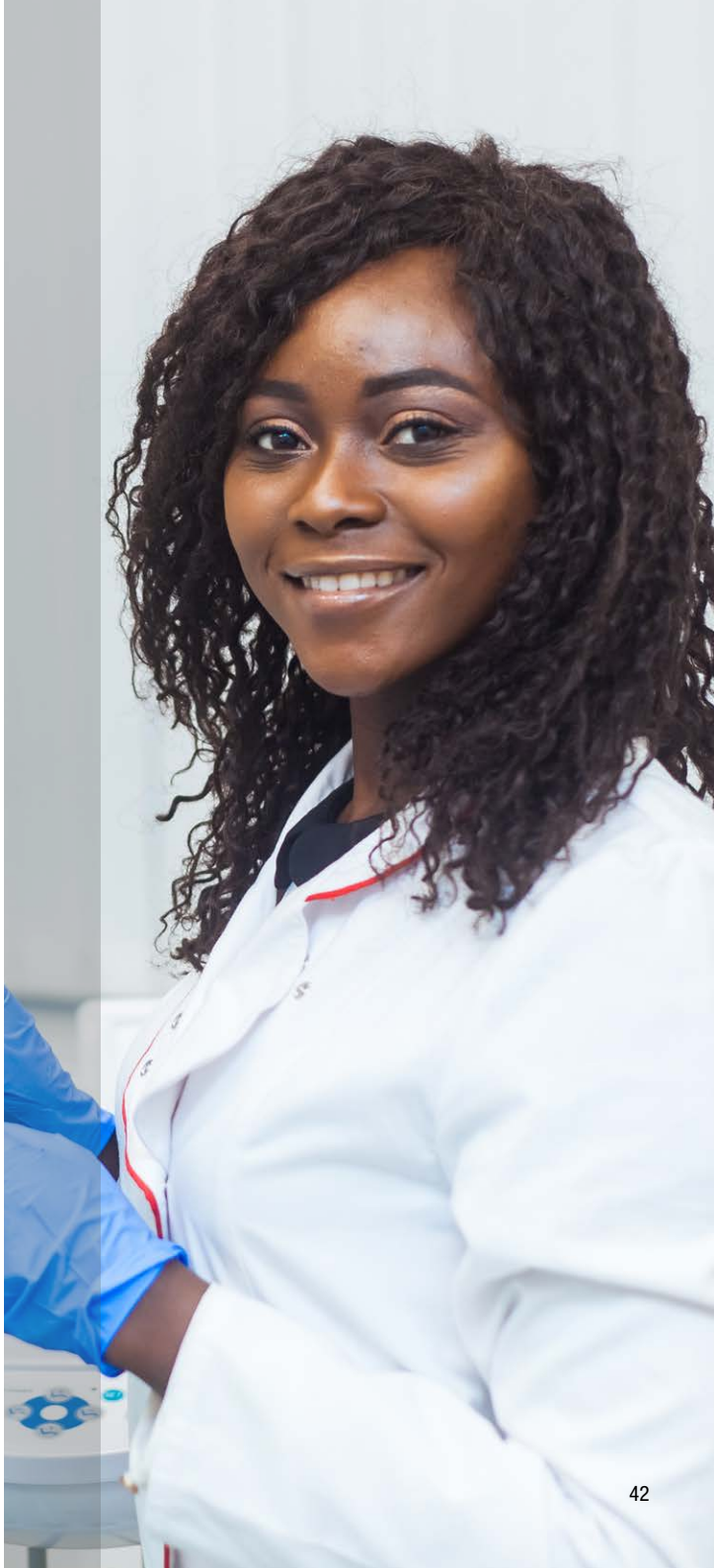
However, only 16% of Germans say they have all of their own teeth with no fillings or implants. Two in five have 1-5 fillings, and almost one in five have 1-5 implants. A third complain of tooth sensitivity, and 21% report tooth decay. 31% say they have no problems with their oral health.

Germans are the least likely to skip brushing their teeth because they forget (only 20% admit that they do this).

Almost a quarter (24%) of German respondents do not think that the dental practice would be a convenient place for health checks, the highest out of all countries.

Just one in ten Germans would favour orthodontic treatment over other cosmetic dental treatments, the lowest of any country. Teeth whitening was the most popular amongst Germans (35% would choose this), followed by white fillings/repairs (19%). 16% say they are happy with their teeth, making them the second most satisfied country behind the Netherlands.

- “Germany has more dentists, dental technicians and dental nurses than any other EU member state.” Ziller, Eaton & Widström, 2015.
- Care is semi-privatised. There is a statutory health insurance system (the world’s first) that covers dental check-ups and basic care. Private insurance is available and covers more extensive treatment.



Indonesia Oral Care Profile

People in Indonesia are the best for brushing their teeth twice a day - almost two-thirds report that they do this.

However, only one-third report that they brush for two minutes with fluoride toothpaste. They are the worst country for cleaning between teeth regularly, and for using an electric airflosser or interdental cleaner. They are in the bottom three countries for using an electric toothbrush.

45% of people admit that they skip brushing when they forget, though only 4% say they skip brushing if they've had an alcoholic drink (it is worth remembering that Indonesia has the largest Muslim population in the world, and as such, drinking is less common than in many other countries).

They report the second most mouth ulcers and sores (12% of respondents), but also the least gum inflammation and disease. Almost half (48%) report tooth decay, over a quarter (27%) report tooth sensitivity, and less than a quarter report no problems with their teeth.

Only 21% normally visit the dentist twice a year, which places them at the bottom out of all the markets.

Indonesia is the country with the lowest level of reported dental intervention – 64% of respondents have all their own teeth and no fillings or implants. Only 25% of people have at least one filling, and only 3% have at least one implant. Just 2% have five or more fillings. Indonesians are the one nation more likely to get dental advice from their family than from the dentist.

Although regular dentist visits are less common, Indonesians are amongst the most open to the idea of wellbeing checks at a dental practice; 61% think it would be convenient, and a further 26% say they would like to try it.

- "Underprovided and underutilized" - The Republic of Indonesia Health System Review, World Health Organization, 2017.
- Inequality of access to dental care exists for rural vs urban communities.
- The dentist to population ratio is 1:6750, based on PDGI data.
- Public sector dental care is available at puskemas (community health clinics) and hospitals.
- The private sector provides most dental care. Unlicensed dental practitioners conduct most of this work.
- Service use is concentrated in people of higher socioeconomic status – access is linked to ability to pay.

Italy
Oral Care Profile

Within Europe, Italy is second to Netherlands in having all their own teeth with no fillings or implants (26%).

The percentage of people with 1-5 fillings is above average, but on par with Spain (43%), and the percentage with 5-10 fillings is the lowest within Europe.

Italians have the highest level of gum inflammation/ disease of all markets (32%), double that of France, and the percentage of people who say they have no problems with their teeth (23%) is low compared to the rest of Europe – and equal to Indonesia, where oral health is overall poor. Bad breath is reported by 15% of Italians, which is higher than elsewhere in Europe.

In terms of oral care habits, Italians are fairly average and do not differ much from the other European countries. Just over half (51%) brush twice a day, and 35% brush for two minutes with fluoride toothpaste. Use of electric airflossers and interdental cleaners is higher than elsewhere in Europe, with Italy ranking second on this metric worldwide (20%). 20% say they skip brushing when they are ill.

Alongside Spain, Italy is the European country least satisfied with their smiles (only 5% are happy as they are). 47% would choose teeth-whitening above other cosmetic treatments.

- In Italy healthcare is provided for all Italian citizens and residents and it is delivered mainly by public providers, with some private or private-public entities.
- The public healthcare system provides only 5-8% of oral healthcare services.
- Dental care is generally not covered, except for children through age 16, vulnerable populations, and people in economic and emergency need.

https://pubmed.ncbi.nlm.nih.gov/28546591/

Japan
Oral Care Profile

Tooth sensitivity amongst Japanese respondents is much lower than every other country – only 19% report this issue.

Japan – tied with Mexico – also has the lowest reported tooth erosion (4%). 25% have tooth decay – the lowest of the Asian markets, and 29% have gum inflammation/disease – the second highest rate after Italy.

Surprisingly, Japanese respondents rank the lowest for daily mouthwash use (21%), and for gargling with mouthwash when they get home (8%). 56% brush their teeth twice a day (slightly higher than the average), but only one quarter brush for two minutes with fluoride toothpaste. They are the third worst country for regular dentist visits, with only 26% reporting that they go twice a year. On top of this, just 55% say they take advice from their dentist (low compared to Mexico's 81%), and 19% say they don't seek advice at all (the highest rate by far).

They are also the country with the sweetest tooth – only 7% avoiding sugary snacks and drinks – and the highest reported bad breath (34%). Regular mouth ulcers and sores are more common than the average, with more than one in ten reporting this issue.

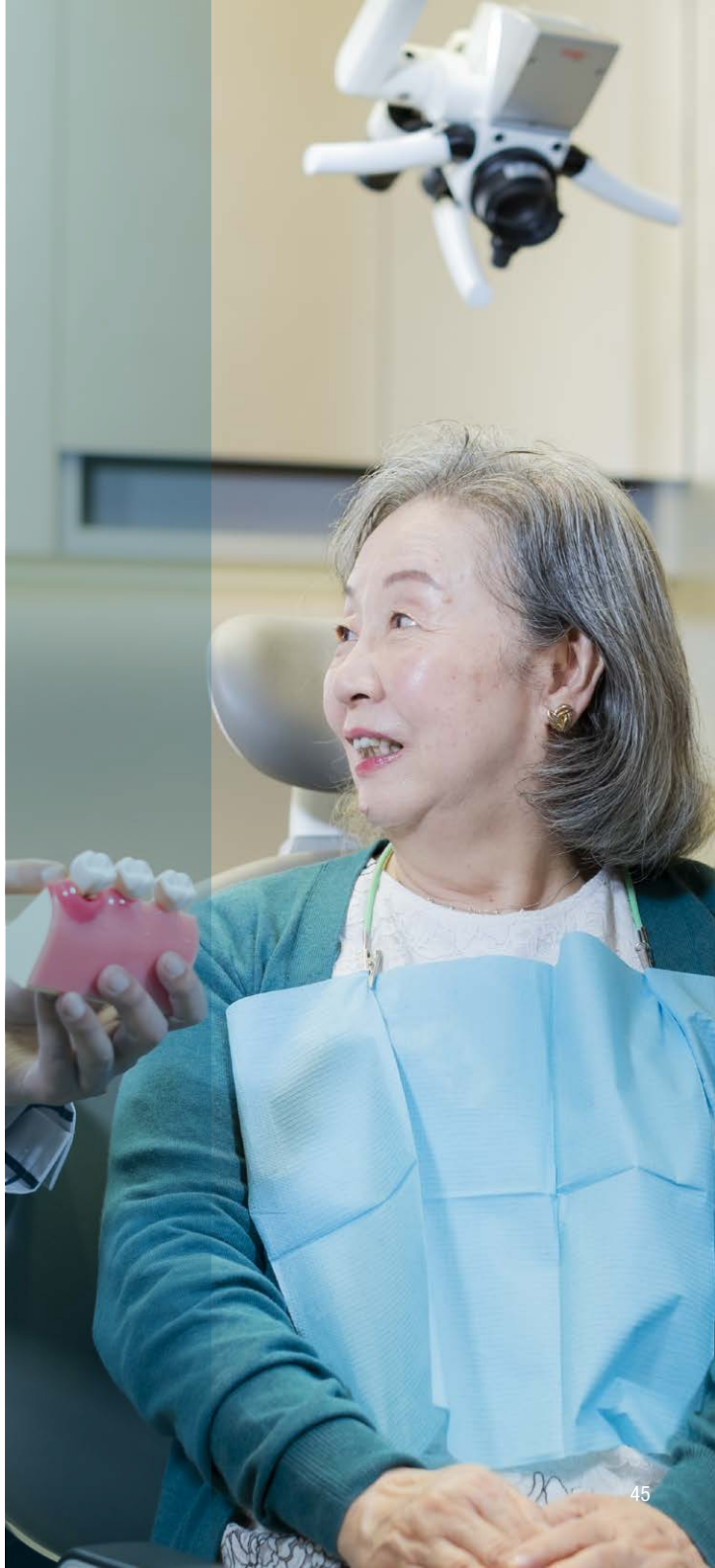
Japan is the leader in fillings - over two-thirds of respondents have at least one filling. It is the market with the highest number of people with five or more fillings (20%).

Japan is the worst country for not brushing their teeth when they can't be bothered – over a quarter admit to this. This is the most common excuse given by Japanese respondents.

Japan is the only market where dementia is more commonly thought to be related to oral health (27%, compared to global avg. of 7%). More respondents in Japan think there is a link to strokes (14%) and overall life expectancy (38%) than anywhere else.

- "Japan introduced a universal health insurance system for the entire population in 1961. It covers almost all medical and dental treatment and pharmacy care required by the population. People can receive treatment at a relatively low cost, and the same fee is applied throughout the nation."

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6163272/



Mexico
Oral Care Profile

Mexico is the worst country for brushing for two minutes at a time with fluoride toothpaste (23%).

It is also the second worst for regularly brushing overall (45%). Still, the percentage of people with all of their own teeth, no fillings or implants is high – 47%, on par with China, and over 20% higher than their neighbours in the US. The percentage of those with at least one filling is also low (34%).

Mexico has one of the best understandings of the link between oral health and smoking (73%). Respondents there also have a better understanding of the link to oral cancer than people anywhere in Europe. Overall, fewer respondents in Mexico than in most countries believe there is no link between oral health and health and life expectancy (7%). However, they have a worse understanding of the link to heart disease (6%), strokes (2%) and dementia (2%) than anywhere else.

Mexicans are the best for taking dental advice from their dental practice (81%). Just 3% say they do not seek advice.

- "Cost of healthcare services in Mexico is variable and dependent on the nature of the service and the institution utilized. Generally, health costs associated with use of the public healthcare sector are higher than their private counterparts."

https://en.wikipedia.org/wiki/Healthcare_in_Mexico

- "The urban population is more concerned about aesthetics. Today, dental implants are in great demand in large cities, where the cheapest implant is offered for about $200."

https://wedc.org/export/market-intelligence/posts/dental-services-boom-mexico/

https://www.borgenmagazine.com/dental-care-in-mexico/

https://www.researchgate.net/publication/313125208_The_paradigm_of_oral_health_in_Mexico/fulltext/58928d00458515aeac946128/The-paradigm-of-oral-health-in-Mexico.pdf

Netherlands Oral Care Profile

The Netherlands reports significantly lower levels of tooth decay than any other country (13%).

It has the highest percentage of people with all their own teeth with no fillings/implants within Europe (27%). Less than half the population (47%) have one or more fillings, a lower rate than elsewhere in Europe. However, the proportion of people with one or more dental implants is high, at 16%, second only to Singapore. The rates of other oral health issues are roughly on par with the other European markets.

Rates of interdental cleaning were higher than elsewhere in Europe (35%), although far off from Brazil. Electric toothbrush use is almost on par with the top two countries (Germany and the UK), at 38%. 40% of respondents said they visit the dentist twice a year normally, placing them third highest (again after the UK and Germany).

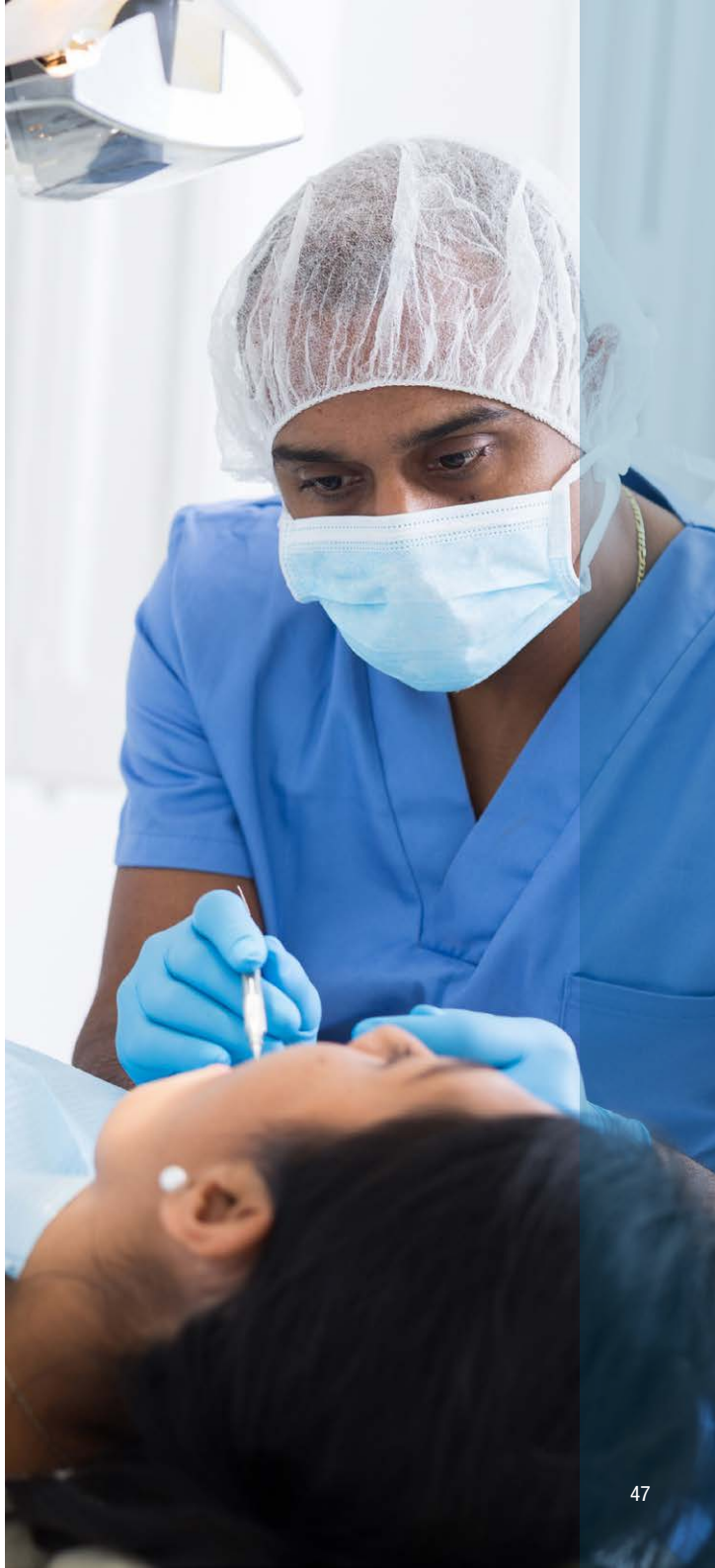
19% of people said they skip brushing their teeth when they can't be bothered, which is the highest rate in Europe, as is the percentage of those who skip brushing when they're in a rush.

Out of all markets, Dutch respondents were the happiest with their teeth (18%), although 14% said they would like orthodontic treatment – the second-highest percentage within Europe. One-third would choose teeth-whitening.

- Dental care in the Netherlands is entirely privatised.
- Basic health insurance covers all dental care for children up to age 18.
- Insurance covers dental surgery for adults.
- Children tend to accompany parents for check-ups from 2-3 to familiarise them with the dentist, then begin to have their own check-up from around age 3.

https://www.expatica.com/nl/healthcare/healthcare-services/dutch-dental-care-104612/

https://www.angloinfo.com/how-to/netherlands/healthcare/health-system/dental-care



Singapore Oral Care Profile

Singapore has fairly average results for dental/oral health, although tooth erosion rates are higher than average and second to worst after Thailand (19%).

Rates of dental implants are high, with 17% of respondents having at least one, whilst the percentage of people with one or more fillings is fairly low (45%). Oral health issues are relatively low, particularly in comparison with elsewhere in South East Asia.

Less than a third of respondents said they brush with fluoride toothpaste for two minutes, and less than half said they brush twice a day.

Just 39% of respondents believed there was a link between oral health and smoking, which could explain the relatively low rate of people who wanted to give up smoking (15%). Still, 11% recognised a link to low birth weight, which is higher than all other countries.

- Singapore has a government-run publicly funded universal healthcare system.
- Costs of dental treatments are unclear – it appears that some basic treatment is covered by MediSave (the medical savings account system that all workers are enrolled into in a similar fashion to the UK's NI scheme).

Spain
Oral Care Profile

23% of people in Spain say they have all their own teeth - no fillings or dental implants.

43% have 1-5 fillings (equivalent to Italy, Thailand, and Brazil), although the percentage with up to 10 fillings is higher than those countries, at 13%. Tooth sensitivity affects almost a third of Spaniards, and gum inflammation over a quarter, but overall, oral health is fairly level with the rest of Europe.

Alongside Thailand, Spain leads in regular mouthwash use with 41% using mouthwash daily or twice daily. 41% brush their tongue, the second highest rate in Europe. A relatively large percentage brush for two minutes with fluoride toothpaste – 39%, which is a higher rate than elsewhere in mainland Europe. Yet only 47% brush their teeth twice daily – the lowest rate in Europe.

Spaniards are the least likely to skip brushing their teeth when they want to go straight to bed (17%), and few skip brushing when they are ill (7% - lower than the rest of Europe).

The Spanish are better for taking their dental care advice from a dentist or dental practice than anywhere else in Europe (75%), and are the least likely to get advice from TV advertisements or infomercials (10%). However, only 31% say they normally visit their dentist twice a year, which is the lowest rate within Europe.

- Dental care in Spain is not covered by the national healthcare system.
- Most dentists operate privately and usually expect payment up-front, but costs are generally lower than in Northern Europe.
- Children aged 6-15 are eligible to free dentistry, which includes six-monthly check-ups.
- Emergency dental care is covered by the state.

https://www.expatica.com/es/healthcare/healthcare-services/dental-care-in-spain-582615/

Thailand
Oral Care Profile

People in Thailand report the most and worst problems with their oral health.

They are the leaders in tooth decay (49%), tooth sensitivity (39%), tooth erosion (25%) and regular mouth ulcers (13%). Only 1 in 10 respondents say they have no problems. Bad breath (30%) and gum inflammation/disease (26%) are also very common. Only 30% normally visit the dentist twice a year.

This is despite the fact that they are the fourth-best country for brushing their teeth regularly, the third-best for brushing for two minutes with fluoride toothpaste, and one of the two best for daily mouthwashing. They are also the second-best country for avoiding sugary snacks and drinks (23%), after China. 25% said that they clean between their teeth regularly, which is more than twice the figure of Indonesians. One in ten use an electric toothbrush.

Thailand is the country most receptive to the idea of general health checks at their dental practice, with only 4% saying they do not think this would be convenient.

White fillings/repairs to teeth is the most desired cosmetic treatment amongst Thai respondents (35%). Only 5% say they are happy with their smile.

- The Universal Coverage Scheme was implemented in the early 2000s.
- This provides citizens with free healthcare, including dental.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3303123/#R17

UK Oral Care Profile

People in the UK are the most likely to report that they have no issues with their dental and oral health (40%).

They are one of the least likely countries to report having bad breath, behind Brazil and Mexico, and tooth decay, behind the Netherlands, Brazil, and Germany. Britons are the second-best for brushing regularly (63%), and by far the best for brushing with a fluoride toothpaste for around two minutes (47%). The UK is also the top country for electric toothbrush use, alongside Germany. The UK is the second-best for visiting the dentist twice a year.

Still, almost a third (31%) report having sensitive teeth, and almost a fifth (19%) suffer from gum inflammation/disease. Only one in ten report that they brush their teeth immediately after every main meal and rinse their mouth with water, which is by far the lowest of any country (the next lowest is Germany, with 17% doing this).

The UK is tied with Japan for the highest percentage of people with one to five fillings (47%). Less than a quarter of respondents have all their own teeth, with no fillings or implants (24%).

One-third of respondents say they never neglect brushing their teeth. The most common excuse given for neglecting to do so is forgetting. More than one in ten (11%) say they skip brushing when they have been drinking. 13% say they do not take advice on their dental health, which is the highest rate in Europe, and the second highest globally.

Over a quarter (28%) believe there is no proven link between general health/life expectancy and oral health – a much higher rate than elsewhere in the word. Only 12% think there is a link between life expectancy and oral health. Just over half (51%) think that smoking affects oral health.

People in the UK are twice as happy with their teeth as Americans (14% vs 7%), although 41% would opt for teeth whitening treatment if they could.

- Dental care in the UK is available both through the NHS and privately.
- Most adults have to pay for NHS treatment, but generally at a much lower rate than for private dentistry; fee exemptions exist for several groups, including children under 18.
- Most NHS dental care is provided by private practitioners.
- A 2018 NHS survey suggested that up to 14.3% of people in South East England “prefer private dentistry”.

https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/08/GP-Survey-Dental-Results-Summary-PDF-842KB-1.pdf

US
Oral Care Profile

Despite the perception of Americans having better teeth than Britons, the US reported more issues than UK respondents.

The most common issue was tooth sensitivity, reported by over one third (34%). Tooth decay is reported by over one quarter (26%). The percentage of reported bad breath (16%) was double that of Brazil, but less than half that of Japan. The US is the third worst country for tooth erosion (16%), after Thailand and Singapore.

Over half (54%) brush their teeth twice a day, and brush their tongues. 40% brush for two minutes with fluoride toothpaste. They are the fourth best country for daily mouthwashing (38%), and the second best for regular interdental cleaning (40%).

Over half of respondents (54%) have one or more fillings, though only 15% have 5-10. More than a quarter (26%) have all their own teeth and no fillings or implants. Dental implants are more commonly desired in the US than any other country (17%), although teeth whitening is still the most desired treatment (37%).

More than a quarter (26%) say that they neglect brushing their teeth when they are in a rush – more than all other countries. One-third (33%) say they skip brushing when they just want to go straight to bed. Less than one in five (18%) say they never forget to brush their teeth.

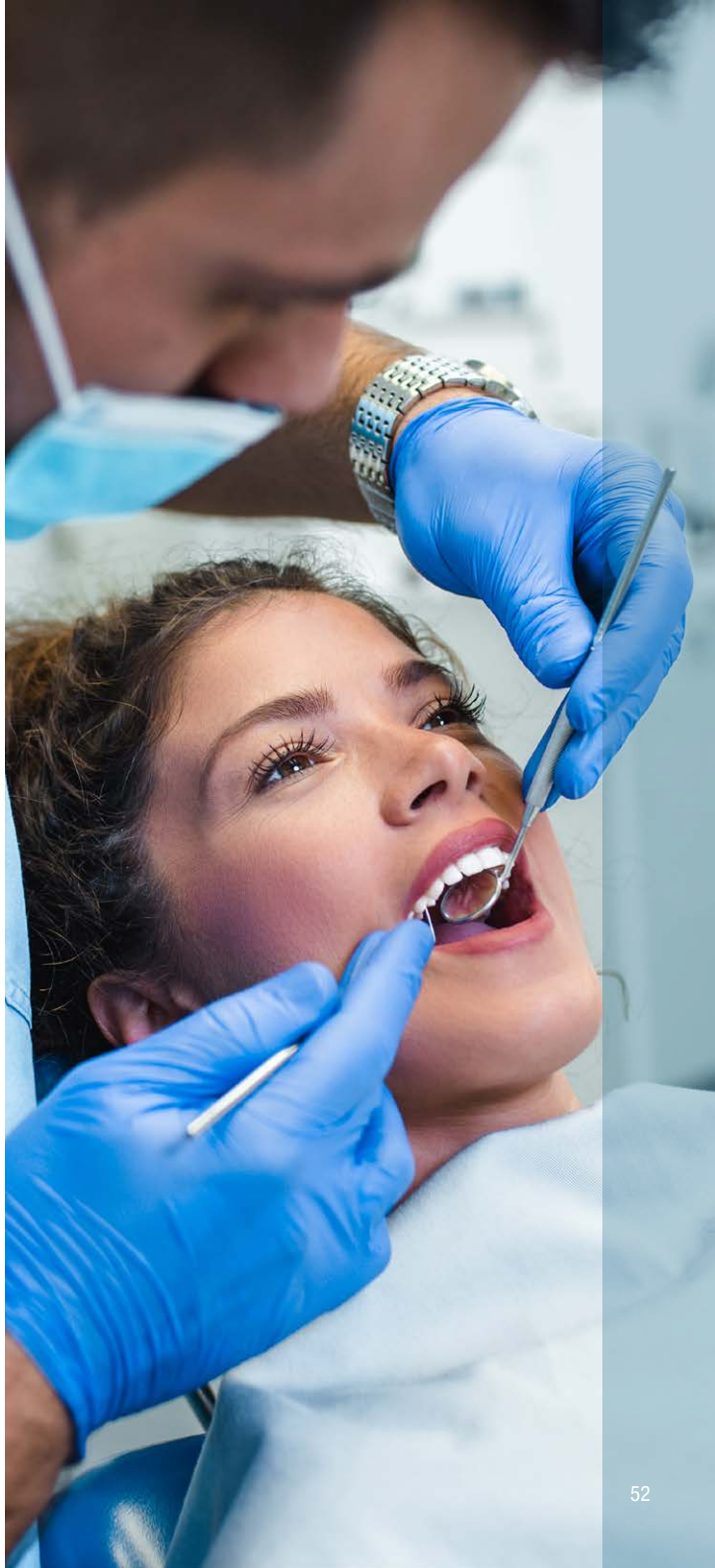
The US is a leader in understanding the links between oral health and general health, with 24% of respondents thinking there is a link to diabetes, 23% to heart disease, and 11% to kidney disease.

- Dental care is not well-integrated into the healthcare system. Most state Medicaid (government sponsored insurance) programmes do not cover adult dental care.

https://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/OralHealthWell-Being-StateFacts/US-Oral-Health-Well-Being.pdf?la=en

https://www.nap.edu/read/13086/chapter/5

https://jdh.adha.org/content/91/1/6



Regional trends

	Top	Bottom
Brushing twice a day	Indonesia	Brazil
Mouthwashing daily or twice daily	Spain & Thailand	Japan
Visiting dentist twice a year	Germany	Indonesia
Brushing tongue	Brazil	China
Brushing for two mins with fluoride toothpaste	UK	Mexico
Cleaning between teeth regularly	Brazil	Indonesia
Using electric toothbrush	UK & Germany	Brazil & Argentina
Avoiding sugary snacks/drinks	China	Japan
Chew sugar-free gum	China	Brazil
Using electric airflosser/interdental cleaner	China	Indonesia