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Self-perceived knowledge and attitudes toward the use of silver diamine fluoride in pediatric dentists.

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Abstract: **Background:** Self-perceived knowledge regarding the use of silver diamine fluoride is relevant for pediatric dentists. **Objective:** To correlate self-perceived knowledge with attitudes towards the use of silver diamine fluoride in pediatric dentists in Peru. **Materials and methods:** A validated self-reported questionnaire was published to 278 pediatric dentists in Peru. Covariates were collected on general characteristics, frequency, education, information and possible barriers regarding SDF. **Results:** 59.35% indicated having used silver diamine fluoride many times, while 13.67% never used the material. Moderate correlations were recorded between self-perceived knowledge of cavitated lesions with patient-related indications regarding the use of SDF, as well as self-perceived knowledge of non-cavitated lesions with patient-related indications regarding the use of SDF and with considerations for treatment outside the esthetic zone. Likewise, the use of SDF before restorative treatment was found to be related to considerations for treatment outside the esthetic zone. **Conclusion:** There is a moderate correlation between self-perceived knowledge and attitudes towards the use of SDF in Peruvian pediatric dentists. However, self-perceived knowledge should be reinforced to promote the use of this material, especially in the current context.

Key words: Pediatric dentistry; dental caries; knowledge; attitude.

Conocimiento autopercibido con las actitudes frente al uso de fluoruro diamino de plata en los odontopediatras.

Resumen: **Antecedentes:** El conocimiento autopercibido frente al uso del fluoruro diamino de plata tiene relevancia para los odontopediatras. **Objetivo:** Correlacionar el conocimiento autopercibido con las actitudes frente al uso del fluoruro diamino de plata en los odontopediatras del Perú. **Materiales y métodos:** Se publicó un cuestionario validado auto reportado a 278 odontopediatras del Perú. Se recopilaron covariables sobre características generales, frecuencia, educación, información y posibles barreras sobre el FDP. **Resultados:** El 59,35% indican haber usado muchas veces el fluoruro diamino de plata, mientras que el 13,67% nunca usó el material. Se registraron correlaciones moderadas entre conocimiento autopercibido de las lesiones lesiones cavitadas con las indicaciones relacionadas al paciente sobre el uso del FDP, así como conocimiento autopercibido de lesiones no cavitadas con las indicaciones relacionadas al paciente sobre el uso del FDP y con consideraciones para el tratamiento fuera de la zona estética. Asimismo, se encontró entre el uso del FDP antes de tratamiento restaurador con consideraciones para el tratamiento fuera de la zona estética. **Conclusión:** Existe una correlación moderada entre el conocimiento autopercibido con las actitudes frente al uso del FDP en los odontopediatras del Perú. Sin embargo, se debe reforzar el conocimiento autopercibido para promover el uso de este material, especialmente en el contexto actual.

Palabras clave: Odontología pediátrica, caries dental, conocimiento, actitud.

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Conhecimento e atitudes autopercebidas em relação ao uso de fluoreto de diamina de prata em odontopediatras.

Resumo: **Fundamento:** O conhecimento autopercebido sobre o uso do fluoreto de diamina de prata é relevante para odontopediatras. **Objetivo:** Correlacionar o conhecimento autopercebido com as atitudes em relação ao uso do diamina fluoreto de prata em odontopediatras no Peru. **Materiais e métodos:** Um questionário validado e autoaplicável foi publicado para 278 odontopediatras do Peru. Foram coletadas covariáveis sobre características gerais, frequência, escolaridade, informação e possíveis barreiras em relação ao FDP. **Resultados:** 59,35% indicaram ter utilizado muitas vezes o fluoreto de diamina de prata, enquanto 13,67% nunca utilizaram o material. Foram registradas correlações moderadas entre o conhecimento autopercebido de lesões cavitadas com as indicações relacionadas ao paciente sobre o uso do FDP, bem como o conhecimento autopercebido de lesões não cavitadas com as indicações relacionadas ao paciente sobre o uso do FDP e com considerações para tratamento fora da zona estética. Da mesma forma, encontrou-se entre o uso do FDP antes do tratamento restaurador com considerações para tratamento fora da zona estética. **Conclusão:** Existe uma correlação moderada entre o conhecimento autopercebido e as atitudes em relação ao uso do FDP em odontopediatras no Peru. Contudo, o conhecimento autopercebido deve ser reforçado para promover a utilização deste material, principalmente no contexto atual.

Palavras-chave: Odontopediatria, cárie dentária, conhecimento, atitude.

Introduction

Dental caries is one of the most prevalent chronic diseases affecting individuals of all ages worldwide.[1,2] The World Health Organization (WHO) has identified early childhood caries as a global concern, with prevalence rates ranging from 60% to 90%.[3] In Peru, the latest epidemiological studies conducted by the General Directorate of Epidemiology showed that 76.2% of children aged 3–5 years present with dental caries.[4]

In the absence of timely dental care, many teeth require extensive restorative treatment due to significant structural loss, making clinical management more complex in younger patients. In children, prolonged time of sitting on a dental chair, coupled with the use of anesthetics and high-speed instruments, increases the level of anxiety regarding dental treatment.[5] Therefore, advanced anesthetic techniques are often required for behavior management in these patients, which increases treatment costs.[6] Thus, employing different therapeutic measures that allow for rapid and safe dental care is essential.

Minimal intervention dentistry is a phenomenon aimed at preserving as much tooth structure as possible, leading to faster and more patient-friendly clinical procedures. Most of these techniques are well-documented and supported in scientific literature.[7,8]

One such technique is the use of silver diamine fluoride (SDF). SDF is a colorless liquid containing 253,900 ppm silver and 44,800 ppm fluoride ions as a 38% solution. It exerts antibacterial, remineralizing, and desensitizing effects, making it an appropriate material for treating caries lesions.[9,10]

Several systematic reviews and meta-analyses have demonstrated the clinical effectiveness of SDF in managing dental caries.[10,11] Consequently, in 2014, the US Food and Drug Administration approved the use of SDF in dentistry.[11] In addition, the Latin American Association of Pediatric

Dentistry indicates that SDF can be applied to various patterns of caries lesions, ranging from initial noncavitated lesions to those with moderate cavitation.[12] Furthermore, the WHO recognizes SDF as one of the most effective and safe drugs for the prevention and treatment of dental caries. [13]

Despite its high success rate, controversies persist regarding SDF use in clinical practice, primarily due to the production of dark staining. A study noted that parental acceptance was affected after SDF application.[14,15] In addition, from the professional standpoint, a lack of knowledge about SDF may also pose a barrier to its clinical use, as demonstrated in a study in Brazil.[16]

However, knowledge is not always reflected in pediatric dentists' attitude. A study conducted in Saudi Arabia reported that, although 65.5% of 278 dentists in public hospitals were aware of the existence of SDF and its advantages, 60% had not used it in their daily pediatric practice. [17]

Therefore, the purpose of this study was to determine the correlation between self-perceived knowledge and attitude toward the use of SDF among pediatric dentists in Peru.

Materials and methods

Study Design

This study was observational, analytical, and cross-sectional in nature. It was approved by the Ethics SubCommittee of the Faculty of Health Sciences.

Population and Sample

The final sample size was 278 participants, and the unit of analysis was each pediatric dentist or pediatric dentistry resident who agreed to participate in the study, provided informed consent, and was currently working. The sampling method was nonprobabilistic by convenience.

Measuring Instrument

The questions regarding knowledge and attitude were obtained from a previous study.[18] The same instrument was previously used in Saudi Arabia and Japan.[17,19,20] The survey comprised 40 questions categorized into 6 sections. The first section consisted of questions about the general characteristics of the respondents; the second section was related to frequency of SDF use; the third section was related to education about SDF; the fourth section was related to information sources for SDF; and the fifth section addressed possible barriers to SDF use. All of these sections contained one multiple choice question each. The sixth section was related to self-perceived knowledge about SDF, and the seventh section addressed attitudes toward SDF use. Both sixth and seventh sections were evaluated using a Likert scale; however, a final score was not obtained. Instead, each question was evaluated independently; then, an average was obtained for each dimension.

To conduct an internal validity assessment of the questionnaire, the translated survey was sent to a committee of experts composed of five professionals. An AIKEN's V statistic of 0.93 was obtained, indicating excellent content validity. Comments and

suggestions for the linguistic adaptation of the questions were also considered. A pilot test of the questionnaire approved by expert judgment was conducted among 22 participants. This revealed high reliability of the instrument. The survey was sent via email and social networking sites (Instagram and Facebook) using the Google Forms platform. Data were collected using Microsoft Excel® 2019 for analysis.

Data Analysis

For univariate analysis, descriptive measures such as absolute and relative frequency were used for qualitative variables. For analyzing quantitative variables for self-perceived knowledge and attitude toward SDF use, the median was used as a measure of central tendency and the interquartile range as a measure of dispersion.

For bivariate analysis, Sperman's test was employed to assess the correlation between self-perceived knowledge and attitudes toward SDF use.

A 95% confidence interval was used, and a p-value threshold for statistical significance was set at <0.05. The results were analyzed using Stata® version 17 software.

Results

This study aimed to determine the correlation between self-perceived knowledge and attitude toward SDF use among pediatric dentists in Peru. A correlation was identified between self-perceived knowledge of cavitated and non-cavitated lesions and the use of silver diamine fluoride prior to restorative treatment with some items related to attitudes toward the use of silver diamine fluoride among pediatric dentists in Peru.

Table 1 presents the characteristics of 278 respondents who accessed and answered the survey correctly. Among them, 60.79% (169) were men and 23.74% (66) were from Peruvian provinces. Moreover, 28.42% (79) of the respondents had 5–7 years of work experience. In terms of employment setting, 43.53% (121) of the respondents reported working in hospital-based dentistry.

As shown in Table 2, 59.35% (165) of the respondents reported using SDF "many times," whereas 13.67% (38) had never used the material. Regarding information sources for SDF, 12.59% (35) received information via courses, 26.98% (75) through dental product magazines, and 33.09% (92) from scientific journal publications. In addition, 14.75% (41) of the respondents referred to inadequate training as a possible barrier to SDF use, compared with 6.83% (19) who mentioned parents' acceptance as a possible barrier.

Table 3 presents the evaluation of the self-perceived knowledge of SDF among pediatric dentists. Of the respondents, 44.24% (123) had limited knowledge about the use of SDF in the treatment of dental hypersensitivity, and 59.35% (165) had adequate knowledge about how SDF is used to treat dental caries in pediatric patients. Half of the respondents reported being aware of the potential problems associated with SDF use. Additionally, 50% (139) agreed that SDF can be used to arrest cavitated lesions in dentin.

Table 1. *General characteristics of the respondents (n = 278)*

Variables	n	(%)
Sex		
Male	169	(60,79)
Female	109	(39,21)
Place of residence		
Downtown Lima	16	(5,76)
East Lima	47	(16,91)
North Lima	61	(21,94)
South Lima	55	(19,78)
Callao	33	(11,87)
Province	66	(23,74)
Years of work experience		
<2	14	(5,04)
3–4	69	(24,82)
5–7	79	(28,42)
8–10	69	(24,82)
>10	47	(16,91)
Employment status		
Freelance practice	57	(20,50)
Association	32	(11,51)
Group practice	53	(19,06)
Hospital dentistry	121	(43,53)
Corporate dentistry	15	(5,40)

n: Absolute frequency

%: Relative frequency

Table 2. *Determination of the frequency of SDF use, education, information, and possible barriers to SDF use in pediatric dentists (n = 278)*

Variable	n	(%)
Frequency of SDF use		
Sometimes	75	(26,98)
Never	38	(13,67)
Many times	165	(59,35)
Education about SDF		
Undergraduate studies	52	(18,71)
Postgraduate studies	149	(53,60)
Internship	48	(17,27)
Master's degree	26	(9,35)
Doctorate	3	(1,08)
Information sources for SDF		
Courses	35	(12,59)
Dentistry journals	75	(26,98)
Publications	92	(33,09)
Dentistry organizations	76	(27,34)
Possible barriers to SDF use		
Parents' acceptance	19	(6,83)
Patients' acceptance	22	(7,91)
Scientific knowledge	35	(12,59)
Inadequate training	41	(14,75)
Reimbursement	39	(14,03)
Product supply	35	(12,59)
Cost	26	(9,35)
Does not restore form or function	35	(12,59)
Dental stains	17	(6,12)
More than one	9	(3,24)

n: Absolute frequency

%: Relative frequency

Table 4 shows the assessment of pediatric dentists' attitude toward SDF use. The majority agreed that SDF is a good treatment alternative for patients with severe dental anxiety and those who need to undergo dental treatments under general anesthesia. Furthermore, 52.52% (146) of the respondents agreed that SDF is a good treatment alternative for lesions located outside the esthetic zone of primary teeth, and 52.16% (145) considered it a good option for teeth within the esthetic zone.

Table 5 reports a correlation between self-perceived knowledge of cavitated lesions (B), self-perceived knowledge of noncavitated lesions (C), and use of SDF before restorative treatment (D) ($p < 0.05$).

Table 3. *Evaluation of self-perceived knowledge of SDF among pediatric dentists (n = 278)*

	Item	Self-perceived knowledge					
		None	Very little	Little	Enough	A lot	Median
		n(%)	n(%)	n(%)	n(%)	n(%)	(IQR)
	How much do you know about... a						
	SDF use in dentistry?	1(0,36)	6(2,16)	29(10,43)	147(52,88)	95(34,17)	3(4-3)
	SDF use in the treatment of dental hypersensitivity?	0(0)	7(2,52)	123(44,24)	120(43,17)	28(10,07)	3(3-2)
	SDF use in the treatment of caries in pediatric patients?	1(0,36)	7(2,52)	50(17,99)	165(59,35)	55(19,78)	3(3-3)
	SDF use in the treatment of caries in adult patients?	3(1,08)	20(7,19)	57(20,50)	147(52,88)	51(18,35)	3(3-2)
	the advantages of SDF over conventional treatments?	2(0,72)	9(3,24)	55(19,78)	150(53,96)	62(22,30)	3(3-3)
	the potential problems associated with SDF use?	3(1,08)	10(3,60)	60(21,58)	139(50,00)	66(23,74)	3(3-2)
	the provisional use of SDF according to ADA to prevent the progression of dental caries (CDT code D1354)?	21(7,55)	21(7,55)	70(25,18)	127(45,68)	39(14,03)	3(3-2)
A	Index of self-perceived general knowledge of SDF use	Median = 3, IQR = (3–2)					
		I totally disagree	I disagree	I neither agree nor disagree	I agree	I totally agree	Median
		n(%)	n(%)	n(%)	n(%)	n(%)	(IQR)
	To what extent do you agree or disagree with the following statements? b						
	SDF can be used to arrest cavitated lesions in dentin	2(0,72)	6(2,16)	32(11,51)	158(56,83)	80(28,78)	3(4-3)
	SDF can be used to arrest cavitated lesions in dentin	1(0,36)	16(5,76)	91(32,73)	139(50,00)	31(11,15)	3(3-2)
	SDF can be used to arrest cavitated root caries	3(1,08)	27(9,71)	59(21,22)	149(53,60)	40(14,39)	3(3-2)
	Infected soft dentin should be removed before applying SDF	3(1,08)	29(10,43)	69(24,82)	138(49,64)	38(13,67)	3(3-2)
	SDF is a good treatment alternative to prevent cavities when all lesions cannot be restored in one appointment	4(1,44)	14(5,04)	75(26,98)	131(47,12)	54(19,42)	3(3-2)
B	Index of self-perceived knowledge of cavitated lesions	Median = 3, IQR = (3–3)					
	SDF can be used to arrest noncavitated lesions in enamel	5(1,80)	6(2,16)	40(14,39)	161(57,91)	66(23,74)	3(3-3)
	SDF can be used to prevent noncavitated root caries	2(0,72)	15(5,40)	87(31,29)	142(51,08)	32(11,51)	3(3-2)
C	Index of self-perceived knowledge of noncavitated lesions	Median = 3, IQR = (3–2)					
	SDF should be applied prior to restorations in all patients	7(2,52)	25(8,99)	88(31,65)	126(45,32)	32(11,51)	3(3-2)
	SDF should be applied prior to restorations in patients at high risk of caries	2(0,72)	13(4,68)	57(20,50)	143(51,44)	63(22,66)	3(3-2)
D	SDF use prior to all restorative treatment indexes	Median = 3, IQR = (3–2)					

a Response options were 1 = none, 2 = very little, 3 = little, 4 = enough, and 5 = a lot. b Response options were 1 = I strongly disagree, 2 = I disagree, 3 = I neither agree nor disagree, 4 = I agree, and 5 = I strongly agree

Table 4. *Evaluation of attitudes toward SDF use among pediatric dentists (n = 278)*

	Ítem	Attitude					
		I totally disagree n (%)	I disagree n (%)	I neither agree nor disagree n (%)	I agree n (%)	I totally agreen (%)	Mean (IQR)
	SDF is a good alternative treatment for...						
	restorations in children with behavioral problems	0(0)	7(2.52)	32(11.51)	152(54.6)	87(31.29)	3(4-3)
	patients who are medically compromised	0(0)	9(3.24)	107(38.49)	121(43.5)	41(14.75)	3(3-2)
	patients with severe dental anxiety	0(0)	6(2.16)	57(20.50)	160(57.5)	55(19.78)	3(3-3)
	patients who are under or have recently been under radiotherapy or chemotherapy	3(1.08)	15(5.40)	62(22.30)	158(56.8)	40(14.39)	3(3-2)
	patients who are taking bisphosphonate medications	3(1.08)	16(5.76)	96(34.53)	130(46.7)	33(11.87)	3(3-2)
	patients who need to undergo dental treatment under general anesthesia	2(0.72)	13(4.68)	71(25.54)	154(55.4)	38(13.67)	3(3-2)
	patients who cannot receive conventional dental treatment and could not be subject to pharmacological behavioral management techniques	1(0.36)	16(5.76)	64(23.02)	156(56.1)	41(14.75)	3(3-2)
	patients with microstomia and difficult-to-access lesions that require treatment	2(0.72)	15(5.40)	74(26.62)	143(51.4)	44(15.83)	3(3-2)
E	Patient-related indications for SDF use	Median = 3, IQR = (3–3)					
	SDF is a good alternative treatment for...						
	patients who require a resin restoration at a later time point because they cannot currently afford it	9(3.24)	26(9.35)	50(17.99)	146(52.5)	47(16.91)	3(3-2)
	patients who require a posterior restoration with amalgam and cannot afford it	9(3.24)	34(12.23)	99(35.61)	119(42.8)	17(6.12)	2(3-2)
F	Cost-related indications for SDF use	Median = 3, IQR = (3–2)					
	SDF is a good treatment alternative for lesions that...						
	are not located in the esthetic zone of primary teeth	4(1.44)	13(4.68)	60(21.58)	146(52.5)	55(19.78)	3(3-2)
	are not located in the esthetic zone of permanent teeth	3(1.08)	12(4.32)	63(22.66)	147(52.8)	53(19.06)	3(3-2)
G	Treatment considerations outside the esthetic zone	Median = 3, IQR = (3–2)					
	SDF is a good treatment alternative for lesions that...						
	are located in the esthetic zone of primary teeth	17(6.12)	19(6.83)	48(17.27)	145(52.1)	49(17.63)	3(3-2)
	are located in the esthetic zone of permanent teeth	30(10.79)	39(14.03)	81(29.14)	102(36.6)	26(9.35)	2(3-2)
H	Treatment considerations in the esthetic zone	Median = 3, IQR = (3–2)					

Response options were 1 = I strongly disagree, 2 = I disagree, 3 = I neither agree nor disagree, 4 = I agree, and 5 = I strongly agree.

Table 5. *Correlation between self-perceived knowledge and attitudes toward SDF use among pediatric dentists (n = 278)*

Item	Self-perceived knowledge of SDF							
	A		B		C		D	
	rho	*p*-value*	rho	*p*-value*	rho	*p*-value*	rho	*p*-value*
Attitude toward SDF*								
E: patient-related indications for SDF use	0,35	*p*<0,001	0,41	*p*<0,001	0,41	*p*<0,001	0,37	*p*<0,001
F: cost-related indications for SDF use	0,12	*p*<0,001	0,24	*p*<0,001	0,21	*p*<0,001	0,25	*p*<0,001
G: considerations for treatment outside the esthetic zone	0,37	*p*<0,001	0,38	*p*<0,001	0,48	*p*<0,001	0,51	*p*<0,001
H: considerations for treatment in the esthetic zone	0,16	*p*<0,001	0,25	*p*<0,001	0,30	*p*<0,001	0,39	*p*<0,001

Note: Items used to create A, B, C, and D indexes correspond to Table 3. Items used to create E, F, G, and H indexes correspond to Table 4.
**Spearman's correlation test*

Discussion

The study aimed to determine the correlation between self-perceived knowledge and attitude toward the use of SDF among pediatric dentists in Peru. A moderate correlation was found between self-perceived knowledge of cavitated lesions (B), self-perceived knowledge of non-cavitated lesions (C), and use of FDP prior to restorative treatment (D).

Within the study, it was found that 59.35% of respondents used it frequently, many times. These results differ from those found in pediatric dentists in the US by Antonioni, with the result that most pediatric dentists have not used the FDP.[18] This may be due to certain limitations in the application of FDP, as there were no national guidelines in the US for the use of the material. [21,22] To date, there are no systematic reviews or trials on side effects in children or adults.[14,22] It is also important to emphasize that there are currently several studies that have succeeded in reducing staining by altering the chemical composition of FDP.[23,24]

In terms of possible barriers to the use of the FDP, only 6.83% considered parental acceptance of the material to be a limitation, and 12.59% considered a lack of scientific knowledge to be a limitation. This contrasts with the results of Vollú et al. 2020.[16] it was found that 64.83% mentioned that parents did not accept the use of the material, since 59.3% used it on anterior and posterior teeth, but 35.2% only used it on posterior teeth, and 58.3% mentioned scientific knowledge. Although the difference in percentage is noteworthy, the barriers remain the same in both contexts. Specialists must be informed both clinically and theoretically about FDP in its use, application, safety, and efficacy in order to build trust with parents.[16,25]

Regarding education on FDP, only 18.71% of respondents received undergraduate classes on this material. This is similar to the results of Moradi et al. 2021, where

6.7% underwent training on the use of FDP in both theoretical and clinical undergraduate courses.[26] Undergraduate dentistry program directors consider the FDP less "essential".[26] It is suggested that the use of this material be incorporated into undergraduate education, as other schools in the US have shown a significant increase since 2020 due to the American Academy of Pediatric Dentistry recommending the use of FDP and adopting a policy and guidelines for treating caries in primary teeth.[27]

In relation to self-perceived general knowledge about FDP (A), 87.05% reported that they used FDP sufficiently/a lot in dentistry, and 76.26% knew the advantages of FDP treatment compared to other conventional treatments. This is similar to the study by Antonioni et al. 2020, which found that 77% reported that they knew well/a lot about what FDP was used for in dentistry and 68% knew the advantages of FDP over other traditional dental treatments.[17] The advantages of this dental material include stopping and preventing tooth decay, being painless, not requiring sophisticated and expensive equipment, and being used in communities with limited resources.[28]

On the other hand, regarding patient-related indications for the use of FDP (E), 85.97% agreed/strongly agreed that FDP is a good treatment alternative for children with behavioral problems, with results similar to those found by Antonioni *et al.* 2019.[18] It is important to emphasize that FDP is a good treatment alternative if patients are unable to receive conventional dental treatment and cannot be treated with pharmacological behavior management techniques.[27,29] This may be because it is effective, affordable, accessible, painless, and has the potential to stop and prevent tooth decay in primary teeth, making it ideal for uncooperative patients.[14,28,29]

This moderate correlation could be due to the fact that, although the material is well known, it is not yet used routinely. The material does not demonstrate favorable aesthetic characteristics, and pediatric dentists consider this an obstacle that prevents the use of FDP. However, to reduce any negative characteristics that prevent the use of the material, studies are currently underway to determine the optimal concentration of potassium iodide to reduce black staining from silver diamine fluoride after 7 to 14 days.[23] Likewise, the use of selenium nanoparticles (SeNPs) altering the chemical composition of FDP could reduce black discoloration without affecting the clinical effectiveness of the material.[24]

Strengths and limitations of the study

The limitations of this study relate to the data collection method. By using a self-report questionnaire, there is the possibility of social desirability bias on the part of respondents, who may complete the survey in a socially acceptable manner rather than according to their own criteria. However, this was counteracted by the fact that this study verified the internal validity of the tool, demonstrating its high reliability.

It is recommended that undergraduate curricula encourage the use of this material, both theoretical and clinical, as it

is a valuable strategy for managing caries in children with behavioral problems, older adults, and patients with special needs.[30] In the same context, at the global level, countries such as Argentina, Brazil, Finland, India, Japan, Kenya, South Africa, Switzerland, Thailand, the United Kingdom, and the United States include FDP in their undergraduate dental training curricula. It should be noted that the concentrations and guidelines differ in each country.[30] Furthermore, further studies are recommended in relation to self-perceived knowledge and attitudes towards the use of this material in the post-COVID-19 pandemic era.

FDP should receive greater recognition, as it can be used in minimally invasive treatments that do not generate aerosols. Furthermore, given that dental caries is a global public health problem with a significant impact on children's quality of life, community projects should be strengthened and FDP should be introduced into health system policies if it is covered as a dental treatment or application of remineralizing substances. [30]

Conclusion

Based on our results, most respondents used FDP frequently despite having less education; therefore, implementing it in the curriculum and increasing its dissemination at the undergraduate level would be expected to lead to greater use by dentists. Likewise, most respondents were working in hospital dentistry as frontline professionals, were familiar with the material, and implemented it in their clinical practice with a focus on treating dental caries at all levels and implementing it in community projects. Similarly, they covered it as a dental treatment or application of a remineralizing substance.

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Conflict of interest

Os autores declaram não ter interesses concorrentes.

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