

Study Title: Protocol for an Analytical Cross-Sectional Study on the Association of Iron Deficiency Anemia with Dental Caries in the Permanent First Molars of Children Aged 7 to 12 Years in Karachi, Pakistan

Instructions:

- 1. Separate form should be filled for each subject.
- 2. This form should only be filled after the subject has been screened successfully and has been considered eligible for the study.

Child ID: _____
Version number and Date: __ (_ / _ / _ _)

Section A: Socio-demographic information

(asked from the legal guardian)

S. No	Question	Code	Skip	Response
1.	Gender of child?	1. Female 2. Male		
2.	What is the age of child?	Write exact age in years		<div>__ __ Years</div>
3 a.	Has the child ever attended school?	1. Yes 2. No 9. I don't know	If "No" or "I don't know" then go to Q4a.	
3 b.	What is the education status of your child?	1. No formal schooling 2. Schooling 2.1 if schooling= please specify Grade _____ 9. I don't know		
4 a.	Has the mother ever attended school?	1. Yes 2. No 9. I don't know	If "No" or "I don't know" then go to Q5 a	
4 b.	What is the mother's education status?	1. No formal schooling 2. Primary school education 3. Middle school education 4. Secondary school		

		education 5. Higher secondary school education 6. Above higher secondary school education 9. I don't know		
5 a.	Has the father ever attended school?	1. Yes 2. No 9. I don't know	If "No" or "I don't know" then go to Q6.	
5 b.	What is the father's education status?	1. No formal schooling 2. Primary school education 3. Middle school education 4. Secondary school education 5. Higher secondary school education 6. Above higher secondary school education 9. I don't know		
6.	What is the usual monthly household expenditure on food items?	Write the exact amount in PKR '98' is I don't remember		
7.	What is the usual monthly household expenditure on utilities such as gas, water and electricity?	Write the exact amount in PKR '98' is I don't remember		
8.	What is the usual monthly household medical expenditure?	Write the exact amount in PKR '98' is I don't remember		
9.	What is the usual monthly household expenditure on clothing items?	Write the exact amount in PKR '98' is I don't remember		
10.	What is the usual monthly household expenditure on social activities such as gifts, parties etc.?	Write the exact amount in PKR '98' is I don't remember		
11.	What is the usual monthly household expenditure on miscellaneous items?	Write the exact amount in PKR '98' is I don't remember		

Section B: Medical history*(taken from the legal guardian)*

S. No	Question	Code	Skip	Response
12 a.	Has the child ever been diagnosed with iron deficiency anemia from the age of 6 by a healthcare professional?	1. Yes 2. No 9. I don't know	If 'No' or 'I don't know', skip to S. No 13 a.	
12 b.	How many times have your child been diagnosed with iron deficiency anemia from the age of 6 by a healthcare professional?	Write the exact number of times '98' is I don't remember		

Section C: Oral hygiene-related behavior*(taken from the child)*

S.No	Question	Code	Skip	Response
13 a.	When was the last time you went to the dentist?	1. Never 2. >1 year ago 3. Between 6 months and a year ago 4. <6 months ago 9. I don't know	If 'Never' skip to S. No 14	
13 b.	What was the reason for your visit to the dentist?	1. Pain or trouble with teeth, gums or mouth 2. Treatment/Follow-up treatment 3. Routine check-up of teeth 4. Other reasons Please specify: _____ 9. I don't know		
14.	How frequently do you brush your teeth?	1. Never 2. 2-3 times a month 3. Once a week 4. 2-6 times a week 5. Once a day 6. ≥ 2 times a day	If 'Never' or 'I don't know' skip to S. No 16.	

		9. I don't know		
15 a.	Do you use a toothpaste?	1. Yes 2. No 9. I don't know	If 'No' or 'I don't know', skip to S. No 16	
15 b.	What toothpaste do you use to clean your teeth?	Write the exact response. '98' is I don't remember		
16.	Do you regularly use any of these other oral hygiene practices atleast once a day?	1. Toothpowder 2. Mouthwash 3. Miswak 4. Dandaasa 5. All of the above 6. None of the above 7. Toothpowder and mouthwash 8. Toothpowder and miswak 9. Toothpowder and dandaasa 10. Mouthwash and miswak 11. Mouthwash and dandaasa 12. Miswak and dandasa 13. Toothpowder, mouthwash and miswak 14. Toothpowder, mouthwash and dandasa 15. Toothpowder, dandasa and miswak 16. Mouthwash, dandasa and miswak		

Section D: Other habits
(taken from the child)

S. No	Question	Code	Skip	Response
17.	How often do you use smokeless tobacco including snus, snuff, chewable tobacco (gutkha, betel leaf and/areca nut with tobacco)?	1. Never 2. 2-3 times a month 3. Once a week 4. 2-6 times a week 5. Every day 9. I don't know		

Section E: Dietary information

(taken from the child)

S. No 18. How often have you consumed, on average, the following food items in the last six months?										
Items		Never/ < once a month	1-3 times a month	Once a week	2 to 4 times a week	5 to 6 times a week	Once a day	2 to 3 times a day	4 to 5 times a day	6 to 7 times a day
	<u>Bread and Cereals</u>									
1	Porridge with sugar									
2	Frozen paratha/ Street food paratha									
3	Homemade paratha (Refined Flour)									
4	White bread/ Bun									
5	Rusk/ Cake Rusk									
6	Two-minute noodles/ Macaroni/ Spaghetti									
7	Biscuit / Cookie									
8	Sandwich biscuit									
9	Donut									
10	Cupcake/Muffin/Plain Cake									
11	Pizza									
	<u>Desserts</u>									
12	Kheer/ Custard/Pudding									
13	Cake/Pastry									
14	Meethai/halwa									
15	Sweetened yoghurt									
16	Ice cream									

17	Plain Jelly									
18	Fruit chaat (that has added sugar)									
	<u>Beverages</u>									
19	Tea with sugar									
20	Sweet lassi (flavored or unflavored)									
21	Soft drink									
22	Sharbat / Instant Drink									
23	Fruit juice									
24	Flavored milk									
	<u>Miscellaneous</u>									
25	French fries									
26	Chocolate									
27	Candy									
28	Cotton candy									
29	Chewing gum (not the sugar-free one)									
30	Lollipop									
31	Jam (for example on bread)									
32	Honey (for example on bread)									
33	Chocolate spread (for example on bread)									
34	Chips									

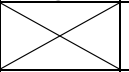
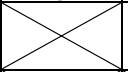
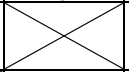
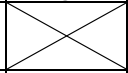



Section F: Physical and oral examination

(taken of the child)

S. No	Measurement	Finding
19.	Height (in cm)	
20.	Weight (in kg)	

S. No 21 **Oral hygiene status assessment**

Debris Index Simplified:

	Right permanent first molar		Permanent central incisor		Left permanent first molar		Total	
	Buccal	Lingual	Buccal	Lingual	Buccal	Lingual	Buccal	Lingual
Upper	_____		_____ (right)		_____		_____	
Lower		_____	_____ (left)			_____	_____	_____

Debris Index Simplified= (The buccal scores) + (The lingual scores)/ (Total number of examined buccal and lingual surfaces)

= _____

Calculus Index Simplified:

	Right permanent first molar		Permanent central incisor		Left permanent first molar		Total	
	Buccal	Lingual	Buccal	Lingual	Buccal	Lingual	Buccal	Lingual
Upper	_____		_____ (right)		_____		_____	
Lower		_____	(left)			_____	_____	_____

Calculus Index Simplified = (The buccal scores) + (The lingual scores)/ (Total number of examined buccal and lingual surfaces)

= _____

Simplified Oral Hygiene Index= Debris Index Simplified + Calculus Index Simplified= _____

S. No 22 **Carious assessment of the permanent first molars and adjacent teeth**

DMFT/dmft index:

Permanent teeth						Primary teeth					
D= Decayed						d= decayed					
M= Missing						m= missing					
F= Filled						f= filling					

Maxilla

28	27	26	25	24	23	22	21	11	12	13	14	15	16	17	18
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65	64	63	62	61	51	52	53	54	55
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Mandible

38	37	36	35	34	33	32	31	41	42	43	44	45	46	47	48

75	74	73	72	71	81	82	83	84	85

Permanent first molar:

Total Decayed=_____ Total Missing=_____ Total Filled=_____

Total DMFT index score=_____

Adjacent teeth:

Total Decayed=_____ Total Missing=_____ Total Filled=_____

Total DMFT index score=_____

Total decayed=_____ Total missing=_____ Total filled=_____

Total dmft index score=_____

Section F: Laboratory-related information

S. No	Blood parameter	Code	Finding
23.	Hemoglobin (g/dL)		
24.	Ferritin (microgram/L)		
25.	C-reactive protein (milligram/L)		

Form filled by: _____ Date: __/__/____ (Day/Month/Year)

Form checked and edited by: _____ Date: __/__/____ (Day/Month/Year)