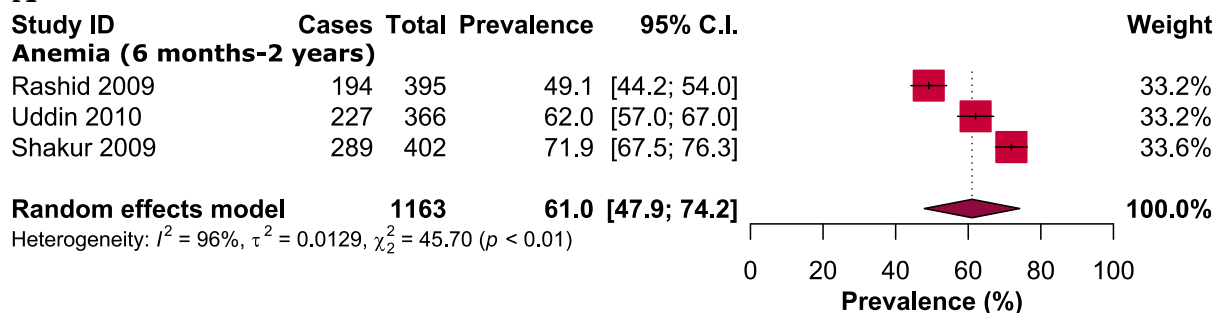
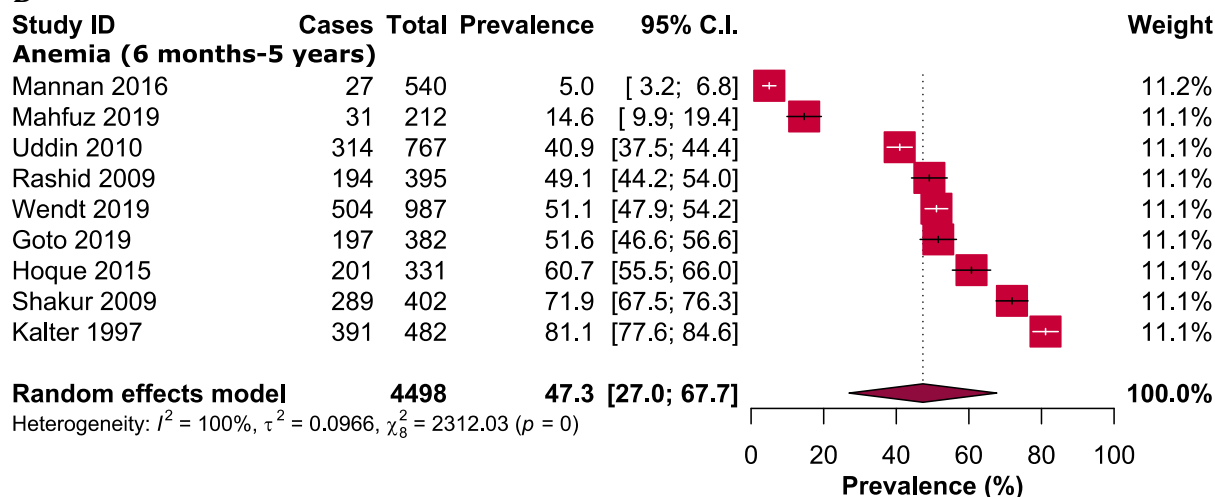


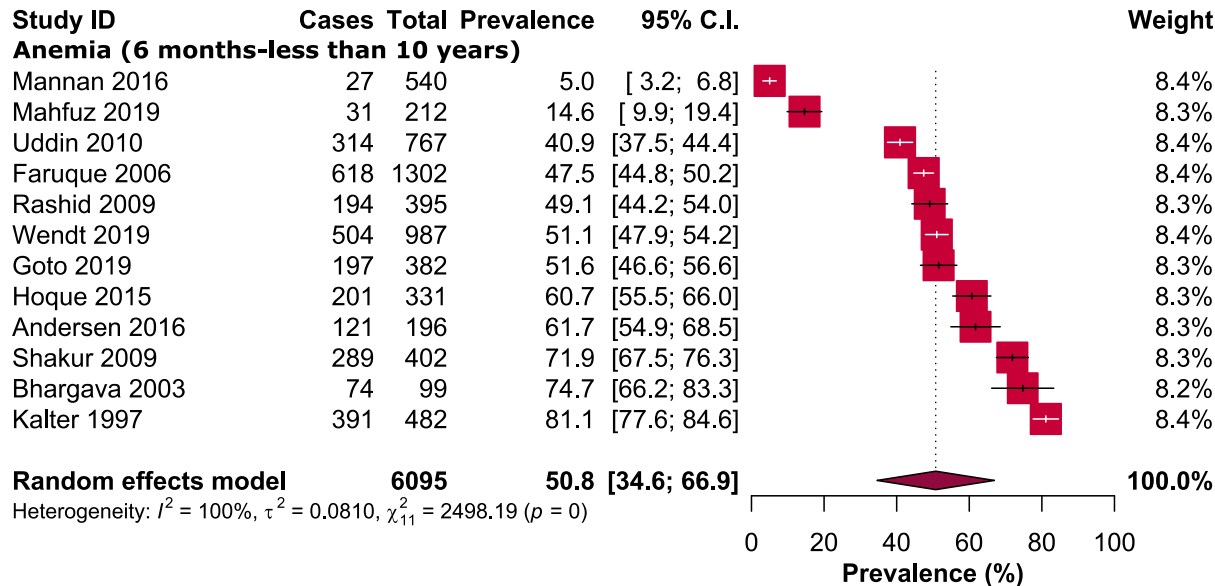
**A**



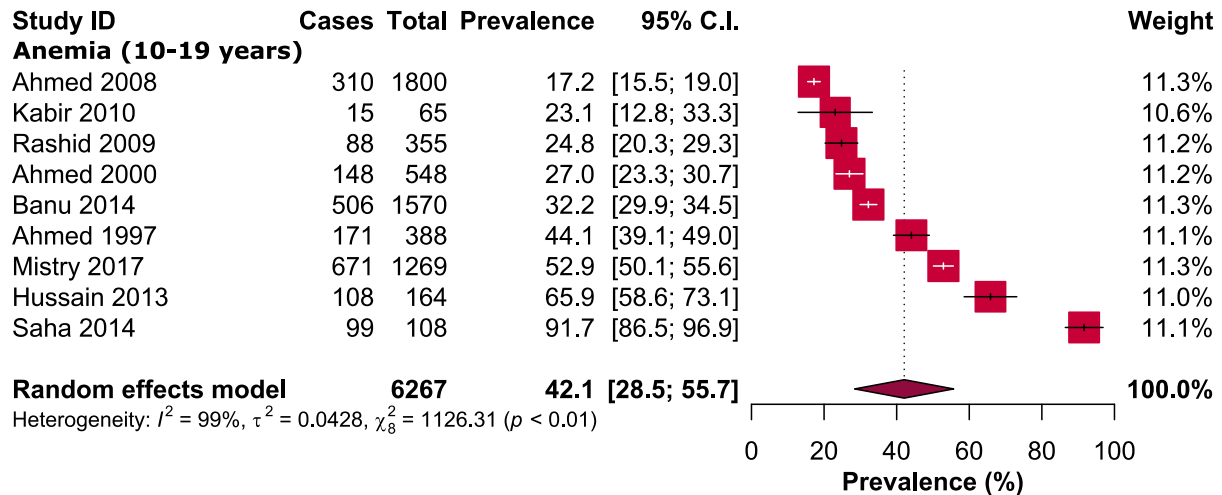
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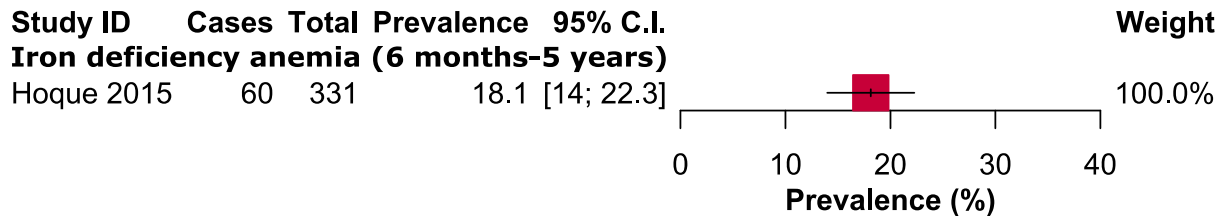
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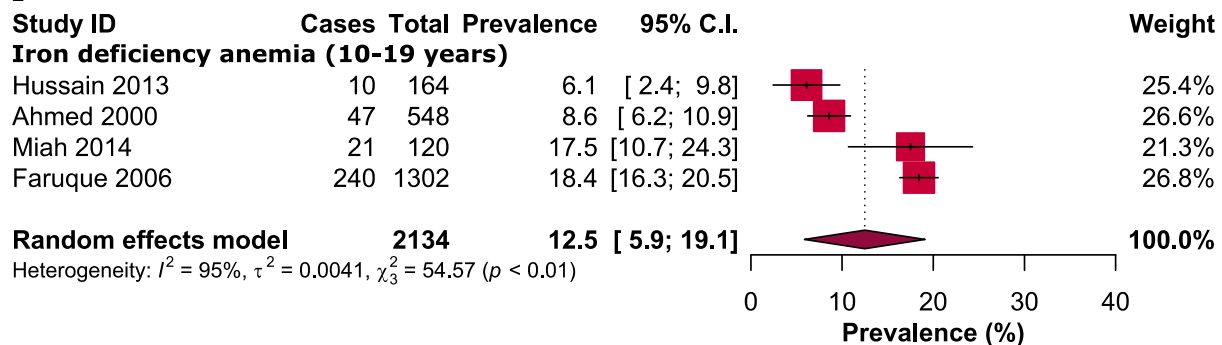
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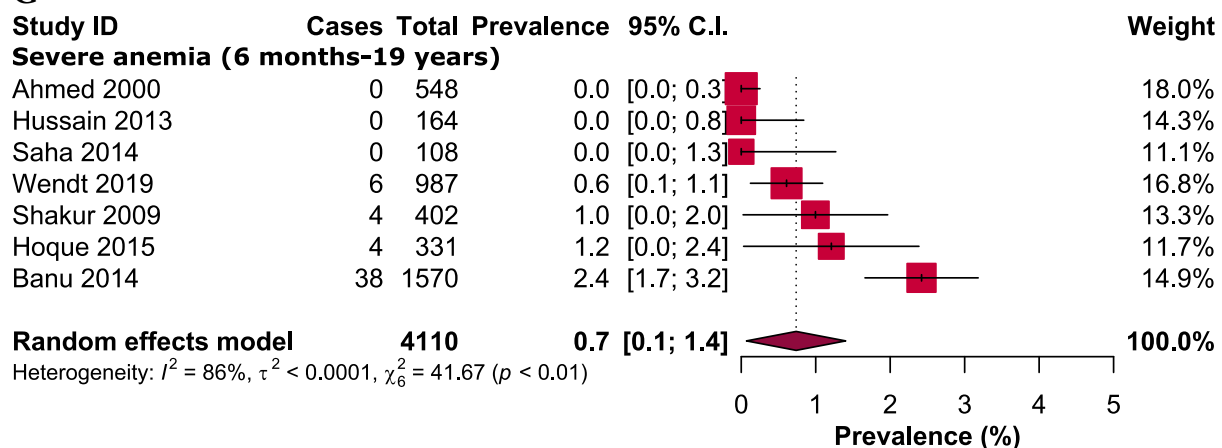
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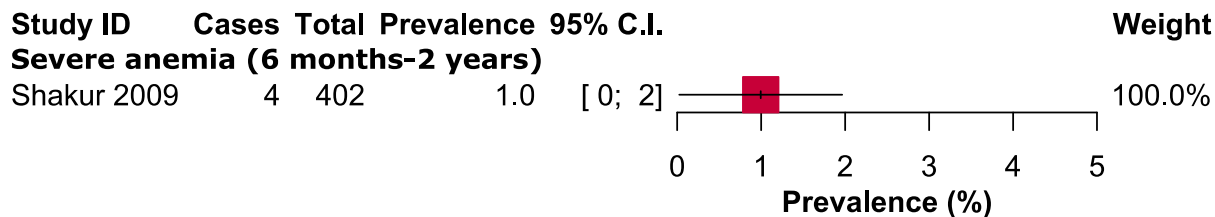
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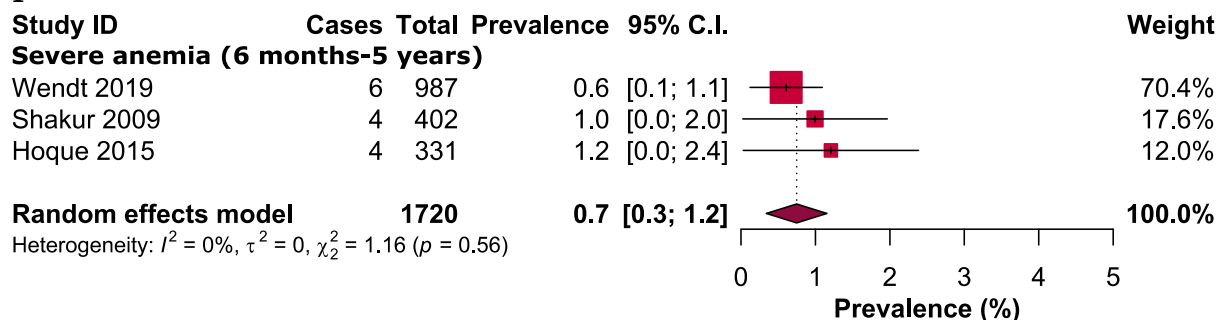
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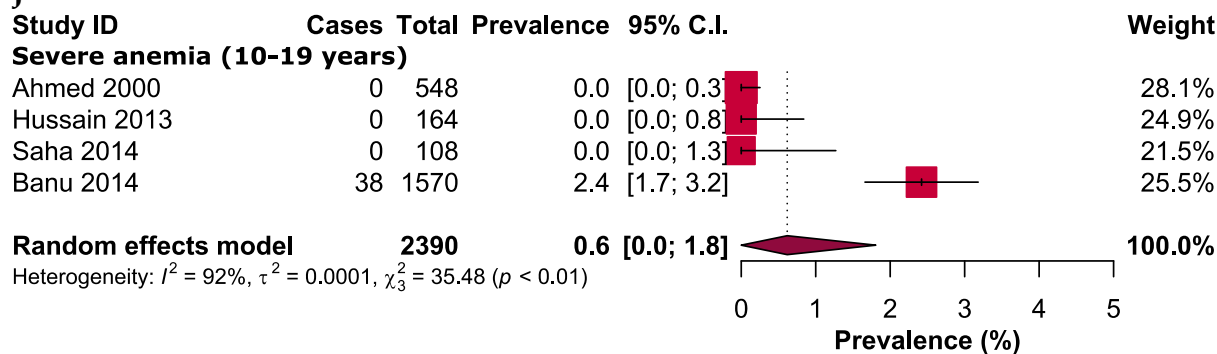
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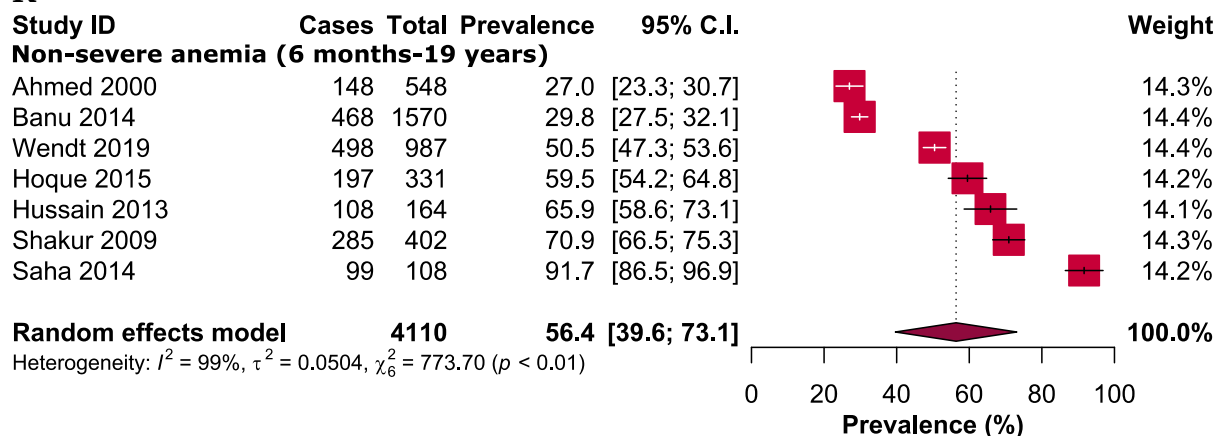
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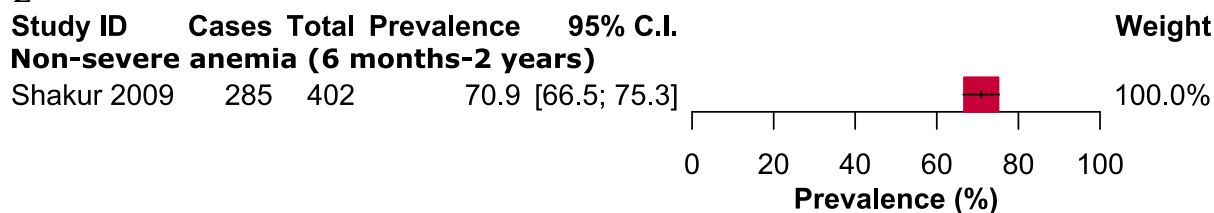
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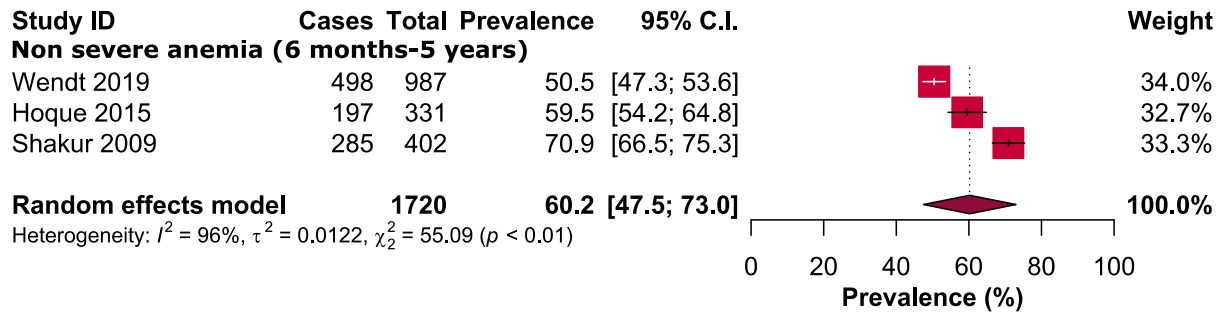
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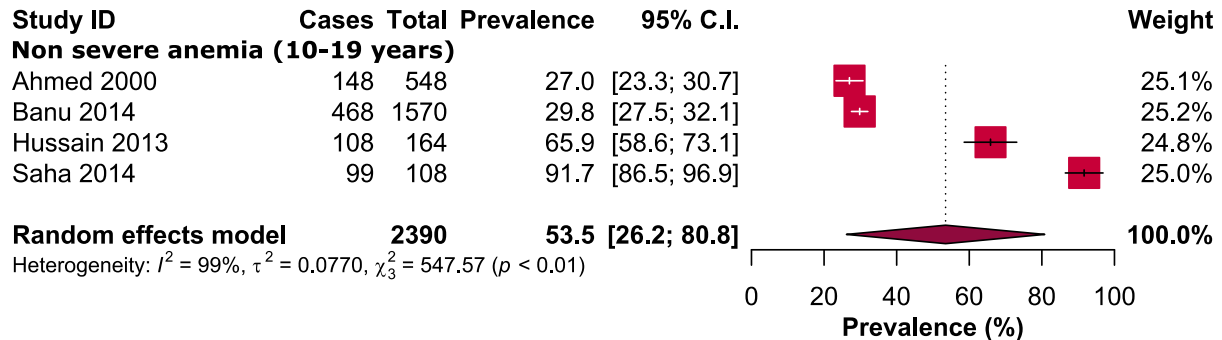
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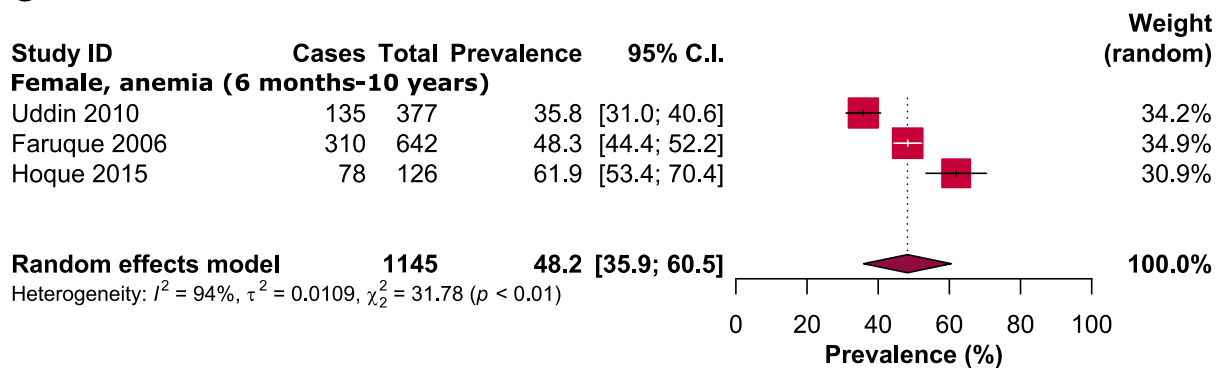
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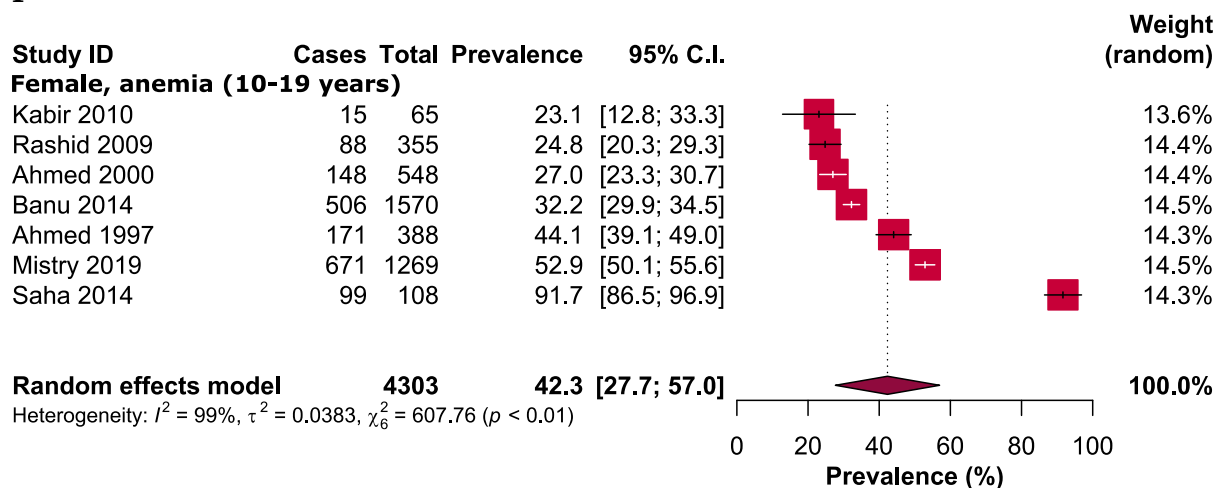
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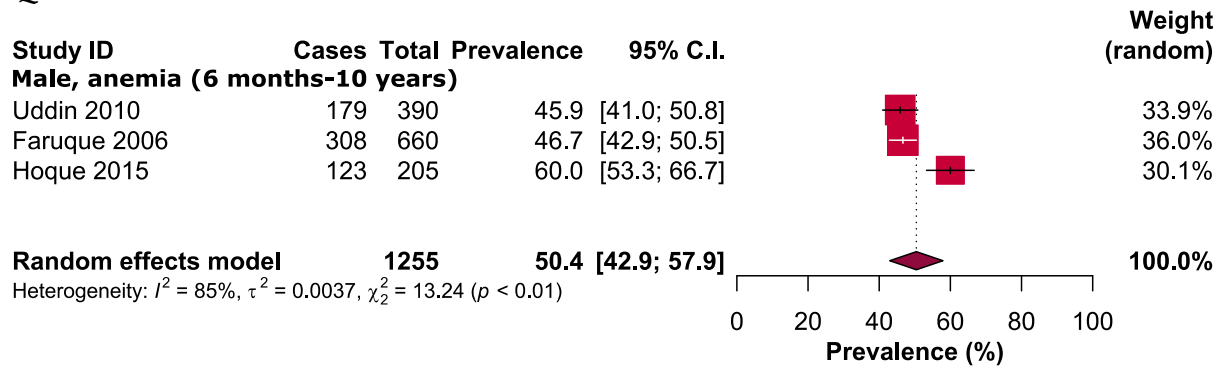
## O



## P



Q

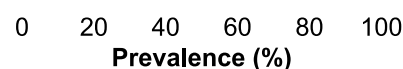


**Figure S1.** Subgroup analysis assessing the prevalence of anemia (A-D), iron deficiency anemia (E-F), severe anemia (G-J), non-severe anemia (K-N) in different age groups and gender (O-Q) of children and adolescents of Bangladesh.

**A**

Study ID	Cases	Total	Prevalence	95% C.I.	Weight
<b>Anemia (Excluding small studies)</b>					
Mannan 2016	27	540	5.0	[ 3.2; 6.8]	6.7%
Mahfuz 2019	31	212	14.6	[ 9.9; 19.4]	6.6%
Ahmed 2008	310	1800	17.2	[15.5; 19.0]	6.7%
Ahmed 2000	148	548	27.0	[23.3; 30.7]	6.7%
Banu 2014	506	1570	32.2	[29.9; 34.5]	6.7%
Rashid 2009	282	750	37.6	[34.1; 41.1]	6.7%
Uddin 2010	314	767	40.9	[37.5; 44.4]	6.7%
Ahmed 1997	171	388	44.1	[39.1; 49.0]	6.6%
Faruque 2006	618	1302	47.5	[44.8; 50.2]	6.7%
Wendt 2019	504	987	51.1	[47.9; 54.2]	6.7%
Goto 2019	197	382	51.6	[46.6; 56.6]	6.6%
Mistry 2017	671	1269	52.9	[50.1; 55.6]	6.7%
Hoque 2015	201	331	60.7	[55.5; 66.0]	6.6%
Shakur 2009	289	402	71.9	[67.5; 76.3]	6.6%
Kalter 1997	391	482	81.1	[77.6; 84.6]	6.7%

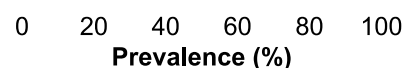
**Random effects model**      **11730**      **42.3 [31.0; 53.7]**      **100.0%**  
Heterogeneity:  $I^2 = 100\%$ ,  $\tau^2 = 0.0498$ ,  $\chi^2_{14} = 2946.43$  ( $p = 0$ )



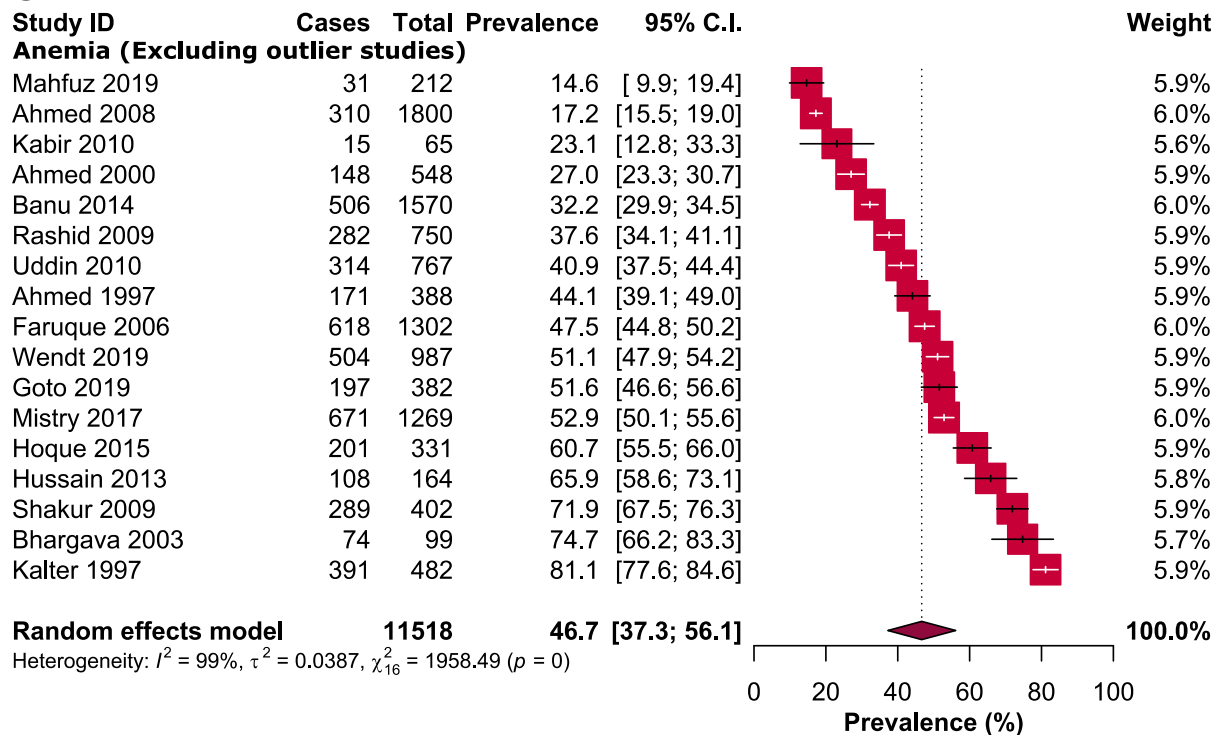
**B**

Study ID	Cases	Total	Prevalence	95% C.I.	Weight
<b>Anemia (Excluding low- and moderate-quality studies)</b>					
Mannan 2016	27	540	5.0	[ 3.2; 6.8]	6.3%
Mahfuz 2019	31	212	14.6	[ 9.9; 19.4]	6.2%
Ahmed 2008	310	1800	17.2	[15.5; 19.0]	6.3%
Ahmed 2000	148	548	27.0	[23.3; 30.7]	6.3%
Banu 2014	506	1570	32.2	[29.9; 34.5]	6.3%
Rashid 2009	282	750	37.6	[34.1; 41.1]	6.3%
Uddin 2010	314	767	40.9	[37.5; 44.4]	6.3%
Ahmed 1997	171	388	44.1	[39.1; 49.0]	6.2%
Wendt 2019	504	987	51.1	[47.9; 54.2]	6.3%
Goto 2019	197	382	51.6	[46.6; 56.6]	6.2%
Mistry 2017	671	1269	52.9	[50.1; 55.6]	6.3%
Hoque 2015	201	331	60.7	[55.5; 66.0]	6.2%
Shakur 2009	289	402	71.9	[67.5; 76.3]	6.2%
Bhargava 2003	74	99	74.7	[66.2; 83.3]	6.1%
Kalter 1997	391	482	81.1	[77.6; 84.6]	6.3%
Saha 2014	99	108	91.7	[86.5; 96.9]	6.2%

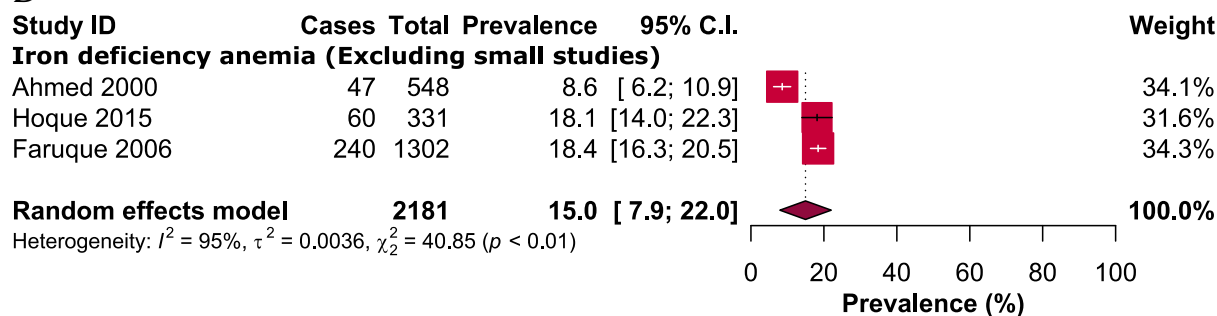
**Random effects model**      **10635**      **47.1 [34.9; 59.2]**      **100.0%**  
Heterogeneity:  $I^2 = 100\%$ ,  $\tau^2 = 0.0610$ ,  $\chi^2_{15} = 3410.92$  ( $p = 0$ )



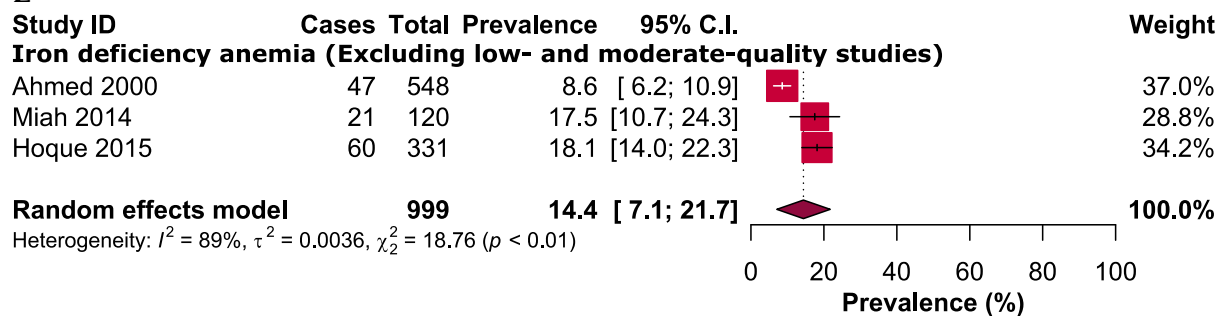
C



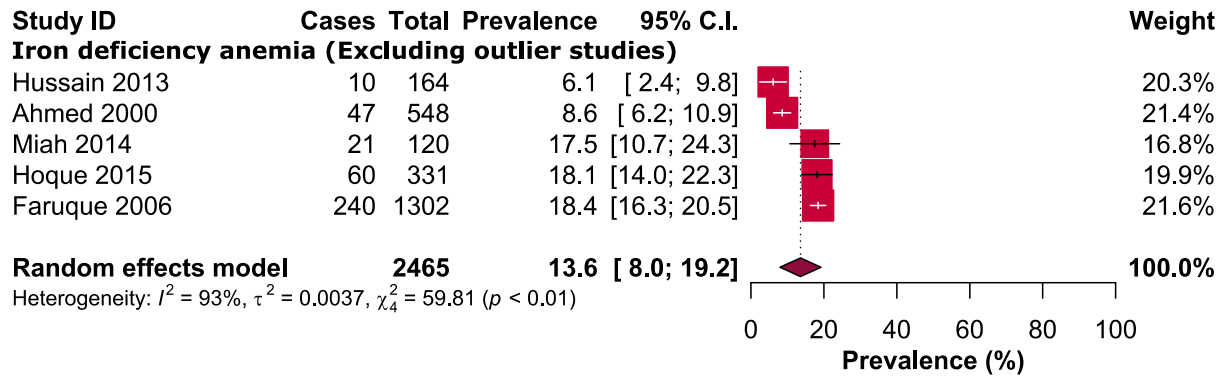
D



E



F



**Figure S2.** Sensitivity analysis assessing the prevalence of (A-C) anemia and (D-F) iron deficiency anemia in children and adolescents of Bangladesh.



**Table S1.** Search strategies

Databases	Search strategies
<b>PubMed</b>	((Anemia[Title/Abstract] OR Anaemia[Title/Abstract]) AND (Child* OR Adolescen* OR Pediatric* OR Paediatric*)) AND (Bangladesh OR Dhaka OR Chittagong OR Chattogram OR Rajshahi OR Rangpur OR Barisal OR Barishal OR Sylhet OR Khulna OR Mymensingh OR Dinajpur OR Bogra OR Bogura OR Comilla OR Cumilla OR Faridpur OR Pabna OR Noakhali OR "Cox's Bazar" OR Jessore OR Jashore OR Satkhira OR Gazipur OR Kushtia OR Sirajganj OR Gopalganj OR Jamalpur OR Gazipur OR Tangail OR Manikganj OR Patuakhali OR Rangamati OR Chandpur OR Netrakona OR Magura OR Naogaon OR Nilphamari)
<b>Scopus</b>	TITLE-ABS-KEY(Anemia OR Anaemia) AND TITLE-ABS-KEY(Child* OR Adolescen* OR Pediatric* OR Paediatric*) AND TITLE-ABS-KEY(Bangladesh OR Dhaka OR Chittagong OR Chattogram OR Rajshahi OR Rangpur OR Barisal OR Barishal OR Sylhet OR Khulna OR Mymensingh OR Dinajpur OR Bogra OR Bogura OR Comilla OR Cumilla OR Faridpur OR Pabna OR Noakhali OR "Cox's Bazar" OR Jessore OR Jashore OR Satkhira OR Gazipur OR Kushtia OR Sirajganj OR Gopalganj OR Jamalpur OR Gazipur OR Tangail OR Manikganj OR Patuakhali OR Rangamati OR Chandpur OR Netrakona OR Magura OR Naogaon OR Nilphamari)
<b>Google Scholar</b>	allintitle: (Anemia OR Anaemia) (Bangladesh OR Dhaka OR Chittagong OR Chattogram OR Rajshahi OR Rangpur OR Barisal OR Barishal OR Sylhet OR Khulna OR Mymensingh OR Dinajpur OR Bogra OR Bogura OR Comilla OR Cumilla OR Faridpur OR Pabna OR Noakhali OR "Cox's Bazar" OR Jessore OR Jashore OR Satkhira OR Gazipur OR Kushtia OR Sirajganj OR Gopalganj OR Jamalpur OR Gazipur OR Tangail OR Manikganj OR Patuakhali OR Rangamati OR Chandpur OR Netrakona OR Magura OR Naogaon OR Nilphamari)

**Table S2.** Quality assessment of the cross-sectional studies

No	Study ID	Critical appraisal checklist								Yes (%)
		1	2	3	4	5	6	7	8	
1	Ahmed 1997	Y	Y	N	Y	Y	Y	Y	Y	87.5
2	Ahmed 2000	Y	Y	Y	Y	Y	Y	Y	Y	100.0
3	Ahmed 2006	Y	Y	Y	Y	Y	Y	Y	Y	100.0
4	Ahmed 2008	Y	Y	N	Y	Y	Y	Y	Y	87.5
5	Banu 2014	Y	Y	Y	Y	N	N	Y	Y	75.0
6	Begum 2017	Y	Y	N	N	N	N	Y	U	37.5
7	Bhargava 2003	Y	Y	Y	Y	N	N	Y	Y	75.0
8	Faruque 2006	Y	Y	N	Y	N	N	Y	Y	62.5
9	Hoque 2015	Y	Y	Y	Y	Y	Y	Y	Y	100.0
10	Hussain 2013	Y	Y	N	N	N	N	Y	Y	50.0
11	Kabir 2010	Y	Y	N	Y	N	N	Y	Y	62.5
12	Kalter 1997	Y	Y	Y	Y	N	N	Y	Y	75.0
13	Miah 2014	Y	Y	Y	Y	N	N	Y	Y	75.0
14	Mistry 2017	Y	Y	Y	Y	Y	Y	Y	Y	100.0
15	Persson 2000	Y	Y	U	Y	Y	Y	Y	Y	87.5
16	Rashid 2009	Y	Y	Y	Y	Y	Y	Y	Y	100.0
17	Saha 2014	Y	Y	Y	Y	N	N	Y	Y	75.0
18	Shahabuddin 2000	Y	Y	Y	Y	U	N	Y	Y	75.0
19	Shakur 2009	Y	Y	Y	Y	Y	Y	Y	Y	100.0
20	Uddin 2010	Y	Y	Y	Y	N	N	Y	Y	75.0
21	Wendt 2019	Y	Y	Y	Y	Y	Y	Y	Y	100.0

1. Were the criteria for inclusion in the sample clearly defined? 2. Were the study subjects and the setting described in detail? 3. Was the exposure measured in a valid and reliable way? 4. Were objective, standard criteria used for measurement of the condition? 5. Were confounding factors identified? 6. Were strategies to deal with confounding factors stated? 7. Were the outcomes measured in a valid and reliable way? 8. Was appropriate statistical analysis used? Y: Yes, N: No, U: Unclear.

**Table S3.** Quality assessment of the cohort studies

No	Study ID	Critical appraisal checklist											Yes (%)
		1	2	3	4	5	6	7	8	9	10	11	
1	Adams 2017	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	81.8
2	Goto 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	100.0
3	Mahfuz 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	100.0
4	Mannan 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	100.0

1. Were the two groups similar and recruited from the same population? 2. Were the exposures measured similarly to assign people 3. to both exposed and unexposed groups? 4. Was the exposure measured in a valid and reliable way? 5. Were confounding factors identified? 6. Were strategies to deal with confounding factors stated? 7. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)? 8. Were the outcomes measured in a valid and reliable way? 9. Was the follow up time reported and sufficient to be long enough for outcomes to occur? 10. Was follow up complete, and if not, were the reasons to loss to follow up described and explored? 11. Were strategies to address incomplete follow up utilized? 12. Was appropriate statistical analysis used? Y: Yes, N: No, NA: Not applicable