

Table 1: Reasons cited by French fifth-year dental students for not using CRA (n=217)

Reasons for not using CRA	Citation frequency ⁽¹⁾	Significantly related respondents' characteristics
Lack of time	67.7%	-
No teaching of CRA during undergraduate education	30.9%	-
Insufficient knowledge on CRA	23.5%	-
Problem of billing or reimbursement	19.4%	Men ($p=0.037$)
Irrelevance of CRA	1.8%	-

⁽¹⁾ Some participants checked off more than one option.

Table 2: Results of the logistic regressions related to the use of CRA in everyday practice according to sociodemographic characteristics of the respondents

	Respondent sociodemographic characteristics	OR	95% CI	P-Value
Univariate LR	Age (years) (n=1,101)	1.02	0.95-1.10	0.5734
	Gender (women/men) (n=1,147)	1.11	0.83-1.49	0.4925
	Reading articles about MI (yes/no) (n=1,140)	1.15	0.84-1.57	0.3885
	Considering initial training on CRA as sufficient (yes/no) (n=1,143)	2.46	1.79-3.37	<0.001*
Multivariate LR	Considering initial training on CRA as sufficient (yes/no) (n=1,143)	2.46	1.79-3.37	<0.001*

LR: logistic regression; OR: odd ratio; 95% CI: 95% confidence interval; MI: minimal intervention; CRA: caries risk assessment

*: statistically significant

Only factors with univariate p-value <0.20 were included in the multivariate models.

Table 3: Overview of preventive treatments performed by French fifth-year dental students (n=1,153) ⁽¹⁾

Preventive options	Citation frequency (2)	Significantly related respondents' characteristics
Sealants	83.4%	
In-office F varnish application	69%	<i>Women (p=0.001)</i>
Prescription of > 1,500 ppm F toothpaste	41.6%	<i>Articles reading (p=0.046)</i>
Prescription of < 1,500 ppm F toothpaste	25.2%	
Prescription of F mouthwashes	23.7%	
In-office F gel application	10.3%	<i>Articles reading (p=0.001)</i>
Prescription of CCP/ACP agents	5.4%	<i>Articles reading (p<0.001)</i>
Prescription of dental products with arginine	4.8%	

⁽¹⁾ Not all participants answered to the question.

⁽²⁾ Some participants checked off more than one option.

CPP-ACP: casein phosphopeptide - amorphous calcium phosphate; F: fluoride; ppm: parts per million

Table 4: Hierarchy of factors considered in a CRA for adults by French fifth-year dental students (n=1,156) ⁽¹⁾

Factor	Factor of importance in CRA (%)	Less important factor in CRA (%)
Current oral hygiene	87.4	0.9
Patient's motivation	45	1.4
Presence of active carious lesion	37	2.1
Reimbursement	0.9	73.7
Dentist's subjective assessment	1.3	53.2
Age	5.5	Women ($p<0.001$) ⁽²⁾ 31.6
Current diet	36.3	9.2
	Women ($p=0.044$) ⁽²⁾	Men ($p=0.048$) ⁽²⁾
Presence of several large restorations	13.8	4.7
	Women ($p=0.040$) ⁽²⁾	
	No articles reading ($p=0.003$) ⁽²⁾	
Comprehension of the causes of caries	15	6.4
		No articles reading ($p=0.029$) ⁽²⁾
Regularity of patients visits	11	5.1
Decreased saliva function	10.6	5
	Articles reading ($p=0.045$) ⁽²⁾	
Current use of F toothpaste	10.4	11.4
Recent carious lesions	9.4	7
	Women ($p=0.003$) ⁽²⁾	
Socioeconomic status	8.6	24.8
Presence of dental appliances	1.8	20
Gingival recession or exposed roots	1	25.3

⁽¹⁾ Not all participants answered to the question.

⁽²⁾ Significantly related respondents' characteristics (gender and additional reading of scientific articles about MI)

CRA: caries risk assessment; F: fluoride

Table 5: Results of the uni- and multi-variate LR's performed to indicate the associations between the CRA use and factors considered as being important in a CRA in adults

	Factors considered as being important	OR	95% CI	P-Value
Univariate LR (n=1,146)	Age	0.75	0.41-1.36	0.3354
	Current diet *	1.71	1.23-2.37	0.0015
	Current oral hygiene	0.70	0.42-1.14	0.1526
	Dentist's subjective assessment	0.63	0.20-2.01	0.4390
	Gingival recession or exposed roots	0.69	0.19-2.58	0.5856
	Socioeconomic status	0.66	0.41-1.07	0.0899
	Decreased saliva function	0.87	0.54-1.39	0.5570
	Presence of several large restorations	1.16	0.74-1.80	0.5169
	Reimbursement *	0.23	0.07-0.80	0.0203
	Presence of dental appliances	0.46	0.18-1.14	0.0945
	Regularity of patients visits	0.80	0.51-1.25	0.3291
	Patient's motivation	0.81	0.60-1.09	0.1556
	Comprehension of the causes of caries	1.37	0.88-2.14	0.1651
	Presence of active carious lesion	1.29	0.94-1.77	0.1083
	Recent carious lesions	1.37	0.79-2.38	0.2624
	Current use of fluoride toothpaste	0.76	0.48-1.20	0.2380
Multivariate LR (n=1,145)	Current diet *	1.80	1.25-2.59	0.0014
	Current oral hygiene	0.66	0.39-1.11	0.1172
	Socioeconomic status	0.76	0.46-1.27	0.2957
	Reimbursement *	0.26	0.07-0.94	0.0393
	Presence of dental appliances	0.50	0.19-1.31	0.1597
	Patient's motivation	0.95	0.68-1.33	0.7752
	Comprehension of the causes of caries *	1.61	1.00-2.58	0.0497
	Presence of active carious lesion	1.41	0.98-2.03	0.0619

*Statistically significant difference

LR: logistic regression; OR: odd ratio; 95% CI: 95% confidence interval

Only factors with univariate p-value <0.20 were included in the multivariate models.

Table 6: Importance of different factors to be considered for the development of a treatment plan in adults

	Not or only marginally important (grade 1)	Moderately important (grade 2)	Very to extremely important (grade 3)	Significantly related respondents' characteristics
Age (n=1,149)	15.8%	34.9%	49.3%	-
Socioeconomic status (n=1,144)	17.9%	37.3%	44.8%	Men: grade 3 (p=0.015)
Current oral hygiene (n=1,147)	0.8%	3.5%	95.7%	-
Presence of active carious lesion (n=1,138)	5.3%	19.8%	74.9%	Articles reading: grade 3 (p=0.041)
Recent carious lesions (n=1,144)	13.9%	36.4%	49.7%	-
Presence of several large restorations (n=1,145)	6.6%	26.7%	66.7%	Women: grade 3 (p=0.045)
Presence of dental appliances (n=1,146)	13.6%	36.1%	50.3%	Women: grade 3 (p=0.005)
Gingival recession or exposed roots (n=1,151)	16.7%	39.3%	44%	Men: grade 1 Women: grade 3 (p=0.003)
Current use of F toothpaste (n=1,150)	28.2%	34.5%	37.3%	Articles reading: grade 2 and 3 (p=0.001)
Current diet (n=1,149)	21.9%	27.9%	50.2%	Articles reading: grade 2 and 3 (p<0.001)
Dentist's subjective assessment (n=1,145)	33.5%	39.9%	26.6%	Men: grade 3 (p=0.009)
Decreased salivary function (n=1,152)	12.2%	24.1%	63.7%	-
Patient comprehension of the causes of caries (n=1,150)	7.9%	18.9%	73.2%	Men: grade 1 and 2 Women: grade 3 (p<0.001)
Regularity of patient visits (n=1,147)	4.7%	19.7%	75.6%	Men: grade 2 Women: grade 3 (p=0.007)
Patient motivation (n=1,147)	1.4%	6.7%	91.9%	-
Reimbursement (n=1,151)	38.6%	39.5%	21.9%	-

F: fluoride

Table 7: What do French fifth-year dental students understand by the term “MI in cariology”? (n=1,157) ⁽¹⁾

What is MI?	Citation frequency ⁽²⁾
A treatment concept based on minimally invasive dentistry	87.8%
A treatment concept based on prevention	Articles reading ($p=0.002$) ⁽³⁾ 77.4%
A treatment concept that can be implemented into private practice	Women ($p=0.013$) ⁽³⁾ 61.5%
A treatment concept based on the understanding of the risk factors	Articles reading ($p=0.002$); Women ($p<0.001$) ⁽³⁾ 57.7%
A treatment concept based on the use of magnification	Articles reading ($p=0.002$) ⁽³⁾ 34.7%
I do not know exactly what is MI in cariology	Articles reading ($p<0.001$) ⁽³⁾ 6.4%
A treatment concept that is part of the public health domain	No articles reading ($p<0.001$) ⁽³⁾ 1.6%
A treatment concept restricted for use in paediatric dentistry	1.4%

⁽¹⁾ Not all participants answered to the question.

⁽²⁾ Some participants checked off more than one option.

⁽³⁾ Significantly related respondents' characteristics (gender and additional reading of scientific articles about MI)

Table 8: Respondents' knowledge about preventive and therapeutic sealants*

	Disagreement (Grade 1)	Neutral (Grade 2)	Agreement (Grade 3)
There is strong scientific evidence on the effectiveness of sealants to prevent dental caries (n=1,144)	3.2%	20.4%	76.4%
There is strong scientific evidence on the effectiveness of sealing non-cavitated carious lesions (n=1,140)	5.7%	35.3%	59%
Follow-up visits are needed when sealants are placed (n=1,133)	1.7%	5.9%	92.4%
The loss of sealants is usually related to technical problems during the procedure (n=1,139)	17.1%	23.7%	59.2%
Resin composites are more efficient than GICs for sealants (n=1,143)	26.1%	35.7%	38.2%
As long as sealants are present, the sealed surface will not develop dental caries (n=1,141)	74.5%	13.1%	12.4%

* Not all participants answered to the question.

GIC: glass ionomer cements

Table 9: Preferences of the respondents for preventive and therapeutic sealants in terms of patient profile and the material choice ⁽¹⁾

		Preventive sealants	Therapeutic sealants
Patient profile	Age (n=1,113)	Children only: 58.5% Adults only: 0.7% Children and adults: 40.8%	Children only: 37.9% Adults only: 6.2% Children and adults: 55.9% <i>Articles reading (p<0.001)</i> ⁽³⁾
	Caries risk level (n=1,111)	Low risk: 4.4% <i>Men (p<0.001)</i> ⁽³⁾ High risk: 62.2% <i>Articles reading (p=0.045)</i> ⁽³⁾ Regardless of risk level: 33.4% <i>Women (p<0.001)</i> ⁽³⁾	Low risk: 24.6% <i>Articles reading (p<0.001)</i> ⁽³⁾ High risk: 38.2% <i>Articles reading (p<0.001)</i> ⁽³⁾ Regardless of risk level: 37.3%
Choice of material ⁽²⁾		GIC: 45.7% (n=529) Composite resin: 60.6% (n=701) <i>Articles reading (p<0.001)</i> ⁽³⁾ RM-GIC: 22.1% (n=256) <i>Articles reading (p=0.029)</i> ⁽³⁾	GIC: 26.4% (n=305) <i>Articles reading (p=0.001)</i> ⁽³⁾ Composite resin: 37% (n=427) <i>Articles reading (p<0.001)</i> ⁽³⁾ RM-GIC: 19.2% (n=221) <i>Articles reading (p<0.001)</i> ⁽³⁾

⁽¹⁾ Not all participants answered to the question

⁽²⁾ Some participants checked off more than one option

⁽³⁾ Significantly related respondents' characteristics (gender and additional reading of scientific articles about MI)

GIC: glass ionomer cements; RM-GIC: resin-modified GIC

Table 10: Preventive measures recommended in addition to preventive sealants ⁽¹⁾

	Never	Only in children	Only in adults Only	In both children and adults
Toothbrushing and dental floss or interdental brushes (n=1,014)	1.4%	5%	13.4%	80.2%
< 1,500ppmF toothpaste (n=910)	30.7%	40.3%	4.8%	24.2%
> 1,500ppmF toothpaste (n=942)	28.6%	8%	40.4%	23%
F mouthwashes (n=910)	52.5%	3.3%	26.6%	17.6%
Products containing CPP/ACP (n=887)	79.7%	6.7%	5.5%	8.1%
Products containing arginine (n=880)	82.7%	1.5%	8.8%	7%
In-office F varnish application (n=960)	12.9%	31.5%	4.8%	50.8%
In-office F gel application (n=886)	63.9%	8.9%	5%	22.2%

⁽¹⁾ Not all participants answered to the question.

CPP-ACP: casein phosphopeptide - amorphous calcium phosphate; F: fluoride; ppmF: parts per million fluoride