

Table S1 Basic Information of Experts

Item	Category	n	%
Gender	Male	3	20
	Female	12	80
Age (years)	30-39	1	6.7
	40-49	7	46.7
	≥50	7	46.7
Years of Work Experience	7-19	5	33.3
	20-29	5	33.3
	≥30	5	33.3
Professional Title	Senior	9	60
	Associate Senior	6	40
Position	Department Director	6	40
	Head Nurse	2	13.3
	No	7	46.6
Education Level	Bachelor's Degree	3	20.0
	Master's Degree	7	46.7
	Doctoral Degree	5	33.3
Graduate Student Supervisor	Master's Supervisor	6	40
	Doctoral Supervisor	1	6.7
	No	8	53.3

Notes: n = number of experts; % = proportion within total sample.

Table S2 Delphi Consultation Results

Item	Positive Coefficient of Experts	Authority Coefficient of Experts (Cr)	Degree of Concentration of Expert Opinions		Degree of Coordination of Expert Opinions
	Questionnaire Response Rate (%)	Cr	Mj	Kj	Kendall's W
Round 1	75	0.930	3.87-5.00	40%-100%	0.213
Round 2	100	0.944	3.73-5.00	6.67%-100%	0.256

Notes: Positive Coefficient = questionnaire response rate, indicating the enthusiasm of experts; Authority Coefficient (Cr) = reflects the reliability of expert judgments; Mj = mean

importance score for each item; K_j = proportion of experts giving full marks to an item; Kendall's W = coefficient of concordance among experts.

Table S3 Results of Item Analysis

Item	Critical Ratio Method	Correlation Analysis	Cronbach's Alpha Coefficient (α)	Communality and Factor Loading Analysis	Number of Failing Criteria	Remarks
K1					0	Retained
K2					0	Retained
K3					0	Retained
K4					0	Retained
K5					0	Retained
K6					0	Retained
K7					0	Retained
K8					0	Retained
K9					0	Retained
K10					0	Retained
K11					0	Retained
K12					0	Retained
K13					0	Retained
K14					0	Retained
K15					0	Retained
K16					0	Retained
K17					0	Retained
K18					0	Retained
K19					0	Retained
K20					0	Retained
K21					0	Retained
K22					0	Retained
A1					0	Retained
A2				√	1	Retained
A3				√	1	Retained
A4				√	1	Deleted
A5					0	Retained
A6		√	√	√	3	Deleted
A7		√	√	√	4	Deleted
A8					0	Retained
A9					0	Retained
A10		√	√	√	3	Deleted
A11					0	Retained
A12					0	Retained

A13					0	Retained
A14					0	Retained
P1					0	Retained
P2		√	√	√	3	Deleted
P3					0	Retained
P4					0	Retained
P5					0	Retained
P6				√	1	Retained

Notes: - '√' indicates that the item fails to meet the criterion for that specific analysis method.
- Critical Ratio Method = independent samples t-test comparing high- and low-scoring groups.
- Correlation Analysis = item-total correlation test.
- Cronbach's Alpha Coefficient (α) = assessing internal consistency reliability.
- Communality and Factor Loading Analysis = evaluating the shared variance and factor loading of each item.

Table S4: Cronbach's α Coefficient for the Overall Questionnaire and Each Dimension (n = 260)

Item	Number of Items	Cronbach's α Coefficient
Knowledge Dimension (K)	18	0.940
Attitude Dimension (A)	10	0.868
Practice Dimension (P)	5	0.822
Overall Questionnaire (KAP)	33	0.948

Table S5: Component Matrix after Rotation from the Second Exploratory Factor Analysis for the Knowledge Dimension

Item	Questionnaire Item	factor loading		
		Factor 1	Factor 2	Factor 3
K4	Periodontitis during pregnancy may increase the risk of adverse pregnancy outcomes (e.g., preterm birth, low birth weight).	0.827	0.130	0.277
K5	Severe pain or acute infection caused by oral diseases may trigger preterm birth or miscarriage.	0.766	0.205	0.256
K2	Oral diseases may affect the overall health of pregnant	0.731	0.360	0.148

	women.			
K3	Untreated severe dental caries in the mother may increase the risk of early childhood caries in her child.	0.730	0.172	0.363
K1	Pregnancy may exacerbate pre-existing oral diseases (e.g., periodontal disease).	0.664	0.418	0.083
K6	Women should visit the dental clinic before pregnancy for examination and treatment of existing oral diseases.	0.292	0.819	0.112
K8	Before dental treatment during pregnancy, an obstetrician should assess the pregnant woman's general health condition.	0.216	0.804	0.213
K7	It is both safe and necessary for pregnant women with oral diseases to receive dental treatment during pregnancy.	0.328	0.676	0.357
K20	If needed, panoramic radiographs can be taken during the second or third trimester, depending on the radiation dose.	0.158	0.144	0.853
K19	If needed, periapical radiographs can be taken safely at any stage of pregnancy.	0.151	0.119	0.834
K18	The radiation dose from a single periapical radiograph is approximately equivalent to 1–3 days of natural background radiation.	0.180	0.013	0.822
K21	Cone-beam computed tomography (CBCT) involves relatively higher radiation doses and should be used cautiously when alternative imaging is available.	0.126	0.231	0.814
K17	In principle, diagnostic dental radiographic examinations are safe throughout pregnancy.	0.270	0.083	0.796
K16	For oral infections during pregnancy, penicillin is the antibiotic of first choice.	0.472	0.123	0.711
K15	For acute dental pain during pregnancy, paracetamol (acetaminophen) is the analgesic of first choice.	0.474	0.148	0.644
K12	A reasonable dose of local dental anesthetic is safe for both	0.275	0.294	0.623

	pregnant women and the fetus, and can be used when needed during pregnancy.			
K22	During dental radiography, pregnant women should wear protective devices (e.g., lead aprons, thyroid collars) to minimize radiation exposure.	0.090	0.257	0.602
K13	Topical administration in dentistry (e.g., mouth rinses) is relatively safe during pregnancy.	0.355	0.313	0.596

Notes: Factor Names: Factor 1: **The Severity of Dental Diseases During Pregnancy**; Factor 2: **Necessity of Dental treatment during pregnancy**; Factor 3: **oral medications and radiographic examinations during pregnancy**. Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalization. a Rotation converged in 5 iterations.

Table S6: Component Matrix after Rotation from the Second Exploratory Factor Analysis for the Knowledge Dimension

Item	Questionnaire Item	factor loading	
		Factor 1	Factor 2
A2	Do you think pregnant women with oral diseases should seek dental care promptly?	0.827	0.113
A1	Do you agree that women should undergo dental examination and treatment for existing oral diseases before pregnancy?	0.789	0.168
A3	Do you believe dental treatment during pregnancy is safe?	0.728	0.168
A12	Taking analgesics (paracetamol/acetaminophen as the first choice) during pregnancy?	-0.008	0.859
A11	Taking anti-inflammatory drugs (penicillin as the first choice) during pregnancy?	-0.047	0.852
A13	Receiving commonly used local dental anesthesia during pregnancy?	0.290	0.839
A14	Undergoing diagnostic dental radiographic examination during pregnancy?	0.214	0.838

A8	Undergoing root canal treatment during pregnancy?	0.306	0.664
A9	Undergoing periodontal scaling and root planing during pregnancy?	0.312	0.662
A5	Undergoing dental cleaning during pregnancy?	0.250	0.521

Notes: Factor Name: Factor 1: **Oral health management awareness** ; Factor 2: **Acceptance of dental diagnosis and treatment procedures during pregnancy**. Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalization. a Rotation converged in 3 iterations.

Table S7: Component Matrix from the First Exploratory Factor Analysis for the Practice Dimension

Item	Questionnaire Item	Factor loading
		Factor 1
P4	You regularly visit the dental clinic for check-ups during pregnancy.	0.804
P5	You actively consult healthcare professionals about the safety of dental treatment during pregnancy.	0.797
P3	You underwent dental examination and treatment for existing oral diseases before pregnancy.	0.760
P6	After being informed by healthcare professionals about the safety of dental treatment during pregnancy, you would accept routine dental care or emergency dental procedures during pregnancy.	0.732
P1	You have searched online for information on the potential harm of oral diseases during pregnancy to the mother and fetus.	0.727

Notes: Extraction method: Principal component analysis. a One component was extracted.

