

Additional file 2

Table S2:Multivariate model between As, Mn, and Pb and BSID-III scores at 20-40 months

Exposures	Cognitive				Fine Motor			
	Sirajdikhan n=265		Pabna n=316		Sirajdikhan n=265		Pabna n=316	
	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value
Ln Water As	0.004 (0.02)	0.85	-0.05 (0.03)	0.08	-0.04 (0.03)	0.1	0.02 (0.03)	0.56
Ln Water Mn	0.03 (0.02)	0.23	-0.09 (0.07)	0.18	-0.04 (0.03)	0.19	0.80 (0.38)	0.03
Ln Water Mn2	-	-	-	-	-	-	-0.07 (0.03)	0.02
Ln Blood Pb	-0.20 (0.08)	0.02	0.05 (0.12)	0.64	0.06 (0.10)	0.54	-0.07 (0.11)	0.54

Note: All models are adjusted for maternal age, maternal education, child's gender, exposure to second-hand smoke, HOME score, maternal Raven score, and child hematocrit levels. Models use age-adjusted BSID-III scores.

Note: All exposures are included in the models simultaneously and missing values were imputed for HOME scores, maternal Raven scores, and water concentrations.

Table S3:Multivariate model between As, Mn, and Pb and BSID-III scores at 20-40 months

Exposures	Cognitive				Fine Motor			
	Sirajdikhan n=380		Pabna n=365		Sirajdikhan n=380		Pabna n=364	
	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value
Ln Water As	-0.02 (0.02)	0.30	-0.03 (0.03)	0.28	-0.03 (0.02)	0.11	0.04 (0.02)	0.14
Ln Water Mn	0.02 (0.02)	0.30	-0.08 (0.05)	0.11	-0.01 (0.02)	0.77	-0.15 (0.05)	0.002

Note: All models are adjusted for maternal age, maternal education, child's gender, exposure to second-hand smoke, HOME score, and maternal Raven score. Models use age-adjusted BSID-III scores.

Note: All exposures are included in the models simultaneously

Table S4: Multivariate model between As, Mn, and Pb and Bayley z-scores at 20-40 months

Exposures	Cognitive				Fine Motor			
	Sirajdikhan n=409		Pabna n=403		Sirajdikhan n=409		Pabna n=402	
	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value
Ln Water As	-0.02 (0.02)	0.43	-0.03 (0.03)	0.32	-0.03 (0.02)	0.10	0.03 (0.02)	0.24
Ln Water Mn	0.02 (0.02)	0.25	-0.08 (0.05)	0.14	-0.01 (0.02)	0.65	-0.15 (0.05)	0.002

Note: All models are adjusted for maternal age, maternal education, child's gender, exposure to second-hand smoke, HOME score, and maternal Raven score. Models use age-adjusted BSID-III scores.

Note: All exposures are included in the models simultaneously, and missing values were imputed for HOME scores, maternal Raven scores, and water concentrations.

Table S5: Multivariate model between As and Mn (early pregnancy) and Pb exposures and Bayley z-scores at 20-40 months

Exposures	Cognitive				Fine Motor			
	Sirajdikhan n=261		Pabna n=304		Sirajdikhan n=261		Pabna n=303	
	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value
Ln Water As 1 st trimester	0.009 (0.03)	0.78	-0.09 (0.03)	0.006	0.07 (0.04)	0.10	0.007 (0.03)	0.81
Ln Water Mn 1 st trimester	0.008 (0.02)	0.67	-0.09 (0.06)	0.13	0.004 (0.02)	0.85	-0.10 (0.05)	0.08
Ln Water Mn2	-	-	-	-	-	-	-	-
Ln Blood Pb	-0.18 (0.08)	0.03	0.03 (0.12)	0.8	0.02 (0.10)	0.85	-0.11 (0.11)	0.32

Note: All models are adjusted for maternal age, maternal education, child's gender, exposure to second-hand smoke, HOME score, maternal Raven score, and child hematocrit levels. Models use age-adjusted BSID-III scores.

Note: All exposures are included in the models simultaneously

Table S6: Multivariate model between As, Mn (1 month post-partum) and Pb and Bayley z-scores at 20-40 months

Exposures	Cognitive				Fine Motor			
	Sirajdikhan n=261		Pabna n=296		Sirajdikhan n=261		Pabna n=295	
	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value	β (SE)	p-value
Ln Water As 1 month post-partum	0.01 (0.04)	0.72	-0.05 (0.03)	0.17	0.02 (0.05)	0.69	0.03 (0.03)	0.38
Ln Water Mn 1 month post-partum	-0.06 (0.03)	0.02	-0.11 (0.07)	0.11	-0.03 (0.03)	0.29	-0.05 (0.07)	0.41
Ln Water Mn2	-	-	-	-	-	-	-	-
Ln Blood Pb	-0.17 (0.08)	0.04	0.05 (0.12)	0.70	0.03 (0.10)	0.77	-0.09 (0.11)	0.42

Note: All models are adjusted for maternal age, maternal education, child's gender, exposure to second-hand smoke, HOME score, maternal Raven score, and child hematocrit levels. Models use age-adjusted BSID-III scores.

Note: All exposures are included in the models simultaneously